

Digitized by the Internet Archive
in 2009 with funding from
University of Toronto

11
M. 12. 18

THE

BRITISH MEDICAL JOURNAL:

BEING THE

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED FOR THE ASSOCIATION BY

ERNEST HART.

544791
2.7.52

VOLUME I FOR 1882.

JANUARY TO JUNE.

London:

PRINTED AND PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION, AT THEIR OFFICE, 161a, STRAND.

MDCCCLXXXII.

THE

BRITISH MEDICAL

JOURNAL

R

31

393

1882

v.1

cop.2

ERNEST HART

5.7.82

VOLUME I FOR 1882

London:

AND PUBLISHED BY THE BRITISH MEDICAL ASSOCIATION, AT THEIR OFFICE, 11, STRAND

NEWCASTLE

INDEX TO VOLUME I FOR 1882.

A

- Abattoir, public, for Dublin, 593
 Abdomen, Dr. Marion Sims on treatment of wounds of, 184, 222, 260, 302; Mr. W. H. Bull on diffuse super-pigmented mole of, 304; tumour of, 619
 Aberdeen, special correspondence from, 926
 Abortion, early, in puerperal mania, 805, 932; induced, prevention of necessity for, 843
 Abraham, Mr., diseased ovaries, 619
 Abrath, Dr., trial of, 167
 Abscess of pancreas, 88; of bladder, 271; of brain with disease of ear, 308, 656; of liver, 425, 619; encysted tubal, 543; iliac, following calculous pyelitis, 663; chronic, of brain, Dr. A. H. Bennett on, 727; spinal, 781
 Academy of Medicine, Royal Belgian, prizes of, 631
 — of Medicine in Paris, management of infants, 105
 Accidents, fatal, in various occupations, 25; in collieries, treatment of, 100
 Accommodation, high degree of spasm of, 120
 Acne, keloid, 579; rosacea, scarification in, 780; nature and treatment of, 944
 Aconite, poisoning by, 24, 774; Dr. Tilt on therapeutic action of, 497; in rheumatism, Dr. D. H. Cullimore on, 616
 Aconitine, note on, 510; letter on, 555, 756; German, poisoning by, 803
 Acrobat, an American, 515; Mr. E. Owen on, 650
 Actinomycosis in man, 545
 Action against medical man for improper certificate, 550; regarding a house, 709
 Adams, Dr. E. A., murder of by a lunatic, 509
 — Mr. J. E., ovariectomy in general hospitals, 8; spasm of accommodation, 120; sclerotomy, 943
 — Mr. W., Dupuytren's contraction of fingers in women, 84; Pathology and Treatment of Curvature of Spine, *rev.*, 582
 Addison's disease, with fibroid degeneration of suprarenal capsules, 191, 425; apparent recovery from, 621; rupture of œsophagus in case of, 659; case of, 703
 Adkins, Mr. J. E., presentation to, 903
 Adulteration, alleged, of coffee, 277; of wine, 314; report of in county Down, 474; in America, 550; of food in 1881, 825; proceedings of Parliamentary Bills Committee regarding, 884; of milk in Glasgow, 919
 Advertisements, medical, 37, 141
 Advertisements of medical books, 788, 921, 957
 Aickin, Dr., presentation to, 215
 Airt, Dr. H., transport of infection of diphtheria by wind, 463
 Aix-les-Bains and the sulphur-springs of Savoy, 502
 Air, purified, injection of into pleura, 658
 Albert, Dr., gastrostomy with unusual characters, 241
 Albuminuria, in Health and Disease, Dr. H. Senator on, *rev.*, 161; influence of on temperature in phthisis, 380; pregnancy complicated with, 504; with tumour of cerebellum, 657
 Alcock, Sir R., hospital accommodation for infectious cases, 434
 Alcohol, Dr. A. Clark on, 133; fatal doses of, 139; poisoning by, 634; use of in hospitals, 829
 Alcoholism, zoological, 526
 Aldrich, Mr. A. W., triple birth, 894
 Alienation, mental, and divorce, 315. *See* Insanity and Lunacy
 Alimentation, rectal, Dr. W. J. Tyson on, 420; Mr. H. E. Spencer on, 459
 Alkapton in urine, 17
 Alkali works, Act for regulation of, 24
 Allbutt, Mr. A., the medical congress at eville, 909
 — Dr. T. C., surgical aids to medicine, 1; hysterical paraplegia in a boy, 267
 Allen, Mr. A. H., Commercial Organic Analysis, *rev.*, 194
 Allfrey, Dr. C. H., and ambulance service, 311, 255, 313
 Alwicks, sanitary report of, 758
 Opesia areata, microscopic specimens of, 343
 Chaus, Dr. J., dangers of nerve-stretching, 11; cerebro-spinal syphilis, 820
 Veolar periostitis in diabetes, 308
 Naurosis from injury to eye, 622
 Ambulance Association. *See* Association
 Ambulance carriage, Dr. Howard's, 97, 200; Mr. Finlay's, 629
 — classes in Aberdeen, 399; in Kiel, 401; in Dublin, 474; in Russia, 591; in Berlin, 830
 — cot of Dr. Gorgas, 255
 — service for London, Dr. Howard on, 152, 324; and Dr. Allfrey, 211, 255, 313; meeting on, 280; letter on, 409
 — stations, at General Post Office, 59
 — volunteer, 75, 136
 America, adulteration in, 550
 Amputation in traumatic gangrene, Mr. J. Hutchinson on, 6; at hip-joint for osteo-myelitis, 16; at hip-joint, 121; of arm for sarcoma, 307; at shoulder for aneurysm, 424; of penis, 820; circular, Mr. R. Davy on coat-sleeve method of, 900; Stokes's, 610
 Amputations, Mr. H. C. Burdett on Relative Mortality after, *rev.*, 822
 Amyl, nitrite of, in hour-glass contraction of uterus, Dr. F. Barnes on, 377; influence of on catamenia, 766; Mr. J. J. F. Barnes on hypodermic administration of, 817
 Anamia, Dr. G. A. Gibson on cephalic murmur of, 82
 Anæsthesia, Dr. D. Drummond on, *rev.*, 121; and hystero-epilepsy, 460
 Anæsthetic, nitrous oxide as an, in labour, 161
 Anæsthetics, letters on, 246, 247, 287, 288, 325, 357, 556, 557, 756; danger of single-handed administration of, 582; deaths under, 89; Committee of Association on, 875, 876; *See* Chloroform, Ether, and Nitrous Oxide
 Analysis, Commercial Organic, Mr. A. H. Allen on, *rev.*, 194
 Analyst, for Cork, 27
 Analysts, official, 469, 471, 481; appointment of, 632, 747
 Anatomy, Gray's, Chinese translation of, 105; Schematic, Mr. W. P. Mears on, *rev.*, 345; elementary, proceedings of Royal College of Surgeons regarding examinations in, 715, 953
 Anderson, Dr. J. E., the Association for the Advancement of Medicine by Research, 679
 — Dr. J. H., reduction of dislocations by manipulation, 10; percussion in nervous diseases, 643
 — Dr. McCall, lesions of brain in syphilis, 613
 Anderton, Mr. C., poisoning by mussels, 500
 Andover, sanitary report of, 535
 Aneurysm of aorta, abdominal, 386, 618, 703
 — of aorta, thoracic, 53, 269, 343, 700, 702; galvano puncture in, 139; sudden death from rupture of, 819
 — arterio-venous, of face, 910
 — of axillary artery, ligature of subclavian and amputation at shoulder-joint, 424; ligature of subclavian, 576
 — of carotid artery, 504
 — of fauces, 160
 — of femoral artery, ligature of external iliac for, 468, 538
 — of popliteal artery, cured by voluntary flexion, 12; ligature of femoral artery for, 268; Mr. W. Roche on case of, 959
 — of subclavian artery, ligature of innominate artery for, 920, 955
 Aneurysmal sac attached to kidney, 702
 — varix of hand, 397, 820
 Aneurysms, military, in cerebral hemorrhage, 741
 Angina pectoris, Dr. T. N. Mills on symptoms of after use of ergotine, 937
 Animalism and religiosity, 130
 Animals, reform of methods of killing, 169; experiments on. *See* Experiments
 Ankle, compound dislocation of, 505
 Ankylosis of hip, 272; division of neck of femur in, 505
 Annuities, Government, proceedings of Parliamentary Bills Committee regarding, 881
 Annuity fund, proposed, 855, 856
 Antagonism of medicines, Committee of British Medical Association on, 871, 873
 Anthracic vaccination, M. Pasteur on, 489
 Anteaters, Mr. Flower on, 901, 937
 Antiseptic incision and drainage in empyema, Mr. F. R. Cross on, 611
 — inhalations, respirator for, 782
 — iodoform as an, 472, 550
 Antiseptic ligature of arteries, 660
 — osteotomy, 577
 — ovariectomy, 746; letters on, 795, 838, 966; Mr. J. G. Smith on, 815
 — solutions of atropine and eserine, 364
 — surgery in Glasgow, 925
 — treatment of lung-disease, Dr. W. V. Snow on, 226
 Antivaccinationists, fallacies of, 707
 Antivivisectionists, attack on Mr. J. Hutchinson, 123; meetings of, 627
 Anus, fibro-œdema of, 619
 Aorta, abdominal, aneurysm of, 386, 618, 703; thrombosis of, 702
 — thoracic, aneurysm of, 53, 269, 343, 700, 702; galvano-puncture of aneurysm of, 139; ulcerations of cancer of œsophagus into, 292; sudden death from rupture of aneurysm of, 819
 Aphasia, case of, 704
 Apoplexy, winter, 842
 Apothecaries' Hall of Ireland, resolution regarding murder of Lord F. Cavendish and Mr. Burke, 752
 Apothecaries, Society of, pass lists, 34, 73, 103, 158, 177, 215, 253, 291, 329, 363, 407, 445, 484, 523, 561, 601, 641, 682, 721, 762, 801, 841, 892, 929, 967; resolution regarding attack on the Queen, 641
 Appeals, 36
 Archbishop of Canterbury, health of, 395
 Archery and phthisis, 447
 Arctic relief expedition, 951
 Arlt, Professor, birthday of, 639
 Arm, amputation of for sarcoma, 307
 Armengué, Dr. J., new vesicant, 759
 Armistead, Dr., administration of Public Health Acts in rural districts, 910
 Armstrong, Dr. G. C., alkapton in urine, 17
 — Mr. H. G., medical attendance on railway passengers, 644
 Army, British, medical service of, compared with navy, 69; deaths, 136, 212, 288, 443, 639, 839; principal medical officer in Canada, 136; in Barbadoes, 136; Montefiore prize at medical school, 201; distribution of prizes, 209; appointments to, 212, 288, 406, 443, 481, 839; successful candidates, 248, 359; memorial to Surgeon-Major Porter, 327; allowance of grooms, 359; movement of troops, *ib.*; remarks of Duke of Cambridge on, 393; recruits rejected, 406; the competitive examination for commissions, 466; letters on appointments, 488; appointment of Director-General, 520, 559; opening of session of medical school, 520; appointments in through nomination, 708; proceedings of Provincial Medical and Surgical Association regarding medical officers, 858; of British Medical Association, 862, 865, 867; of Parliamentary Bills Committee, 881
 — French, change in administration of medical service, 444
 — German, courses of practical surgery for surgeons, 443
 — Hospital Corps, proceedings in Parliament regarding, 760
 — Indian, medical department of, successful candidates, 248, 359; proceedings of Parliamentary Bills Committee regarding, 882; amalgamation of with British, 959
 Arnold, Dr., contagion of typhoid fever, 353
 Arsenic in pigments, 724; proceedings of Provincial Medical and Surgical Association regarding legislation on sale of, 858, 859
 Arteries, antiseptic ligature of, 660; and veins of retina, extreme tortuosity of, 741
 Arterio-venous aneurysm, 910
 Artery, axillary, aneurysm of, 424, 576
 — carotid, common, suppurative panophthalmitis after ligature of, 381; aneurysm of, 504
 — femoral, ligature of external iliac for aneurysm of, 468, 588; ligature for wound, 577
 — innominate, ligature of for subclavian aneurysm, 920, 955
 — popliteal, aneurysm of, cured by flexion, 12; aneurysm of, ligature of femoral artery for, 268; perforation of after excision of knee, 501; Mr. W. Roche on a case of aneurysm of, 939
 — pulmonary, embolism of, 659
 — superior mesenteric, embolism of, 307

- Artery-compressor, 501
 Arthritis, suppurative, of left elbow, 308; chronic rheumatic of bursa, 387; chronic rheumatic in a dog, 425; deposit of ammoniac-magnesian phosphate in, 663
 Artisan classes, medical attendance on, 365, 447, 487, 605
 Artisans' and labourers' dwellings, Select Committee on, 802, 952; proceedings of Parliamentary Bills Committee, 883
 Ascaris lumbricoides expelled by coughing, 621
 Ashe, Mr. St. George, presentation to, 301
 Ashhurst, Dr. J., International Encyclopædia of Surgery, *rev.*, 346
 Ashton-under-Lyne, sanitary condition of, 432
 Asphyxia, preventable, 128, 218
 Assassination of Lord F. Cavendish and Mr. Burke, *post mortem* examinations, 714; resolutions concerning, 752
 Assault on a hospital surgeon, 278; on Dr. J. R. Gray, 512; on Dr. Orange, 915
 ASSOCIATION, BRITISH MEDICAL, programme of fiftieth annual meeting, 440, 553, 891, 924, 964; financial statement for 1881, 508; proposed Indian Branch of, 637; homeopaths and membership of, *see* Homeopaths; historical sketch of, 847; changes in constitution and laws of, 860, 861, 862; proposed charter for, 867; incorporation of, 873; presidents and places of annual meeting, 880; remarks on history of, 886; arrangements for jubilee meeting, 890
 Committee of Council, proceedings of, 173, 596
 Committee on Aural Surgery, 102, 172, 356; report, 596
 Committee on Collective Investigation, secretary of, 166; work of, 355; members of Committee, 356; acute pneumonia, 439; chorea, 478, 515, 553, 595; acute rheumatism, 594, 675; functions of local committees, 674; local committees, 678, 754, 755, 795
 Committee on Habitual Drunkards, report, 594
 Committee on Medical Reform. *See* Medical Reform
 Committee on Parliamentary Bills, meetings of, 206, 674; last annual report, 206; militia surgeons, *ib.*; examination and registration of midwives, 206; local legislation on infectious diseases, 206; the tax on carriages, 674; history of proceedings of, 832
 Committee, Joint, on State Medicine, history of, 921
 Publications of, history of proceedings regarding, 834, 855, 856, 857, 859
 Aberdeen, Banff, and Kincardine Branch, lithotripsy, 504; pregnancy complicated with albuminuria, *ib.*; aneurysm, *ib.*
 Bath and Bristol Branch, ordinary meetings, 134, 323, 678; new members, 134, 323, 678; papers, 134, 324, 678; homeopathy, 324; Collective Investigation Committee, 678
 Birmingham and Midland Counties Branch, ordinary meetings, 286, 480; new members, 286, 480; the office of secretary, 286; admission of visitors, *ib.*; vivisection and surgery, 286, 480; instruction at the Borough Asylum, 480; communications, 480; Pathological Section: amputation of arm for sarcoma, 307; tumour of brain, *ib.*; membranous bronchitis, *ib.*; embolism of superior mesenteric artery, *ib.*; removal of egg-shell by tracheotomy, *ib.*; suppurative arthritis of elbow, 308; fracture of skull, *ib.*; lympho-sarcoma removed by abdominal section, 504; unreduced dislocation of shoulder, *ib.*; pyloric obstruction, *ib.*; pseudo-hypertrophic paralysis, *ib.*; changes in sympathetic system in Bright's disease, *ib.*; coloboma iridis, 703; gall-stone passed *per rectum*, *ib.*; suprarenal capsules in Addison's disease, *ib.*; burn, *ib.*; aneurysm of aorta, *ib.*; malignant disease of breast, 703, 781; malignant disease of colon, 703; fibroid phthisis, *ib.*; spinal abscess, 381; necrosis of os calcis, *ib.*; removal of tongue, *ib.*; cancer of stomach, *ib.*; fatty embolism in fractures and diabetes, *ib.*; syphilitic iritis, *ib.*; talipes calcaneo-valgus, *ib.*
 Border Counties Branch, amputation at hip joint, 121; treatment of scarlet fever, *ib.*; autumnal meeting, 134; new members, *ib.*; communications, *ib.*; Dr. Fothergill's proposal, *ib.*; British Medical Benevolent Fund, *ib.*; dinner, *ib.*
 Dublin Branch, president's address, 146; annual meeting, 174; report of Council, *ib.*; election of president, *ib.*; notification of infectious diseases, 174, 232; election of officers, 175; dinner, *ib.*
 East Anglian Branch, resolutions regarding syphilis, 173
 Glasgow and West of Scotland Branch, meeting, 30; vivisection, *ib.*; medical reform, *ib.*; British Medical Benevolent Fund, *ib.*; demonstration of cases, *ib.*
 Gloucestershire Branch, meeting, 246; Medical Defence Associations, 246; homeopathy, *ib.*
 Lancashire and Cheshire Branch, notification of infectious diseases, 278, 313; ordinary meeting, 793; communications, *ib.*
 Association, Metropolitan Counties Branch, circular regarding Medical Benevolent Fund, 23; general meeting, 324; Dr. Howard's ambulance apparatus, *ib.*; president's conversation, 785.—East London and South Essex District, metropolitan provident dispensaries, 27; meetings, 286, 794; medical attendance on the poor, 286; communications, 794; collective investigation, 795.—North London District, purpura, 51; diphtheria, *ib.*; meetings, 210, 402, 716; papers, 210, 402; typhus epidemic in Marylebone, 402; registration of diseases and deaths, 716; treatment of phthisis by inhalation, 780; radiating veins in chest, 781.—South London District, clinical cases, 52; acute traumatic malignancy, *ib.*; quackery, *ib.*; notification of infectious diseases, 278, 320
 North Wales Branch, intermediate meeting, 836; new members, *ib.*; president's address, *ib.*; papers, *ib.*
 South Australian Branch, Proceedings of, *rev.*, 389
 South-Eastern Branch: East Kent District, meetings, 402, 795; papers, 402, 795; secretary, 795.—West Kent District, meeting, 717; conjoint meeting, *ib.*; papers, *ib.*; Collective Investigation Committee, *ib.*—East and West Surrey Districts, migraine, 464; lunacy from lead-poisoning, *ib.*; meeting, 480.—East Sussex District, taxis in hernia, 52; removal of foreign body from bladder, *ib.*; aneurysm of aorta, *ib.*—East and West Sussex Districts, meeting, 554; papers, 554; investigation of disease, *ib.*
 South Wales and Monmouthshire Branch, spring meeting, 754, 794; new members, 754; papers, *ib.*; Collective Investigation Committee, *ib.*; homeopathy, *ib.*; vote of sympathy, 755; luncheon and dinner, *ib.*
 South-Western Branch, quarterly meetings, 66, 755; new members, 66, 755; the prosecution of Professor Ferrier, 66, 755; homeopathic practitioners, 66, 755; Collective Investigation Committee, 755; communications, *ib.*
 Southern Branch: Isle of Wight District, meeting, 286; papers, *ib.*—Dorset District, meeting, 678; vote of condolence, *ib.*; new member, *ib.*; proposed new Branch, *ib.*; Collective Investigation Committee, *ib.*; papers, *ib.*
 Staffordshire Branch, general meeting, 638; new members, 638; homeopaths and the membership of the Association, *ib.*; communications, *ib.*
 West Somerset Branch, spring meeting, 678; new members, *ib.*; representatives of Branch, *ib.*; homeopathic practitioners, *ib.*; collective investigation, *ib.*; dinner, *ib.*; communications, *ib.*; question for discussion, *ib.*
 Association for Advancement of Medicine by Research, remarks on, 465, 469; formation of, 476; letters on, 516, 517, 599, 638, 679; council of, 635; subcommittees, 677; list of subscriptions, 679
 Ambulance, St. Andrew's, 242, 425; in Glasgow, 633, 926
 Ambulance, St. John's, proceedings of, 104, 189, 629; formation of classes, 199; in Malta, 292; class in Dublin, 474
 Eastern Provincial Medical and Surgical, 849, 851
 Glasgow, for Relief of Incurables, report of, 242
 Irish Graduates, annual metropolitan dinner, 485
 Irish Medical, annual meeting, 890; report of Council, *ib.*; officers, *ib.*; dinner, *ib.*
 Junior Medical Mutual, 804, 844
 Medical Defence, annual general meeting, 963
 Medico-Ethical, Manchester, annual meeting, 168; officers and council, *ib.*
 Medico-Psychological, quarterly meeting, 793
 Metropolitan Provident Medical, meeting in support of, 641, 747
 Poor-law Medical Officers', meetings of Council, 213, 590; the case of Dr. Simpson, 213; superannuation of Poor-law medical officers, 213; order relating to casual paupers having small-pox, 520; the coroner for Central Middlesex and workhouse medical officers, *ib.*; charges against medical officers, *ib.*
 Provincial Medical and Surgical, history of, 847
 Sanitary, Dublin, annual meeting, 132
 Sanitary, Manchester and Salford, memorial regarding milk supply, 360
 Sanitary, Tottenham, annual report of, 671
 Sanitary Protection, in Glasgow, proposed formation of, 518
 Sanitary Protection, London, engineer's report, 281; annual meeting, 358
 Social Science, preparation for annual meeting, 199; resolutions regarding hospital accommodation, 449
 of Surgeons practising Dental Surgery, officers, 279
 United Hospitals Rifle, annual meeting, 279
 Associations, Medical Defence, 246, 765
 Asthma, an Australian remedy for, 562
 Aston, sanitary report of, 758
 Astragalus, fracture of, 384
 Asylum, Ballinasloe District, report of, 519
 —Birmingham Borough, inquiry into death at, 23; election of superintendent, 35; resolution of Birmingham and Midland Counties Branch on instruction at, 480
 —for Blind, at Glasgow, annual meeting, 170
 —Brookwood, report of, 681
 —Castlebar District, report of, 244, 593
 —at Colombo, appointment of committee of inquiry, 21
 —Cork District, entertainment at, 205; report of, 244; chargeability of lunatics from workhouses, 400
 —Derby County, report of, 681
 —Dundee, Royal Lunatic, report on, 954
 —East Riding of Yorkshire, election of superintendent, 35
 —for Glasgow, new, 919
 —Glasgow, Royal Lunatic, statistics of, 100
 —Haddington, number of patients in, 283
 —Hereford County, report of, 522
 —for Imbeciles, at Darenth, annual inspection of, 917
 —Killarney District, report of, 519
 —Michigan, murder of physician at, 509
 —Pietmaritzburg, appointment of superintendent, 655
 —Sligo, appointment of superintendent, 920
 —Smithston, administration of, 399
 —Stafford, County, report of, 839
 —Woodilee, report of, 290
 Asylums for Imbeciles, superintendents of 442, 517, 538, 680, 755
 —Lunatic, in Bengal, phthisis in, 483; in Ireland, inmates of, 522; private, 626, 640; fractured ribs in, 711
 Asylums Board, Metropolitan, expenses of, 25; Mr. Godrich on, 294; work of, 587; proceedings of Parliamentary Bills Committee regarding, 882
 Ataxia, locomotor, Mr. H. L. Spencer on stretching of sciatic nerve in, 116; Mr. Stanley's cases of, 239; in workers at sewing machines, 315; night-sweating in, 332
 Athetosis, bilateral, with aphasia, 16
 Atkins, Dr. R., stricture of sigmoid flexure of colon, 386
 Atkinson, Dr. F. P., treatment of diphtheria, 265
 Atlee, Dr., fungosities of female bladder, 729
 Atmospheric pressure, high, 236, 364
 Atropia, antiseptic solution of, 364; antagonism of to morphia, 668, 679
 Athill, Dr. L., removal of uterus, 133; epithelioma of fundus uteri, 272; partial occlusion of vagina, 341; craniotomy, 387; mucous growth of fundus uteri, *ib.*; fibrous tumour of uterus, 620; vascular tumour of uterus, 621; ovarian cyst, 663; removal of fundus uteri by abdominal section, 782; hypertrophy and dilatation of uterus, 821
 Auditory canal, osseous tumours removed from, 120, 656
 Aural Surgery, Committee of British Medical Association on Study of, 102, 596; lectures on at Newcastle, 436
 Australia, obstetric practice in, 331; original research in, 358
 Axles, Mulliner's patent India-rubber collar, 823
 B.
 Baby-farming, proceedings of Parliamentary Bills Committee regarding, 884
 Bacillus of typhoid fever, Dr. J. Coats on, 421; of tubercle, 709
 Bacon, Mr. A. T., nitrite of amyl and the catamenial flow, 766
 —Dr. G. M., death from blow with fist, 192
 Bacteria, recent researches on, 634, 706; typhoid, in albuminous urine, 894
 Bagshot Park, Dr. W. S. Playfair on sanitary condition of, 373
 Baird, Dr. A. W., obituary notice of, 127
 Bakehouses, metropolitan, legislation on, 663
 Baker, Mr. Alfred, resignation of, 32
 —Rev. H. R., evidence regarding Contagious Diseases Acts, 552
 —Mr. Morratt, acne keloid, 579; prurigo of Hebra, *ib.*
 Baiding, Mr. D. B., poor-law infirmaries and coroners' fees, 640
 Balfour, Dr. G. W., Clinical Lectures on Diseases of the Heart and Aorta, *rev.*, 945
 Bampton, Dr. A. H., anaesthetics, 556
 Bantingm in eczema, Mr. B. Squire on, 499, 817; Mr. A. C. Rich on, 695, 903; Mr. F. C. Berry on, 817
 Bantock, Dr. G. G., Pica for Early Ovariectomy, *rev.*, 309; uterine fibroids removed by laparotomy, 426, 778

- Barclay, Dr. A. W., address to Royal Medical and Surgical Society, 342
- Barker, Mr. A. E., congenital dislocation of hip, 342
- Barling, Dr., fracture of dorsal vertebra, 160; fracture of base of skull, *ib.*; sarcoma of arm, 307; tumour of brain, *ib.*; unreduced dislocation of shoulder, 304; pyloric obstruction, *ib.*; aneurysm of aorta, 702; thrombosis of abdominal aorta, *ib.*; malignant infiltration of breast, 703; threatened death from chloroform, 776
- Barlow, Dr. T., extirpation of kidney for calculous pyelitis, 579
- Dr. W. H., regressive paralysis, 734
- Barnes, Mr. A. R., poisoning by mussels, 576; mild scarlatina, 696
- Dr. Fancourt, hour-glass contraction of uterus treated with nitrite of amyl, 377
- Dr. Henry, treatment of scarlet fever, 121
- Mr. J. F., hypodermic administration of amyl nitrite, 817
- Dr. R., hernia of ovary, 119; antidotes for strychnia, 457; the Association for the Advancement of Medicine by Research, 576, 638
- Barnsley, sanitary report of, 600
- Baronetics, 747
- Barr, Dr., aneurysm of fauces, 160
- Barton, Dr. T., fibro-lipoma simulating umbilical hernia, 544
- Baruch, Dr., mortality from small-pox, 472
- Barwell, Mr. R., acute traumatic malignancy, 187
- Bassett, Dr. J., *post partum* hæmorrhage, 36, 654
- Bastian, Dr. H. C., diabetes treated by large doses of opium, 12
- Baths, cold, in pneumonia, 49
- Batterbury, Dr. R. L., iron ring round penis, 616
- Battey, Dr. R., new speculum, 194
- Battey's operation, death after, 802
- Baxter, Dr. E. B., hydrocephalus with asymmetrical deformity, 268
- Mr., disease of wrist-joint, 619
- Bayfield, Mr. H. D., treatment of phthisis, 846
- Bazaar for Glasgow Western Infirmary, 518
- Beach, Dr. Fletcher, superintendents of imbecile asylums, 442, 558, 755
- Beamish, Dr., superannuation allowance of, 101, 317
- Beatty, Dr. W., serofulous pyonephrosis, 664
- Beaumont, Mr. W. M., duration of human life, 38
- Béclanché, M., myxomata, 789
- Beck, Mr. Marcus, nephro-lithotomy, 158; Catalogue of Specimens of Surgical Pathology in University College, *rev.*, 231; apparent poisonous action of iodoform, 903, 904
- Beef-tea, Dolby's patent, 194
- Beer, law regarding adulteration of, 350
- Beever, Dr. C. E., conjugate deviation of eyes after epileptic fits, 85
- Belfast, health of, 244
- Bell, Mr. Graham, teaching of deaf-mutes, 919
- Mr. P. G., tricycles, 805
- Belladonna, and aconite, Mr. W. S. Simpson on poisoning by, 774
- Belper, sanitary report of, 70
- Ben Nevis, proposed observatory on, 204
- Bendall, Mr. H., acute farcy in man, 191
- Bengal, phthisis in lunatic asylums of, 483
- Benger's preparations of digestive ferment, 465
- Bennett, Dr. A. H., chronic cerebral meningitis, 727
- Dr. E. H., dislocation and ankylosis of hips, 272; spontaneous laryngeal fistula, *ib.*; rheumatic arthritis of bursæ, 387; calculi from bladder and urethra, 544; fracture of bodies of vertebrae, 622; ammoniaco-magnesian deposit in chronic rheumatic arthritis, 663
- Benson, Mr. A., a rare dislocation, 422
- Mr. A. H., ciliary staphyloma, 271; coloboma, 385; sequestrum from temporal bone, 543; restoration of eye lid, 620; iridectomy, 663; suppurative cystitis and hyalitis, 664; tortuosity of arteries and veins of retina, 741
- Benthall, Mr., omnivorous eccentricities, 831, 914
- Bequests, 30, 74, 136, 194, 226, 316, 317, 364, 408, 433, 437, 486, 518, 524, 602, 628, 723, 764, 802, 926, 949, 959
- Berdoe, Mr. E., endometriosis, 606
- Berlin, health in 1881, 327
- Bernard, M. Claude, statue of, 277
- Berry, Mr. F. C., treatment of eczema, 817
- Mr. W., strangulated inguinal hernia, 118; recto-vaginal fistula, 267
- Bert, M. P., and the Academy of Sciences, 510
- Bethnal Green, sanitary report of, 361, 799
- Bichromate of potash, poisoning by, 506
- Biddle, Mr. D., treatment of pneumonia, 226; duration of human life, 605; cigarette-smoking, 846
- Bile, presence of in saliva, 461
- Bilharzia hæmatobia, specimens of, 13
- Bills, local improvement, 393, 926, 967
- Biographies of living medical men, proceedings of British Medical Association regarding, 867
- Birds, small pox in, 550, 655; in motion, photography of, 672
- Birmingham, special correspondence from, 32, 481; health of, 213, 800
- Birth, quadruple, 198; illegitimate, 282. See Triplet and Twin
- Births, and deaths, proceedings of Parliamentary Bills Committee regarding registration of, 885
- Bischoff, Professor von, jubilee of doctorate of, 170
- Bishop, Dr. J., treatment of hypertrophy of tonsils, 265
- Bladder, removal of foreign body from, 53; Dr. Marion Sims on wounds of, 261; sarcoma of, 268; abscess of, 271, 386; malignant disease of, 386; Mr. R. Harrison on tapping of through hypertrophied prostate, 498; laceration of, 502; myxomatous polypus of, 502; irritable, 526, 606; removal of tumour of, 540; calculi from, 544; calculi embedded in walls of, 702; female, fungosities of, 729; Mr. F. S. Edwards on foreign body in, 816
- Blair, Mr. T., steam for heating hospital wards, 526, 686
- Bleeding from nose. See Epistaxis
- Blind, Glasgow Asylum for, 170
- Blomfield, Mr. A. G., salicylate of soda in acute rheumatism, 75
- Blood, arrest of changes of, 313
- Blood-poisoning, Mr. Rushton Parker on materials of, 898
- Blower, Mr. B., chloroform, 448, 644
- Bodington, Dr. G., obituary notice of, 252, 362
- Body-snatching, 59
- Boileau, Dr. J. P. H., yellow fever and movement of troops, 7
- Bolton, sanitary report of, 71; improvement Acts, 327, 406
- Bombay, health of, 482
- Bond, Dr. F. T., scarlet fever, 448
- Bone, formation of corpuscles in red marrow of, 392
- temporal. See Temporal Bone
- Bones, and brain, lateral asymmetry of, 699
- Books, medical, public advertisements of, 788, 921, 957; cheap, 888, 932
- Booth, Dr. Mackenzie, case of aneurysm, 504
- Boric glycerine, 644, 726
- Borax, supposed poisonous effects of, 589
- Botanical garden at Bordeaux, 94
- Bouchard, M., infective nephritis, 311
- Boucheron, Dr., deaf-mutes, 308
- Boulton, Dr. P., conjoined twins, 14; acephalous monster with hæmaturia, 340; prolapsus uteri, *ib.*
- Bourneville, M., Researches on Epilepsy, Hysteria, and Idiocy, *rev.*, 784
- Bowen, Mr. O., oil-globules in urine, 575
- Bowly, Mr., chondro-sarcoma of breast, 740
- Boyd, Mr. Stanley, case of farcy, 541; colloid scirrhus of prostate, 542; embolism of pulmonary artery, 659; rupture of œsophagus, *ib.*
- Boyes, Mr. A. H., pemphigus, 117
- Bozeman, Dr. N., cyst of pancreas, 524
- Bracey, Mr. H., strangulated umbilical hernia after parturition, 537
- Bradypodize, Mr. Flower on, 694, 737
- Braidwood, Dr. P. M., and Vacher, Mr. F., life-history of contagium, 41, 77, 107, 143, 181, 219, 257
- Brailley, Dr., disease of optic nerve in retinal hæmorrhage, 747; sclerotomy, 943
- Brain, hereditary sclerosis, 89, 267; tumour of, 307, 578; abscess of with disease of ear, 308, 656; case of concussion of, 382; Relation of to Mind, Dr. Cleland, *rev.*, 544; cancer originating in membranes of, 578; lesions of in syphilis, 618; and its Functions, M. J. Luys on, *rev.*, 623; and bones, lateral asymmetry of, 699; Dr. A. H. Bennett on chronic abscess of, 727; Dr. Dowse on diagnosis of disease of, 731, 769; Dr. J. Shaw on cases of disease of, 771
- Braithwaite, Dr., unilateral vaginal oophorectomy, 580
- Bramwell, Dr. Byrom, Diseases of the Spinal Cord, *rev.*, 744
- Brawn, poisoning by, 396
- Breast, sarcoma of in a plover, 268; sarcoma of, 387; malignant infiltration of, 703, 781; chondro-sarcoma of, 740
- Brighton, park for, 363, 485
- Bright's disease, cases of, 386; changes of sympathetic system in, 504. See Kidney
- Bristol, park for, 949
- Bristowe, Dr. J. S., the testimonial to Professor Virchow, 37
- Broadbent, Dr. W. H., the British Medical Benevolent Fund, 175
- Broca, M. P., monument to, 914
- Brodie, Sir B. C., Ideal Chemistry, *rev.*, 18
- Bromate of quinine, therapeutic properties of, 909
- Bromide of potassium, ulcers after, 366; Dr. P. T. Duncan on poisoning by, 616
- Bronchitis, acute membranous, 307; Chronic, Dr. J. Milner Fothergill on, *rev.*, 911
- Bronchocele, malignant, 542; with secondary growths, 543; calcified, 699
- Brook, Mr. W. F., artificial human milk, 448
- Brooks, Isaac, case of, 60, 72
- Brown, Mr. A. G., obituary notice of, 362
- Mr. F. M., arrest of development, 932
- Mr. G. D., examination of leaves of vegetables, 845
- Brown, Mr. Henry, chloroform as an anæsthetic, 365, 525
- Dr. John, death of, 713; obituary notice of, 761
- Browne, Mr. Lennox, ozena, 255; local application of iodoform, 422
- Brown-Séquard, Dr., arrest of changes of blood and tissues, 313
- Browning, Dr. B., working of calf-vaccination, 270
- Mr. J. N., court-martial on, 347
- Bruce, Mr. D., superintendents of imbecile asylums, 442
- Bryant, Mr. T., excision of stricture of descending colon, 461
- Buchanan, Professor G., compound fracture of tympanic plate, 341; glandular epithelioma of jaw, 704; cystic tumour of fibula, *ib.*
- Buildings, Peabody, increase of, 228
- Bull, Mr. W. H., diffuse superpigmented mole, 304
- Bullets, detection of by induction-balance, 241
- Buns, hot cross, supposed poisoning by, 551, 593
- Burdett, Mr. H. C., Official Intelligencer, *rev.*, 194; Relative Mortality after Amputations, *rev.*, 822
- Burke, Mr. Thomas, assassination of, 714, 752
- Burma, British, vaccination in, 791
- Burn, case of, 703
- Burnet, Dr. R. W., the proposed hospital for North London, 679
- Burg, Dr., 94; his vaccinator, 588
- Burrows, Lady, death of, 363
- Bursæ, chronic rheumatic arthritis of, 387
- Bursaries, medical, in Aberdeen, 242
- Burton, Mr. J. E., lying-in hospitals, 556
- Bury, Dr. J. S., contraction of palmar fascia, 189; dementia from hereditary syphilis, 503
- Bury St. Edmunds, sanitary report of, 600
- Butlin, Mr. H. T., squamous epithelioma of upper jaw, 13; sarcoma of thumb, *ib.*; diagnosis of epithelioma of tongue, 223; acute traumatic malignancy, 403; cases of myxoma, 542
- Butterine and soapstone, 127
- Byrne, Mr. J. J., rapid recurrence of measles, 141
- Mr. T., fees for attendance on families of medical men, 256
- C.
- Cachexia, malarial, in India, Sir J. Fayer on, 567
- Cæcum without appendix vermiformis, 425
- Cæsarean section, case of, 314
- Calculi removed from perineum, 502; from bladder and urethra, 544; imbedded in walls of bladder, 702
- Calculus, median lithotomy for, 86, 87; in ureter, 425; formed on a shell, 578; renal, undergoing disintegration, 740
- Calf-lymph. See Vaccination, animal
- Cambridge, the Duke of, at Netley, 209, 393
- Camel, filaria sanguinis in lung of, 578
- Cameron, Mr. A. H. F., chloroform and ether, 403
- Dr. C., death-rate in Dublin, 247; quinine iodate and bromate, 909
- Dr. H. C., antiseptic ligature of arteries, 660
- Dr. R., galvano-puncture in aortic aneurysm, 139
- Campbell, Dr. J. A., proposed endowment of chair of pathology in Glasgow, 558
- Canada, medical fees in, 256; medical men in parliament in, 787
- Cancer, Mr. J. Hutchinson on early operation in, 5; sarcoma, and local injury, 197; Mr. J. Hutchinson on papillary growths preceding, 297; deaths from in Middlesex and Hertfordshire, 588; *versus* syphilis, Dr. T. Drapes on, 816
- of bladder, 386
- of brain, originating in membranes, 578
- of breast, 703, 781
- of cerebellum, 54
- chimney sweep's, 424
- of kidney, 741
- of intestine, large, colotomy for, 940
- of œsophagus with ulceration into aorta, 192; gastrotomy in, 505; primary, 544
- of sigmoid flexure of colon, 658
- of stomach, fatal through hæmorrhage, 387; scirrhus, 781
- Cancerous oris, necrosis of lower jaw from, 386
- Cane-sugar, digestion of, 790
- Cannes, Dr. C. J. B. Williams on typhoid fever at, 150; sanitary state of, 172
- Carbolic acid in hæmorrhoids, Mr. C. W. Thorp on, 48; pollution of water with, 61; therapeutic and poisonous effects of, 271; poisoning by, 748; Dr. R. H. Wilbe on poisoning by, 939
- Carbon, unconsumed, 99
- Carbonic acid, Mr. G. K. Given on poisoning by, 11
- oxide in the air, 712
- Card, an extraordinary, 844
- Cardew, Mr. G. A., fractures of vertebral column, 941
- Cardiac therapeutics, Mr. E. W. Forster on, 534
- Carditis, malignant rheumatic, 663
- Carnarthen, sanitary report of, 601
- Carpenter, Dr. A., liability of water-companies, 61; the fogs of London, 99; notification of infectious diseases, 409; infectivity of scarlatina, 502

- Carpenter, Dr. W. B., vaccination, 245
 Carriages, proposed additional tax on, 636, 674, 717, 724, 766, 796, 838, 966; for medical men, 823, 969
 Carrier-pigeons, use of by medical men, 141, 398, 870
 Carrington, Dr., hour-glass contraction of stomach, 89; cerebro-spinal meningitis, 700
 Carson, Dr. J. C. L., cramp, 525
 Carter, Dr. A. H., ulcerative endocarditis, 502
 — Dr. C. H., fibroid tumour of uterus, 229
 — Mr. R. B., sclerotomy, 943
 — Dr. W., notification of infectious diseases, 318
 Carver, Mr., perforation of popliteal artery after excision of knee, 501
 Castor-oil plant as a fly-killer, 788
 Catalepsy, Mr. C. E. Thompson on a case of, 156; case of, 218; hysterical, 422
 Cataplexia, action of nitrite of amyl on, 766
 Cataract, diabetic, 120
 Catarrh, nasal, 76; Dr. J. Ross on treatment of, 86
 Catheter, dandelion used as a, 766
 Caution, a, 332
 Cayley, Dr. J., naphthalin in psoriasis, 156; treatment of ringworm of scalp, 939
 Cavendish, Lord F., *post mortem* examination of, 714; resolution regarding assassination of, 752
 Cavities, pulmonary. See Pulmonary cavities
 Cemeteries, management of in Edinburgh, 513
 Census as a basis for statistics, 32; of Ireland, 290; of Paris, 313
 Cerebellum, cancer of, 54; cyst of, 88; tumour of, 657
 Cerebral localisation, Dr. J. Shaw on cases bearing on, 771
 Cerebro-spinal meningitis, 700
 — syphilis, 820
 Certificates of death, signature of by unqualified persons, 395, 670; false, 748; questions regarding, 844; and club-certificates, 932
 — of lectures and hospital practice in Ireland, 400
 — of lunacy, fees for, 214
 — for school-boards, 137
 — of still-births, 169
 Ceylon, cultivation of cinchona in, 783
 Champneys, Dr. F. H., artificial respiration in still-born children, 306
 Chance on conjunctiva, 120
 Chapman, Mr. F., laceration of intestine, 341
 Charcot, M., galvanism and hypnotism, 276; hypnotic experiments, 551
 Charity begins at home, 448
 Chart for tabulating deaths from infectious diseases, 341
 Charter, proposed, for British Medical Association, 866, 867
 Chavasse, Mr. T. F., calculi removed from perinæum, 502; disease of hip-joint, *ib.*
 Cheese, American, 711, 927; manufacture of, 946
 Chekan and its preparations, 232
 Chemistry, Ideal, Sir B. C. Brodie on, *rev.*, 18; Physiological and Pathological, Dr. C. H. Ralfe's Demonstrations in, *rev.*, 55; of death, 75
 Cheshire, sanitary report of, 800
 Cheshire, Mr. A. E., presentation to, 611
 Chest, Throat, and Nasal Cavities, Dr. E. F. Ingals on, *rev.*, 122; Dr. J. W. Cousins on incision of, 774; radiating veins in, 781
 Cheyne, Mr. Watson, micro-organisms in disease, 778
 Chicken-pox, pitting after, 725
 Child, paralysis of fifth and facial nerves in, a, 15; acute yellow atrophy of liver in, a, 39; death of a from overdose of medicine, 99, 127, 218; removal of needle from back of a, 218; cast of head of a, 619
 Children, pauper, boarding out of, 71; directions for management of, 94, 214; winter sanatorium for in Italy, 234; sanatoria for in Germany, 240; still-born, artificial respiration in, 306; headaches in, 307; Mr. S. H. Lindeman on dislocations of the elbow in, 378; Dr. W. Sneddon on injury of elbow in, 499; Dr. W. J. Mackie on, 613; Mr. Bennett May on, 616; meningitis in, 662; fatal cases of typhoid fever in, 775; delicate, home for, 970
 Chimney-sweep's cancer, 424
 China, self-mutilation in, 397; the medical profession in, 398; Sir J. F. Fayer on anomalous fever in, 647
 Chinchona in Ceylon, 783
 Chinoline, Schering's, 310; administration of, 447
 Chloral, death from overdose of, 823
 Chloroform, deaths under, 58, 96, 165, 166, 300, 380, 589, 889, 952; impure, 63; letters on, 246, 247, 287, 288, 325, 356, 357, 394, 403, 449, 448, 536, 557, 644; tests for purity of, 331, 365, 525, 563; and ether, Mr. T. P. Teale on, 338; management of inhalation of, 586; recovery from poisoning by, 775; threatened death from, Dr. G. Barling on, 776
 Cholera at Trichinopoly, 361; in North-West provinces of India, 398; in the East, 512; proceedings of Provincial Medical and Surgical Association regarding epidemic of, 858
 Cholesterine in anterior chamber of eye, 152; formation of in double hæmorrhagic pleurisy, 907
 Chondrocranium and chondrosternum, 419
 Chondrosarcoma of breast, 740
 Chorea, Dr. F. Warner on analogies of movements of plants to, 263; rheumatic, Dr. T. Churton on salicylate of soda and conium in, 377; memorandum of Collective Investigation Committee, 478, 515, 553, 595; and Allied Movement Disorders, Dr. O. Sturges on, *rev.*, 743
 Choroid, hæmorrhage in from external injury, 382; coloboma of, 385; melanotic sarcoma of, 618
 Choroido-retinitis in inherited syphilis, 381
 Christison, Sir Robert, death of, 172; obituary notice of, 214, 249
 Christmas and New Year in London hospitals, 29
 Churchill, Messrs. J. and A., cheap medical books, 932
 Churton, Dr. T., rheumatic chorea treated by salicylate of soda and conium, 377; double hæmorrhagic pleurisy with formation of cholesterine, 907
 Cigarette-smoking, 846
 Cities, foreign, health of, 35, 74, 104, 178, 216, 254, 292, 330, 364, 408, 446, 486, 524, 562, 603, 642, 684, 723, 764, 802, 842, 930, 968
 Clark, Dr. Andrew, alcohol, 133; individualism in charitable institutions, 434
 — Mr. H. E., nerve-stretching in tetanus, 11
 Cleator Moor, water-supply of, 945
 Cleft palate, 703
 Cleland, Dr. J., Relation of Brain to Mind, *rev.*, 544
 Cleveland, Dr., primary and secondary vaccination, 581
 Climate of India, Sir J. Fayer on, 367
 Clinical teaching, defects of in London, 60
 Clippingdale, Dr. S. D., absorption of neck of femur, 294
 Clitherow, Mr. R. E., triplets, 932
 Clouting, Mrs. A., the Swaffham Board of Guardians and Poor-law Medical Relief, 521
 Clubs, sick, payments for, 142; private medical, 447; patients of and parish relief, 928
 Coal, consumption of, 99
 Coal-gas, poisoning by, 313
 Coal-miners, vertigo among, 526, 644
 Coati, pneumothorax in, a, 191
 Coats, Dr. J., Eberth's typhoid bacillus, 421
 Cockburn, Surgeon-General R., case of strychnia-poisoning, 574
 Codeia in diabetes, Dr. R. S. Smith on, 933
 Coffee, mixtures of with vegetable matter, 760
 Coffin, Mr. W., gutta-percha for taking impressions, 582
 Coins, swallowing of, 831, 914
 Coleman, Mr. A., administration of anaesthetics, 582
 Collective Investigation. See ASSOCIATION
 College, Firth, at Sheffield, 95
 — of France, Laboratory of Physical Biology, 166
 Gresham, claims of University of London on, 715
 — Jefferson, honorary degree conferred by, 623
 — King and Queen's of Physicians in Ireland, pass lists, 138, 253, 445, 601, 967; censor of, 205; notification of infectious diseases, 354; address to the Queen, 400; title of Doctor, 686; resolution regarding murder of Lord F. Cavendish, 714; address to Earl Spencer, 752; honorary degrees of, 868
 — Mason's, and experiments on animals, 32; transference of chairs to, 481, 669
 — Owens, physiological scholarships, 749; bequests to, 949
 — Queen's, Belfast, students in, 171
 — Queen's, Birmingham, transference of teaching to Mason's College, 481, 669
 — Royal, of Physicians of Edinburgh, pass list, 722; resolution of British Medical Association regarding admission of homœopaths, 863
 — Royal, of Physicians of London, pass lists, members, 177, 682; licentiates, 329, 682; Dr. Ewart's Gulstonian Lectures, 331, 369, 415, 453, 493, 530, 569; Sir Joseph Fayer's Croonian Lectures, 367, 413, 451, 490, 529, 567, 607, 645; Dr. Burdon Sanderson's Lumsden Lectures, 411, 449, 492, 527, 565, 608; address to the Queen, 394; Murchison scholarship, 436, 921; meetings of fellows, 510, 921; sale of poisons, 510; examiners, *ib.*; president, *ib.*; new fellows, 628, 801, 921; regulation regarding title of Doctor, 765; proceedings of Provincial Medical and Surgical Association regarding, 856; *conversazione*, 915; advertisements of medical books, 921; report of visitors of examinations, *ib.*
 — Royal, of Surgeons of Edinburgh, pass lists, 253, 722
 — Royal, of Surgeons of England, pass lists, primary examinations for membership, 34, 72, 103, 523, 561, 601, 640, 682, 721, 762; final examinations for membership, 103, 136, 601, 640, 762, 801; primary examination for fellowship, 841; final examinations for fellowship, 892; meetings of Council, 65, 363, 561, 715, 891; further examinations, 65; preliminary scientific examination, *ib.*; resolution regarding Mr. South, 127; visitors to museum, 134; Jacksonian prize, 170, 561, 715; questions at examinations, 170, 685, 765, 806; Mr. Parker's Lectures on the Morphology of the Mammalian Skull, 262, 301, 337, 372, 419, 456, 533, 572, 610; address to the Queen, 363; rule regarding rejected candidates, 363, 715; new fellows, 407, 715, 929; analysts in cases of poisoning, 561, 747; new regulation regarding pass examinations for membership, 596; remarks on primary and pass examinations, 605; new catalogue of Pathological Museum, 627; Mr. Flower's Lectures on the Edentata, 649, 694, 737, 768, 901, 937; examination in elementary anatomy and physiology, 715; circular regarding, 953; number of candidates at examination, 802; vacancies in Council, 832, 888, 915, 950; prizes of, 832; proceedings of Provincial Medical and Surgical Association regarding by-law of, 857; regarding voting at election of councillors, 865, 866, 867, 868; syllabus of Mr. Eve's lectures, 951
 College, Royal, of Surgeons of Ireland, professor of anatomy, 132; the changes in the curriculum, 284, 593; notification of infectious diseases, 354; lecture and hospital certificates, 400; examiner in ophthalmic surgery, 514; examiners, 673; professorship of ophthalmic and aural surgery, 714; resolution regarding murder of Lord F. Cavendish and Mr. Burke, 752; pass list, 762; proposed enlargement of school, 785, 836, 837, 889; deputation to Lord Lieutenant, 793; letter on election of Vice-President and Council, 795; annual report, 832; new regulations for fellowship examination, 835; annual meeting, 889; officers and Council, *ib.*; honorary fellowship, 868
 — Royal Medical Benevolent, festival dinner, 589; letters on, 718; presentation to, 951
 — Royal Veterinary, deputation to Lord President of Privy Council, 627; annual meeting, 719; president of, 827
 — University, at Dundee, 204
 — University, Liverpool, opening of, 94
 — University, London, Descriptive Catalogue of Specimens of Surgical Pathology in Museum of, *rev.*, 231; distribution of prizes, 750; *soirée* at, 831
 — Veterinary, in Edinburgh, professorship of physiology, 551
 Colleges, Royal, of Physicians and Surgeons of Edinburgh, pass lists, 253, 722; letters regarding, 487, 564, 643
 Collieries, treatment of accidents in, 100
 Collins, Dr. F. H., spontaneous fractures in infancy, 703
 — Dr. M., displaced leukaemic spleen, 458
 Coloboma of choroid and sheath of optic nerve, 385
 Colon, perforating ulcer of in typhoid fever, 88; stricture of sigmoid flexure of, 380; excision of stricture of, 461; malignant disease of, 703; enlargement of, 704; cancer of sigmoid flexure, 658
 Colonies, practice in, 447, 488; health laws in, 632
 Colonpuncture in intestinal obstruction, Dr. I. McGown on, 83
 Colorado as a summer and winter residence, 141
 Colotomy for disease of colon, 703; for stricture of rectum, 782; for cancer of large intestine, 940; left inguinal in rectal stricture, Mr. Reeves on, 902
 Colour, Dr. Kolbe's Tables for Measuring Perception of, *rev.*, 506
 Colour-blindness in relation to railway and sea-service, 99
 Coma, diabetic, 665
 Commerce and quarantine, 314
 Comrie, Staff-Surgeon P., death of, 797
 Concert for East London Hospital for Children, 24
 Congress, International of Hygiene, at Turin, 134; at Geneva, 790
 — International Medical, the *Transactions* of, 24, 64; meeting of in Copenhagen, 59, 165; deputation regarding experiments on animals, 60; photographs of members, 435, 469, 509; final meeting of Executive Committee, 747; student members of, 789, 795
 — Medical, German, 470
 — Medical, at Seville, 126, 352, 917, 969
 Conium, and salicylate of soda, Dr. T. Churton on rheumatic chorea treated by, 377; use of in a case of saltatory spasm, Dr. E. H. Jacob on, 735
 Conjunctiva, transplantation of, 40; chance on, 120; polypoid growth of, 157; bony tumour of, 742; epithelioma of, 911
 Conjunctivitis, variolous, Mr. M. D. Makuna on, 812
 Connaught, the Duchess of, 201, 314, 441
 Consumption, pulmonary, Dr. Burney Yeo on contagiousness of, 895. See Phthisis
 Contagious Diseases Acts, commission on, 314; meetings of Select Committee, 438, 514, 552, 637, 676, 753; evidence of Mr. Wreford, *ib.*; of Captain Britton, 439; of Mr. Wheeler, 514, 552, 637; of Mr. J. P. Kingston, 637; of Rev. Dr. Cook, *ib.*; of Dr. A. Patterson, 676; of Rev. S. Rimbault, *ib.*; Mr. D. Cooper, 753; report of, 950; proceedings of Parliamentary Bills Committee regarding, 821
 Contagium, Dr. Braidwood and Mr. Vacher on life-history of, 41, 77, 107, 143, 181, 219, 257; recent researches on, 178
 Contraction of limbs, 12
 Contracts in restraint of medical and surgical practice, 63
 Convalescent home at Bexhill, meeting on behalf of, 827; at Folkestone, 485, 593; for the German hos-

- pital, 375; Glasgow, at Lenzie, annual report, 100; for Queen Charlotte's Lying-in Hospital, 165; for St. Bartholomew's Hospital, 57, 120, 107; homes for workmen, 127; for children, 128
- Convalescents, report of Committee of Charity Organisation Society, 121
- from scarlatina, homes for, Dr. A. P. Stewart on, 374; notes on, 434; letters on, 604, 686, 814
- Convicts, at Chatham, phthisis among, 630
- Convulsions, epileptic, with inverted uterus, Mr. G. C. Searle on, 117; cases of, 387; puerperal, Mr. W. E. Green on nitro-glycerine in, 573
- Cook, Mr. E. A., process for estimation of uric acid, 505
- Rev. F., evidence regarding Contagious Diseases Acts, 637
- Coombs, Dr. C. P., life-assurance companies and medical fees, 493
- Cooper, Mr. Daniel, evidence regarding Contagious Diseases Acts, 753
- Coppinger, Mr., popliteal aneurysm cured by voluntary flexion, 12
- Corbould, Dr. F. J., flea-bites, 846
- Cork, health of, 101, 714
- Corley, Mr., lithotomy in a boy, 505
- Cornack, Sir John Rose, obituary notice of, 761; notes regarding family of, 787, 827, 888, 949, 951
- Cornea, epithelioma of, 30; growth at margin of, 741
- Cornitis, variolous, Mr. M. D. Makuna on, 813
- Corner, Dr., whooping-cough, 653
- Coroner, office of, 57, 93; election of for Loughlinshollin, 171; for Central Middlesex, and medical witnesses, 444, 520, 560
- Coroners, remuneration of in county Down, 438; medical, 564; proceedings of Parliamentary Bills Committee regarding election of, 884; and medical witnesses, 928, 970
- Coroners' fees, 38, 105, 255, 520, 605
- Corpus luteum, 778
- Corrugated paper splints, 391
- Cosgrave, Dr. E. M., rules for a dispensary, 447; skeleton respirator for antiseptic inhalation, 722
- Cottage home for children in Glasgow, 633
- Cotton yarns, oversizing of, 952
- Couloute, Mr. W. M., obituary notice of, 407
- Counter-prescribing by druggists, 166
- County boards, 197
- Coupland, Dr. S., tubercle, 186; double neuro-retinitis after concussion of brain, 382
- Courts of justice and infectious diseases, 129
- Courts-martial, naval, 62, 213, 347
- Cousins, Dr. J. Ward, new convertible stethoscope, 45; new antiseptic trocar, 273; method of performing incision of chest, 774
- Cowell, Mr. G., large strangulated scrotal hernia, 118; sclerotomy, 943
- Cow-pox, relations of to small-pox, 135, 247; new stock of, 352. See Vaccination
- Craig, Mr. R., rheumatism with hysteria, 817
- Cramp, 487, 525, 605
- Crane, Mr., death from chloroform, 952
- Craniorrhomy, case of, 387
- Crawford, Dr., appointed Director-General of the Army Medical Department, 520; services of, 559
- Crayons, poisonous, 669, 724
- Cream, salicylic, 229
- Creighton, Dr. C., tumours in skin-glands of dog, 50; tubercular vomicae from an eland, 426
- Cremation of dissected bodies, 313; and exhumation, 417
- Cressey, Mr. G. H., removal of needle from back of child, 218
- Criminal responsibility, 195; lunatics, 300; cases, physiological tests in, 508
- Cripps, Mr. W. H., traumatic malignancy, 653; disseminated polypi of rectum, 700
- Critchett, Mr. Anderson, bony tumour of conjunctiva, 742
- Mr. G., sclerotomy and iridectomy, 908
- Crocker, Dr. H. R., prurigo of Hebra, 906
- Croly, Mr., obturator hernia, 271; fracture of astragalus, 384; cancer of oesophagus, 505; excessive granulation-tissue, 544; sequestrum from os calcis, 16; epithelioma of tongue, 16; excision of knee, 019; paronychia gangrenosa, 663
- Crookenden, Dr. H., the will of, 437
- Cross, Mr. F. R., antiseptic measures and drainage in empyema, 611
- Dr. R., poisoning by nitrate of potash, 500
- Crouch, Mr. E. T., pruritus vulvæ, 765
- Cruelty in a workhouse, 950
- Cruikshank, Dr. R., hospitals in Scotland, 179
- Crummer, Dr., removal of placenta in miscarriage, 567
- Cucumber or carbolic acid, 61
- Cullimore, Mr. D. H., aconite in rheumatism, 616; hospital for North London, 718
- Cullingworth, Dr., solid tumours of ovaries, 384
- Cumberland, Mr. S., thought-reading, 710
- Cunningham, Dr. D. J., dinner to, 437
- Cureton, Mr., oophorectomy, 190
- Curious tale, 218
- Cyanide of potassium, poisoning by, 740
- Cyclitis, traumatic suppurative, 604
- Cyst of cerebellum, 88; ovarian dermoid, 271; ovarian, 944
- Cysts of liver, 88; of pancreas, 524; of ovary, papillary, 579
- D.
- Dabbs, Dr. G. H. R., subpneumonia to medical men, 487; carrier pigeons, 970
- Dairies and infectious diseases, 100
- Dairy, a model, 776
- Dalrymple home for inebriates, 436, 594
- Dampness and dryness of rooms, 487
- Dandelion used as a catheter, 766
- Daniell, Mr. E., proposed annuity fund, 855, 856
- Darrest, M., cause of production of monsters, 245
- Darwin, Mr. Charles, death of, 589; notes on, 628, 634; note of Convocation of University of London, 711; proposed memorial of, 787
- Dasyurus, lymphosarcoma of mesenteric glands in a, 268
- Davies-Coley, Mr., false membrane in scald of pharynx and glottis, 192; radical cure of inguinal hernia, 343; malignant pustule, 942
- Davis, Deputy Inspector-General F. W., ambulance cot of Dr. Gorgas, 255; morphia and atropia, 679
- Davy, Dr. H., perforating ulcer of stomach, 423; intra-cranial hæmorrhage, 739
- Mr. R., coat-sleeve method of performing circular amputation, 900
- Day, Dr. W. H., headaches in children, 307
- Dead among the living, 293; in hospitals, 953
- Deaf, speech for the, 828
- Deaf and Dumb, Glasgow Institution for, 752; teaching of, 919
- Deaf-mutism, cause of, 398
- Death, chemistry of, 75; unknown causes of, 132; sudden from blow with fist, 192; certificates of, and unqualified assistants, 395, 670, 743; question regarding certificates of, 844; registration of, proceedings of Parliamentary Bills Committee regarding, 885
- Deaths in London in 1881, 130; uncertified, 241, 293
- Debove, M., preparation of spinal cord for microscopic section, 139
- Deformity, asymmetrical, with chronic hydrocephalus, 268; Mr. Flower on Fashion in, *rev.*, 665; fashionable, 629
- Delirium tremens, treatment of, 15
- Dementia from hereditary syphilis, 503
- Dent, Mr., dislocation of tibia backwards, 342
- Dental Practitioners Bill, proceedings of Parliamentary Bills Committee regarding, 853
- surgeons, position of, 57, 76, 106, 141; resolution of Odonto-Chirurgical Society regarding curriculum for, 488
- Dentists, Register of, 239
- Depaul, M., prevention of necessity for induced abortion, 843
- De Rance, Mr. C. E., Water-supply of England and Wales, *rev.*, 162
- Derby, sanitary report of, 799
- Dermatitis, exfoliative, 703
- De Watteville, Mr. A., reflexes and pseudo-reflexes, 736; influence of galvanic current on motor nerves, 767
- Diabetes mellitus, treated by large doses of opium, 12; and alveolar periostitis, 308; malarial, Sir J. Fyner on, 529; endocarditis a complication of, 602, 843; fatty embolism in, 781; Dr. Shingleton Smith on codeia in, 933
- Diabetic cataract, 120; coma, 665
- Diaconate, medical, proposal for, 864
- Diagnosis, mistakes in, 243, 388
- Diarrhoea in Brixton prison, 588; infantile, 632; choleraic, and polluted water, 791
- Dick, Deputy Inspector-General J. N., 212
- Dickinson, Dr. W. H., cancer of synovial flexure, 658
- Diet, treatment of eczema by, Mr. B. Squire on, 499, 817; Mr. A. C. Rich on, 695, 903; Mr. F. C. Berry on, 817
- Digestion, lecture on, 203
- Digestive ferments, Benger's preparations of, 465
- Dinsmore, Mr. G. H. J., pitting in chicken-pox, 725
- Diphtheria, death from in London, 130; mortality from at different ages, 176; isolation of persons suffering from, 233; death of a French house-surgeon from, 234; at Potsdam, 16; Dr. F. P. Atkinson on treatment of, 265; Mr. H. C. Lawrence on, 340; Mr. A. Hirst on, 365; death of a lady-doctor from, 290; at Llanwddyn, 361; death of a parish medical officer from, 415; transport of infection of by wind, 463; outbreak of in London, 914
- Dipsomania, retreats for, 288
- Discussions at meetings of British Medical Association, 866, 875
- Disease, pictorial averages of physiognomy of, 237; new, 366; registration of, Committee of British Medical Association on, 867, 868, 869, 870, 871, 872, 873, 875, 876, 878; discussion on registration of, 716
- Diseases, infectious, chart for tabulating deaths from, 31; hospital accommodation for, 52, 278, 509; communication of through drains, 100; in courts of justice, 129; discussion on prevention of spread of, 169; closure of schools during prevalence of, 395, 779; and the Edinburgh hospitals, 633; management of in Glasgow, 700; isolation hospitals for, 788; Netherfield Institution for, 797, 969; removal of cases of, 828; in town districts in Ireland, 835; hospital for at Armagh, 955
- Diseases, infectious, notification of, in Edinburgh, 100, 167, 473, 713; petition in favour of, 137; in Ireland, proceedings of Dublin Branch of Association regarding, 174; resolution of Corporation of Dublin, 244; proceedings of Colleges of Physicians and Surgeons in Dublin, 354; report of Irish Medical Association on, 890; report of Parliamentary Bills Committee on local legislation for, 207; remarks on, 232; at Nottingham, 280; proceedings of Lancashire and Cheshire Branch regarding, 318; of South London District of Metropolitan Counties Branch, 320; at Bolton, 327; in New South Wales, 360; letter on, 406; Bills for, 435; discussion on at Rochdale, 444; Dr. A. Carpenter on, 469; in Wisconsin, 512; communications to Local Government Board, 711, 756; in Warrington, Mr. Gornall's remarks on, 720; at Aston Manor, 751; recommendations of Society of Medical Officers of Health regarding, 779; memorial of medical practitioners in Nottingham regarding, 798; proceedings of Parliamentary Bills Committee regarding, 885; memorial of practitioners in Liverpool, 915; Committee in House of Commons on Bill for, 926
- Disinfecting chamber, protest against a, 408, 627
- Dislocation, voluntary power of, 515; Mr. E. Owen on, 650
- Dislocation of ankle, compound, 505
- of elbow in children, Mr. S. H. Lindeman on, 378; Mr. A. Benson on, 422; Dr. W. Sneddon on, 499
- of femur, traumatic, 272; congenital, 342; of old standing, 739
- of humerus, unreduced, 504
- of patella edgeways, 192
- of tibia backwards, 342
- Dislocations, Dr. J. H. Anderson on reduction of by manipulation, 10
- Dispensary, Anderson's College, report of, 559
- Birmingham General, treasurer's account, 798
- Edinburgh Eye, appointment at, 473
- Edinburgh New Town, annual meeting, 353
- Edinburgh Northern, annual meeting, 473
- Edinburgh Royal, report of, 242
- Farringdon General, 611
- Newcastle-on-Tyne, lectures on aural surgery at, 436
- St. Marylebone General, payment of medical officers, 202
- for Skin-disease, Glasgow, report of, 560
- rules for a, 417
- medical relief in Ireland, 890
- Divorce and insanity, 515
- Doctor, title of, 686, 845, 970
- Dodwell, Rev. H. J., assault on Dr. Orange, 915
- Dog, chronic rheumatic arthritis in a, 425
- Dogs, parasitic pneumonia in, 744
- Dolan, Dr. T. M., Boylston prize awarded to, 950
- Dolby's patent beef-tea and gravy extractor, 194
- Domville, Mrs., apartments at Hampton Court granted to, 433
- Donahoe, Mr., and the Local Government Board, 213
- Donations, 30, 74, 194, 226, 317, 364, 408, 486, 524, 562, 723, 764, 802, 843, 959
- Doncaster, sanitary report of, 841; guardians of union, and Mr. Sykes, 927
- Donkin, Dr. H., round-celled sarcoma of kidney, 157; the memorandum of the Collective Investigation Committee on Chorea, 515; pseudo-hypertrophic paralysis, 537
- Donovan, Mr. W., inversion of uterus, 644
- Doran, Mr. Alban, ovariectomy in Switzerland, 114; papillary cysts of ovary, 579
- Dott, Mr. D. B., impurities of anaesthetics, 563
- Dougal, Dr., the case of Christine Marshall, 631
- Dougall, Mr. J., attachment of penis and scrotum, 774
- Dover, Kate, trial of, 237
- Dowdswell, Mr. G. I., pathogenic organisms, 969
- Downes, Mr. E., elephantiasis of penis and scrotum, 227
- Dowse, Dr. T. S., differential diagnosis of intracranial disease, 731, 769; treatment of phthisis by inhalation, 780
- Drainage-tubes used as dilators, 945
- Drapes, Dr. T., *petit mal* in operation, 76; pruritus vulvæ, 765; syphilis versus cancer, 816
- Drasche, Dr., water-supply and death-rate, 763
- Dreschfeld, Dr., lupus, 503; epithelioma of lung with secondary growths, 16; progressive facial hemiatrophy, 16; phlegmonous gastritis, 911
- Dress of the period, 330; letters on, 357
- Dresses, ladies', exhibition of, 376; remarks on, 629

- features of recent epidemic of, 832; antipyretic treatment of, 842; case of, 848; in South Africa, 57, 282; in Edinburgh, 131, 204; at Ilkeston, 361; in Leicester Infirmary, 540; in New Zealand, 214; in Glasgow, 524
- Fever, ephemeral, Sir J. Fayrer on, 607
- malarial, masked, in India, 567; in the Mauritius, 949
- puerperal, infection with, 29, 164; relation of to pyæmia, 219
- remittent, in India, Sir J. Fayrer on, 522
- splenic, M. Pasteur on prophylaxis of, 48
- typhoid. See Fever, enteric
- typhus, in a prisoner, 366; epidemic of in Marylebone, 402; cases of with scarlet fever, Dr. J. S. Main on, 422; in Waterford, 634
- yellow, Dr. Boileau on, 7; microphytes of, 90; at Senegal, 112, 152
- Fever of India, Sir J. Fayrer's Croonian lectures on, 387, 413, 451, 490, 529, 567, 607, 645
- continued, in India and the tropics, Sir J. Fayrer on, 607; Dr. J. C. Wilson's Treatise on, *rev.* 714
- Ffolliott, Surgeon-major N., nasal catarrh, 76
- Fibroid tumour of uterus. See Uterus
- Fibro-lipoma simulating umbilical hernia, 544
- Fibro-adenoma of anus, 619
- Fibula, cystic tumour of, 704
- Fild, Mr. G., removal of osseous tumours from auditory meatus, 120; cases in aural surgery, 62
- Filaria sanguinis in South Formosa, 51; in relation to epidemics and endemics, *ib.*; in camel's lung, 121; in a case of hæmatochyluria, 740, 750; in lung of a sealion, 838
- Filtration of water, 749
- Fincham, Dr., tumour of brain, 49
- Finger, necrosis of a, 308
- Fingers. Dupuytren's contraction of, in women, Mr. W. Adams on, 84. See also Fascia, and toes, supernumerary, 387, 471
- Finlay, Dr., pneumonia treated by cold baths, 49; aneurysm of ascending aorta, 269
- Finny, Dr. J. M., cancer of œsophagus, 544; apparent recovery from Addison's disease, 621; pulmonary gangrene, 622, 663; acute ascending paralysis, 732
- Firth, Mr. R. H., statistics of chloroform or ether administration, 442
- Fisher, Mr. F. R., plaster-of-Paris jacket for spinal disease, 774
- Fist, sudden death from blow with, 192
- Fistula, recto-vaginal, after labour, 267; spontaneous laryngeal, 270; vesico-vaginal, operations on, 894
- Fitzgerald, Dr. C. E., deficiency of vision in a seaman, 383
- Dr. G. H., unqualified practitioners and uncertified deaths, 223
- Fleas, prevention of bites of, 726, 765, 846
- Fleming, Mr. G., relations of small-pox and cow-pox, 135
- Fletcher, Mr. F. A. C., the tax on carriages, 724
- Fletcher's syrup of hydrobromate of iron and quinine, 464
- Flint, Dr. A., the antipyretic treatment of fever, 843
- Flower, Mr. W. H., anatomy, physiology, and zoology of the Edentata, 649, 694, 737, 768, 901, 937; Fashion in deformity, *rev.* 665
- Flowers, fatal, 434
- Fœtus, mummified, 229; asexual, 944
- Fog, effect of on death-rate in London, 201, 235; and smoke, 237
- Food, cheap, 60; obstruction of pharynx by, 271; adulteration of in 1882, 825; supply of, 926
- Foot, Dr. A. W., diseased aortic valves with hypertrophy of left ventricle, 272
- Football, hospitals' challenge cup, 171
- Forbes, Sir John, honorary degree conferred on, 859
- Forceps, perineal curve and axis-traction, Mr. S. Macvie on, 9; long, new form of, 384
- for throat, 194
- for tonsils, new, 428
- Forehead, congenital tumour of, 384
- Foreign bodies, removed from eye by electro-magnets, 160; in thyroid cartilage, thyrotomy for removal of, 777
- body, removal from bladder by median operation, 53; in œsophagus, 305; in eye, 502; in bladder, Mr. F. S. Edwards on, 816
- cities. See Cities
- Forster, Mr. E. W., cardiac therapeutics, 534
- Fothergill, Dr. J. M., Chronic Bronchitis, *rev.* 911
- Foulis, Dr., curvatures of spine, 161
- Fournier, M. A., Syphilis and Marriage, *rev.* 162
- Fowke, Mr. F., appointed Secretary of British Medical Association, 871
- Fowl, needle from a, 386
- Fowler, Dr., intestinal obstruction, 14
- Fracture of astragale, 334
- of auditory process of temporal bone, Mr. J. Lloyd on, 190; Mr. A. Davidson on, 341
- of base of skull, 160, 308, 502
- of femur in a puma, 191; of neck of, simulated, 384
- of humerus, Mr. J. A. Grant on spruce-shaving splint in, 48; ununited, 308
- Fracture of leg, with remarkable features, Mr. K. Millican on, 738
- of patella, Mr. J. Hutchinson on, 298; Mr. C. Heath on, 422; Mr. W. B. Holderness on, 500
- of ribs in asylums, 711
- of vertebra, 160, 622
- Fractures, club payments for, 605; Dr. Raoult Deslong champs on Treatment of, *rev.* 623; spontaneous, in early infancy, 793; fatty embolism in, 781
- France, Mr. J. F., and the Royal Medical Benevolent College, 951
- France, suicides in, 118; army medical service in, 444; regulations for practice in, 563
- Francis, Mr. E. G., infantile paralysis, 564
- Frankland, Dr. E., Water-Analysis for Sanitary Purposes, *rev.* 31
- Franks, Mr. Kendal, disease of suprarenal capsules, 386; stricture of œsophagus, 619
- Fraser, Mr. D., aphasia, 704
- Frost, Mr. W. A., sympathetic inflammation after enucleation of an injured eye, 742
- Fruit-pickers' lodgings Bill, 967
- Fungi in eggs, 602; poisoning by, 949
- Fungosities of female bladder, 729
- Furlong, Dr. J. S., appointed principal medical officer in Ireland, 248
- G.
- Gade, Mr. W. R., supposed poisonous effects of borax, 589
- Gadde, Mr., recurrent epulis, 701
- Gaffney, Mr. C. B., presentation to, 291
- Gairdner, Dr. W. T., pseudohypertrophic paralysis, 618
- Galabin, Dr., doubtful case of double vagina, 344; retention of menstrual fluid in half of a double uterus, *ib.*; histological results of laceration of cervix uteri, 426; diseased ovary, 580
- Gall-stones, large, 544; in an infant, Dr. A. D. Walker on, 575; letters on, 726, 804; passed by rectum, 703
- Galloway, Dr. J. H. M., appeal on behalf of family of, 36
- Galvanic current, influence of on motor nerves, Dr. A. Waller and Mr. De Watteville on, 767
- Galvanism in catalepsy, 218; and hypnotism, 276
- Galvano-puncture in aortic aneurysm, 139
- Ganglion cervicale uteri, 14
- Gangrene, traumatic, Mr. J. Hutchinson on prompt amputation in, 6; of lung, 622, 663
- Garden, botanical, at Bordeaux, 94
- Gardner's syrup of hydriodic acid, 465
- Garfield, President, surgeons of, 314
- Garibaldi, General, health of, 25, 519; death of, 889, 916
- Gas in living-rooms, 743
- Gastritis, phlegmonous, 911
- Gastrostomy for stricture of œsophagus, 234, 505, 538; case of with unusual characters, 241
- Gayton, Dr. W., small-pox in birds, 655
- Gee, Dr., fatal cases of typhoid fever in children, 775
- Geneva convention, accession of United States to, 281
- Genital organs, male, malformation of, 398; imperfect development of, 821
- Genu valgum, bones from, 87; supracondylar osteotomy for, 160; antiseptic osteotomy for, 577
- Germany, medical statistics of, 315; ambulance work in, 401
- Gestation, extra-uterine. See Extra-uterine
- Gibson, Dr. G. A., cephalic murmur in anæmia, 82
- Gillingham, Mr., uterine fibroid complicating pregnancy, 229
- Girard-Teulon, Dr., the Function of Vision and its Anomalies, *rev.* 18
- Girdlestone, Mr. T. M., surgical uses of kangaroo-tendons, 228
- Girls, physical education of, 548
- Given, Mr. G. K., poisoning with carbonic acid, 11
- Gladstone, Mrs. L., convalescent homes for scarlet fever, 434
- Glanders in the human subject, 790
- Glasgow, special correspondence from, 32, 211, 518, 925; health of, 65, 139, 204, 399, 513, 713, 833, 919, 954; charities in, 212
- Glassington, Mr. C. H., deaths from anæsthetics, 325
- Glaucoma, discussion on sclerotomy for, 748, 907, 943; Mr. S. Snell on eserine and pilocarpine in, 811
- Glioma of retina, 120
- Gisan, Dr. R., Text-book of Modern Midwifery, *rev.* 231
- Glottis, bilateral paralysis of openers of, 542
- Glycerine, boracic, 644, 726
- Godlee, Mr. R. J., femoral artery tied for aneurysm, 268; ether as an anæsthetic, 756
- Godrich, Mr. A., the Fulham Small-pox Hospital, 294, 331
- Godson, Dr. C., treatment of spasmodic dysmenorrhœa and sterility by dilatation, 14
- Goitre, endemic, Dr. R. B. Low on etiology of, 43, 80; Mr. C. Roberts on geographical distribution of in England, 117; exophthalmic, 351, 622
- Golding-Bird, Mr., nephrectomy for scrofulous kidney, 500; mechanical treatment of spinal disease, 687
- Gonorrhœa, treatment of, 104
- Goodhart, Dr., acute yellow atrophy of liver in a child, 29; case of Addison's disease, 191; lunacy from lead-poisoning, 464; nephrectomy for scrofulous kidney, 500; memorandum on acute rheumatism, 594; work of Collective Investigation Committee, 675
- Gosselin, Dr., ambulance cot of, 255
- Gosselin, M., management of inhalation of chloroform, 586
- Gould, Mr. A. P., bones from genu valgum, 87; spina bifida cured by injection of iodine, 661; congenital intestinal obstruction, *ib.*; lateral asymmetry of bones and brain, 699; amputation of penis, 820
- Gout, joints from cases of, 267; theory of, 564
- Gowers, Mr. W., case of myxœdema, 772
- Gowers, Dr. W. R., epilepsy with auditory aura, 696
- acute spinal paralysis, 729
- Gräfe, Albrecht von, memorial statue of, 240
- Grafton, the late Duke of, 787
- Grant Bey, Dr., honorary degree conferred on, 627
- Grant, Mr. J. A., the spruce-shaving splint, 48
- Miss, presentation to, 205
- Grants, Scientific, of British Medical Association, 873, 874, 876, 877, 878
- Granville, Dr. J. M., percussion in nervous diseases, 339; sleep and sleeplessness, 826
- Grass, penetration of organs by ears of, 87
- Grattan, Mr. N., treatment of spinal curvature, 693
- Gray, Dr. J. P., attempted assassination of, 512
- Green, Dr. Hennis, and the Provincial Medical and Surgical Journal, 854, 855, 856
- Mr. Thomas, death of, 32
- Mr. W. E., nitro-glycerine in puerperal convulsions, 573
- Greenhow, Dr. E. H., rheumatic fever treated with iodide of potassium and sulphate of quinine, 905
- Greenway, Mr. H., suspension in surgery, 151
- Greenwood, Mr. M., instrumental *versus* normal parturition, 189
- Messrs., clinical thermometers, 705
- Gréhaut, M., fatal doses of alcohol, 139
- Griffin, Dr. R. W. W., obituary notice of, 103
- Griffith, Dr. A. H., sarcoma of eyeball, 503; rodent ulcer, *ib.*; epithelioma of conjunctiva, 911
- Mr. J. H., school-boards and medical fees, 366
- Mr. T., death of, 823
- Gross, Dr. S. D., resignation of professorship, 627
- Gruber, Dr. M., carbonic oxide in the air, 712
- Guelliot, M. O., ataxy and sewing machines, 315
- Gueneau de Mussy, Dr. N., exophthalmic goitre, 351
- Guiana, British, district medical officers in, 26, 917
- Guild of St. Luke, 802
- Guilds of health, parish, 482
- Guillemard, Dr. F. H., Endemic Hæmaturia of Hot Climates, *rev.* 704
- Guiteau, C., the case of, 292, 947
- Gummata in spleen, 88
- Gunshot wounds of abdomen, Dr. M. Sims on treatment of, 184, 222, 260, 302
- Gutta percha for taking impressions in dentistry, 582
- Guy, Dr. W. A., small-pox in London, 948
- Gymnasium in Liverpool, 518
- H.
- Häckel, Professor, scientific mission of, 22, 394, 627
- Hadden, Dr. W. D., anomalous case of infantile hemiplegia, 224; new tract of spinal degeneration, 541; congenital cardiac disease, *ib.*
- Hæmatoma in an acephalous monster, Dr. P. Boulton on, 340
- Hæmaturia of vesical origin, 656; Endemic, of Hot Climates, Dr. Guillemard on, *rev.* 704
- Hæmatochyluria, filarial, 740, 750
- Hæmoptysis, Dr. J. M. Williamson on treatment of, 536
- Hæmorrhage, cerebral and military aneurysms, 741
- in cerebral tumour, 426
- choroidal, from external injury, 382
- post partum, treatment of, 36; Dr. J. Basset on, 54; Mr. H. Thompson on, 695
- retinal, case of, 119
- in stomach, in cirrhosis of liver, 740
- subarachnoid, and into pons Varolii, 739
- uterine, concealed, 621; Dr. Braxton Hicks on arrest of, 935
- Hæmorrhoids, Mr. C. W. Thorp on carbolic acid in, 48; Mr. W. Whitehead on surgical treatment of, 142
- Hair-washes, poisonous, 669
- Hair-oil, petroleum as, 845
- Hall, Dr. de Havilland, perichondritis of larynx, 661
- Mr. F., the Royal Medical Benevolent College, 710
- Hallowes, Mr. F. B., advancement of medicine by research, 517
- Hallucinations of hearing, case of, 697
- Hand and fingers, aneurysmal varix of, 820
- Hardie, Mr., staphylophary and uranoplasty, 703
- Hardwicke, Mr. W. W., tricycles, 805

- [illegible]

Hotz, Dr. F. C., homatropine as a mydriatic, 523
 Houel, Dr., Catalogue of the Dupuytren Museum, *rev.*, 1293
 House duty and medical men, 563
 Houses in London, drainage of, 281; healthy, legal right to, 472, 709
 Howard, Dr. H., ambulance service for London, 152; ambulance apparatus, 324
 — Mr. H. C., arrest of bleeding from nose, 37
 — Dr. J. F., scarlet fever, 410
 Howe, Mr. J., triplets, 225
 Huet, Dr., malaria in lung of a sea-lion, 838
 Hueter, Dr., death of, 529
 Hughes, Dr. John, death of, 714
 Hull, sanitary condition of, 444
 Human remains, discovery of, 562
 Humerus, Mr. J. A. Grant on spruce-shaving splint for fracture of, 48; central necrosis of head of, 500; sarcomatous tumour of, 501; reduced dislocation of, 504
 Humphry, Dr. G. M., sarcomatous tumour of humerus, 501
 Hunger and appetite, 786
 Hunt, Dr. B., tumour of cerebellum, 657
 — Dr. De Vere, the tax on carriages, 717
 Hurt, Dr. G., position in relation to injury of perineum during labour, 524
 Husband, Mr. W. D., elected President of Council of British Medical Association, 869; elected Treasurer, 874, 877; resolution of Committee of Council on resignation of, 879
 Hutchinson, Mr. Jonathan, precancerous stage of cancer, 5; empiricism and specifics, *ib.*; amputation in traumatic gangrene, 6; syphilis twice, *ib.*; treatment of lichen psoriasis, *ib.*; chronic synovitis, 7; pemphigus in infants, 79; and the antivivisectionists, 123; papillary growths in leg preceding cancer, 297; peculiar conditions of malignant disease of skin, *ib.*; fracture of patella, 298; ankylosis of hip in flexed position, *ib.*; multiple osteo-chondromata, 342; anomalous nerve-disorder in infancy, *ib.*; calcified bronchocele, 699
 — Mr. Jonathan, junior, psammoma of spinal cord, 741
 Hyalitis, traumatic, 664
 Hydauds of peritoneum, 308
 Hydriodic acid, Gardner's syrup of, 465
 Hydrobromate of iron and quinine, Fletcher's syrup of, 464
 Hydrocephalus, chronic, with asymmetrical deformity, 268
 Hygiene, International Congress of, 134; Naval, Dr. J. D. Macdonald on, *rev.*, 193, 388
 Hygrometers, Mr. G. S. Symons on History of, *rev.*, 122
 Hyperpyrexia in acute rheumatism, report of Committee of Clinical Society on, 807, 905
 Hypnotism, and galvanism, 276; experiments on, 282, 554
 Hypodermic injection of amyl nitrite, Mr. J. J. F. Barnes on, 817
 Hysteria with rheumatism, Mr. R. Craig on, 817
 Hysterical paraplegia in a boy, 267
 Hystero-epilepsy, cases of, 379, 460, 461

I.
 Ice-water, dyspepsia from, 280
 Ichthyosis of tongue, 426; of entire surface of body, 906
 Idiocy, varieties of, 17
 Idiots in the Western counties, 241
 Ignipuncture in hypertrophy of tonsils, 130
 Ileum, diverticula of, 425; obstruction by diverticulum of, 541
 Illegitimacy in Salford, 282
 Illingworth, Mr. C. R., paralysis treated by elastic extension, 156
 Imbecile paupers, certification of, 759
 Imbeciles, Institution for at Larbert, 316; superintendents of asylums for, 442, 517, 558, 680, 759; asylum for at Darenth, 917
 Income-tax, proceedings of Provincial Medical and Surgical Association regarding, 859
 Incurables, Glasgow Association for Relief of, 242
 Edinburgh Institution for, 353; Protestant Home for in Cork, annual meeting, 400
 India, climate of hill-sanitaria of, in scrofula and phthisis, 39; medical administration in, 275; mortality in prisons in, 347, 632; vaccination in central provinces of, 362; Sir J. Fayer's Croonian lectures on climate and fevers of, 367, 413, 451, 490, 529, 567, 607, 645; medical service of, and medical etiquette, 448, 525; insalubrity of larger stations in, 712; death-rate of European soldiers in, 839
 Induction-balance, detection of lead bullets by, 241
 Inebriates, homes for, 331, 436. See Drunkards
 Infancy and Childhood, Dr. J. L. Smith on Diseases of, *rev.*, 664
 Infant Life Protection Act, prosecutions under, 549; proceedings of Parliamentary Bills Committee regarding, 534
 Infant, Dr. A. D. Walker on gall-stones in an, 575, 804; spontaneous fractures in an, 703; psychology of the, 826. See Child

Infants, spasmodic paralysis of, 16; Mr. J. Hutchinson on pemphigus in, 79; mortality of at Long Sutton, 94; preventable asphyxia of, 128; deaths of in London 10 1881, 130; Society for Protection of in Paris, 202; anomalous nerve-disorder in, 342; treatment of tape-worm in, 410; mortality of at Keighley, 482; treatment of paralysis in, 554; mortality among, 712. See Children
 Infection, homicide by, 164, 320
 Infectious diseases. See Diseases
 Infirmary, in Glasgow, financial state of, 32; fancy ball in aid of funds, 405
 — parochial, and coroners' fees, 640
 Infirmary, Aberdeen Royal, the office of superintendent, 792
 — Cork North, changes at, 317, 753
 — Cork South Charitable, annual report, 519
 — Dundee Royal, annual meeting, 920
 — Edinburgh Royal, report, 26; bequest to, 316; physicianship of, 438, 473; donation to, 513
 — Eye and Ear, Dublin, new buildings, 474
 — Eye, at Edinburgh, annual meetings, 131
 — Glasgow Royal, annual meeting, 358; resident appointments, 723
 — Glasgow Western, bazaar on behalf of, 518; resident assistants, 602
 — Greenock, alleged irregularity at, 203, 212
 — Kilkenny Union, payment to, 760
 — Leicester, typhoid fever in, 549
 — Liverpool Royal, annual meeting, 202
 — Manchester Royal, new pathological theatre, 966
 — Oldham, donation to, 888; bequest to, 949
 — Paisley, annual meeting, 600
 — Perth City and County, report of, 290
 — sea-bathing at Margate, new wing and chapel, 22
 Inflammation, Dr. Eurdon Sanderson's Lumlilan lectures on, 411, 449, 492, 527, 565, 608
 Influenza, investigation regarding by Provincial Medical and Surgical Association, 851
 Ingals, Dr. E. F., Lectures on Diseases of the Chest, Throat, and Nasal Cavities, *rev.*, 122
 Inhalation, Dr. R. J. Lee on scientific principles of, 937
 Inhumanity, charge of, 59, 141
 Inoculation, future of, 294
 Inquest without knowledge of medical attendant, 471; scene at an, 511. See Coroner
 Insane in houses, 169, 670; in workhouses, 839
 Insanity and responsibility, 163, 279, 947; statistics of, 353; with hallucinations from disease of ear, 697; from drugs, 763; criteria of, 842; increase of in Paris, 913; Morison lectures on, 954
 Institution for Deaf and Dumb, Glasgow, annual meeting, 752
 — for Imbecile Children at Larbert, annual meeting, 316
 — Netherfield, for infectious diseases, 797, 969
 — Ophthalmic, Glasgow, annual meeting, 399
 — for Relief of Incurables, Edinburgh, report of, 553
 — Royal, appointments at, 198
 — for Women and Children, Glasgow, report of, 713
 Insurance. See Life-Assurance
 Intemperance in females, 590; and disease, 602
 Intestine, annular stricture of, 14; obstruction of, 14, 541; Mr. H. B. Runnalls on stricture of, 47; Dr. McGown on obstruction of treated by colopuncture, 83; Dr. Marion Sims on gunshot-wounds of, 261; laceration of, 341; tubercular ulceration of simulating typhoid fever, 503; congenital obstruction of, 661; ulceration of large, 700; action of opium and morphia on, 790; colotomy for cancer of, 949
 Intraprofessional obligations, 480
 Iodate of quinine, 909
 Iodide of potassium with quinine in rheumatic fever, 905
 Iodine, injection of in spina bifida, 661; new use for solution of, 766
 Iodoform in treatment of soft sores, Mr. W. Whitehead on, 340; Mr. L. Browne on local application of, 422; as an antiseptic, 472; in English antiseptic surgery, 550; in ulcer of stomach, 657; apparent poisonous influence of, 903, 913
 Ireland, Dr. W. W., the dry earth system, 37
 Ireland, census of, 290; sanitary condition of prisons in, 349, 406; quarterly report of health of, 475
 Irideremia, case of, 663
 Iris, and ciliary body, Dr. J. R. Wolfe on tubercle of, 299; primary tubercle of, 742
 Iritis, sympathetic, after enucleation of eye, 742; syphilitic, 781
 Isle of Man, practice in, 293, 331
 Isle of Wight, sunshine in, 211
 Italy, Poor-law medical service in, 550

J.
 Jackson, Brigade-surgeon, vesical abscess, 271; enteric fever, 968
 — Dr. Hughlings, migraine, 464
 — Dr. T., poisoning case at Dairycotes, 409

Jacob, Dr. E. H., a portable polygraph, 91; deaths from anaesthetics, 325; heating of hospitals by steam, 564; saltatory and general clonic spasm treated by conium, 735
 Jago, Mr. F. W. P., blood-discs in hemorrhagic diathesis, 576
 Jalland, Mr. W., dislocation of femur reduced after eight weeks, 739
 James, Mr. J. B., treatment of tongue-tie, 340
 Jamieson, Dr. F., obituary notice of, 681; proposed memorial of, 752
 — Dr. W. A., cases of pityriasis, 817
 Jarro, sanitary report of, 70
 Jastreban, Dr., the ganglion cervicale uteri, 14
 Jaw, lower, sarcoma of, 381; necrosis of from cancrum oris, 386; glandular epithelioma of, 704
 — upper, squamous epithelioma of, 13; myeloid tumour of, 782
 Jeaffreson, Mr. G. E., village doctors, 487
 Jejunum, rupture of, 513
 Jenks, Dr. G. S., obituary notice of, 290
 Jesse, Mr. G. R., experiments on animals, 75
 Jessop, Mr. C. W., a model hospital, 409
 Jeston, Mr. T. W., 128
 Jevons, Mr. Stanley, married women in factories, 63
 Jews, comparative longevity of, 723
 Joel, Dr., ovariectomy in Switzerland, 357
 Johnson, Dr. G., renal tube-casts and their diagnostic significance, 295; acute perforative pneumothorax, 343
 Johnston, Dr. H. M., ligature of femoral artery for wound, 577
 Joins, Mr. W. Thomson on after-treatment of excision of, 113
 Jones, Mr. George, presentation to, 104
 — Mr. Sydney, removal of uterus, 96, 539
 — Mr. T., absorption of neck of femur, 17, 227
 Jopp, Surgeon-major J., death of, 288
 Journal, Association Medical, 859
 JOURNAL, BRITISH MEDICAL, editors of, 861, 863, 868, 871; proceedings in annual meeting of Association regarding, 866, 876; action for libel against, 879; remarks on, 887
 Journal, Provincial Medical and Surgical, original supply of, 854; change of management, 855, 857; claim of Dr. Dennis Green against, 855, 856; removal of to London, 859
 Junod, Dr., death of, 291
 Jury, a perverse, 280

K.
 Kangaroo tendons, surgical uses of, 228
 Karolyi, Count, and London hospitals, 103
 Keetley, Mr. C. B., cheap editions of medical works, 970
 Keith, Dr. T., simple and aseptic ovariectomy, 746, 795, 966
 Kellogg, Dr., sickness and taxation, 62
 Keloid, case of, 502; acne, 579
 Kennedy, Mr. C., treatment of pemphigus, 265
 — Dr. H., Salisbury's views on phthisis, 230; fatal cases of eczema, 909
 Kenny, Mr. J. E., 243, 327, 400, 474
 Kensington, sanitary report of, 35
 Ker, Mr. H., ovariectomy, 702
 Ker, Dr. Norman, retreat for dipsomaniacs, 288; epidemic of typhus fever in Marylebone, 402
 Kesteven, Mr., ulcer of stomach, 13; xanthopsia, 158
 Key, Mr. A. C., case of threatened strangulation, 410
 Kidd, Dr. G. H., medical education, 146; the Royal College of Surgeons of Ireland, 836
 Kidney, round-celled sarcoma of, 157; micrococci in, 161; Dr. G. Johnson on casts from, 295; scrofulous, nephrectomy for, 500; injury of, 502; myxosarcoma of, 541; removal of for calculous pyelitis, 579; calculus of, undergoing disintegration, 740; cancer of, 741; sacculated, 795
 King's Norton, sanitary report of, 758
 Kingston, Mr. J. P., evidence regarding Contagious Diseases Acts, 637
 Kirkwood, Dr., testimonial to, 954
 Knee, excision of in early life, Mr. W. Stokes on, 117; perforation of popliteal artery after excision of, 501; cases of excision of, 505, 619, 622; removal of loose cartilages from, 820
 Knight, Mr. J. T., instrumental *versus* normal parturition, 266
 Köbner, Dr., inoculation of leprosy, 917
 Knock-knee, letter on, 331. See Genu valgum
 Koch's method of investigating pathogenic bacteria, 624; investigations on tuberculosis, 706
 Kocher, Dr., ovariectomy, 746
 Kolbe, Dr. B., Tables for Measuring Colour-Perception, *rev.*, 506
 Koumiss, manufacture of, 394
 Krämer, Dr., solutions of atropine and eserine, 364
 Krishaber, M., treatment of hypertrophied tonsils by ignipuncture, 130

L.
 Labour, nitrous oxide as an anæsthetic in, 161; complicated with urethral cyst and prolapsus uteri, Dr.

[illegible]

Medical advertising, 37, 141, 844
 annuity fund, proposed formation of, 855, 856
 articles in lay papers, 143
 assistants, unqualified, and certificates of death, 670
 Association. *See* Association
 attendance, honorary, 76; on the poor, 182
 on wards in Chancery, 217; on the artisan classes, 365, 447, 487, 605; on railway passengers, 644
 Benevolent Fund, action of Branches on behalf of, 23, 31, 134; resolution of annual meeting, 115; meetings of Committee, 166, 312, 485, 629; letter on, 175; subscriptions and donations, 209, 293; history of, 848, 849, 851, 852, 854, 855, 856, 857, 858, 860, 861, 864, 866, 869
 bills, particulars in, 804
 Book-keeping, Dr. A. Sheen's Handy System of, *rev.*, 83
 books, cheap editions of, 888, 932, 970
 carriages, 823
 Congress. *See* Congress
 Coroners, 564, 605
 Council, new members of, 234, 954; members appointed at formation of, 863; representation of medical profession in, 870, 871
 degrees, in United States, 315; letters on, 765, 831
 deserts and military justice, 393
 diaconate, proposed, 864
 education, Dr. G. H. Kidd on, 146; Dr. Edis on, 200; letters on, 293, 409, 844; compulsion in, 738; defects in, 824; South Western Branch on, 959
 ethics, proposed committee on, 853, 859, 860, 863
 etiquette, 75, 140, 142, 218, 523, 605, *rev.*, 725, 811; in India, 440, 525
 fees. *See* Fees
 hero, a, 524
 Institute, Birmingham, donations to, 481
 Institution, Liverpool, officers and Council, 71
 Journal. *See* Journal
 laws in South Australia, 166
 magistrates, 73, 523, 562, 762, 930
 man, testing certificate of, 471
 members of Parliament, 787
 men, attendance on widows and children of, 37, 75, 94, 142, 256, 480; newspaper charges against, 141, 142; subpoenas to, 487, 931; house-duty paid by, 518; and life-assurance companies, *see* Life-Assurance; proposed schools for sons of, 853, 856; unjust persecutions of, 865; living, biographies of, 867; societies for widows of, 931
 meteorologists, 546
 mission at Smyrna, 513
 officer, charge against a, 27, 98, 101, 273, 835
 officer of a prison, charge against, 587, 668
 officers of health, duties of; 270; district medical officers as, 799
 practice in the Colonies, 447, 488; in France, 563; contracts in restraint of, 625; with single qualification, 765
 practitioner, unqualified, appointed to a friendly society, 180; charge against a, 435, 464, 590; alleged appointment as poor-law medical officer, 521
 practitioners, unqualified, and certificates of death, 293, 410
 profession, legal obligations of, 20, 625; in China, 398; representation of in Parliament, 863, 866, 868
 provident fund, 865, 866, 868
 qualifications, registration of, 141
 reform, proceedings in Association regarding, 853, 854, 855, 856, 857, 859, 860, 861, 862, 863, 864, 870, 871, 872, 873, 875, 876, 878; proceedings of Parliamentary Bills Committee regarding, 884; proceedings of Branches, 957, 958. *See* Medical Acts
 Register, the, 239
 relief to poor, proceedings of Association regarding, 851, 852, 853. *See* Poor-law
 service of British Guiana, 26, 917; of Bengal, subordinate, 483
 statistics of Germany, 315
 Students' Club, 914
 Students' Register, *rev.*, 506
 study, period of, 106
 topography, proceedings of Provincial Medical and Surgical Association, 847, 854, 858
 witnesses, and the Coroner for Central Middlesex, 444, 520, 521; fees to, 605, 928; and coroners, 511, 579
 Medicine, Mr. J. W. Haward on Liberty and Authority in, *rev.*, 162; and meteorology, 332; advancement by scientific research, *see* Association; as a civilising agent, 788
 Medico-gymnastic machines, the Zander, 310
 Mesenteric, poisonous and patent, 126, 547; proceedings in Parliament regarding, 760
 Medulla oblongata, hyperæmia and hæmorrhage in, 268
 Meiglin, M., tinea favosa, 968
 Melanotic sarcoma of finger, 271; of eye, 544
 Memorial of Dr. R. J. Harvey, 64, 100, 317, 713; of Dr.

Simpson, 170; of Professor Schwann, 292; of Surgeon-Major Porter, 327; of Dr. McIntyre, 549; of Mr. Charles Darwin, 787; of Von Gräfe, 828
 Menière's disease, case of, 618
 Meningitis in children, 662; cerebro-spinal, 700; chronic cerebral, Dr. A. Hughes Bennett on case of, 727
 Menorrhagia, cases of, 581
 Mentone, sanitary state of, 394; visit of the Queen to, 437, 509, 548, 589
 Menstrual fluid, retention of in double uterus, 344
 Mercurial erythema from inunction, Mr. J. Lowe on, 188
 Mercury, in sympathetic ophthalmia, 796; investigation of action of, 867, 869
 Mesenteric glands, of dasyurus, lymphosarcoma of, 268; caseous, peritonitis from, 781
 Meteorology, advances in, 282; and medicine, 332, 546
 Metric system, 878
 Meymott, Mr. H., the law of lunacy, 806; retention of urine, 816
 Micrococci from fresh urine, 53; in kidney, 161
 Micro-organisms in disease, 778, 787
 Microzymes, 789
 Middlemore, Mr. R., prize founded by, 877, 913
 Midwife charged with manslaughter, 129
 Midwifery, Modern, Dr. R. Glisan's Text-book of, *rev.*, 211; in the Paris hospitals, 914
 Midwives, examination of at the Obstetrical Society of London, 169; registration of, proceedings of Parliamentary Bills Committee regarding, 885, 961
 Migraine, observations on, 494
 Mikulicz, Dr., iodoform as an antiseptic, 472
 Military surgery in Germany, 443
 Militia surgeons and their grievances, 198, 210, 636, 667, 838, 839, 962, 967; legal right of to retiring allowances, 745; proceedings of Parliamentary Bills Committee, 382
 Milk, supply of, and epidemic disease, 279; artificial human, 410, 448; adulteration of, 433, 919; of elephant, 436; spread of scarlet fever by, 437; Swiss, Lehmann's unsweetened, 464; supervision of supplies of, 512; pure Alpine Swiss, 584; prevention of infection by, 779, 798; churning of, 946
 Milk-food for children and invalids, 464; (Ettli's, 534
 Miller, Sir William, malignant rheumatic carditis, 663
 Mills, Dr. T., effect of local application of ergotine, 937
 Millican, Mr. K. W., fracture of leg, 738
 Miners' nystagmus, 805; anæmia, 914
 Mines Regulation Bill, proceedings of Parliamentary Bills Committee regarding, 885
 Miscarriage, charge of procuring, 551; removal of placenta in, 567
 Mitchell, Mr. D., attachment of penis and scrotum, 774
 Möbius, Dr. P., primary chronic disease of organs of voluntary motion, 348
 Moffit, Mr. Andrew, obituary notice of, 252
 Mole, superpigmented, Mr. W. H. Bull on, 304
 Monaco, Dr. T. H. Pickering on, *rev.*, 273
 Money, Dr. A., frequency of cardiac murmurs in the puerperal state, 306; disease of sacrum, 659; summons against, 918
 Montefiore, Mr. N., prize at Army Medical School, 201
 Moon, Mr. H., epilepsy cured by removal of dental irritation, 582
 Moore, Mr. G. W., a dandelion catheter, 766
 — Dr. J. W., disease from drinking impure water, 230; pleural effusion with hyperæmia of lung, 272; large gall-stones, 544; ascari lumbricoides, 621; temperature charts in fever, *ib.*; lymphosarcoma of mediastinum, 622; calculous pyelitis, 663
 — Dr. Norman, perforating ulcer of colon in typhoid fever, 88; abscess of pancreas, *ib.*; joints from cases of gout, 267; abnormalities of alimentary canal, 425; calculus in ureter, *ib.*; chronic rheumatic arthritis in a dog, *ib.*; stomach with hæmorrhages in cirrhosis of liver, *ib.*; oxalic acid poisoning, *ib.*; poisoning by cyanide of potassium, *ib.*; ulceration of epiglottis in typhoid fever, *ib.*
 — Dr. Milner, aneurysm of aorta, 703
 — Mr. S. H., the coroner for Central Middlesex, 521
 — Dr. William, anæsthesia and hystero-epilepsy, 460; hemichorea, 461; resignation of professorship by, 673
 Moreland, Dr. H., death of, 283
 Morgan, Mr. J. H., fibrous tumour of larynx, 12
 Morison, Mr. J. R., axillary aneurysm, 576
 Moritz, Dr., staining from use of nitrate of silver, 54
 Morphia, poisoning by overdose of, 350; and atropia, 668, 679
 Morphæa alba, 113
 Morris, Dr. A. W., treatment of gonorrhœa, 104
 — Mr. H., nerve-stretching in acute tetanus, 47; fracture of femur in a puma, 191
 — Mr. M., papaine in chronic eczema, 738, 845; scarification in acne rosacea, 780; treatment of chronic ringworm of scalp, 901
 Mortality among infants, 712; in the Punjab, 791
 Morris, Dr. G. De Courcy, Junior Medical Mutual Association, 844

Morton, Mr. A. S., Refraction of the Eye, *rev.*, 390
 — Dr. T., meningitis in children, 662
 Mortuary, at Chelsea, 128; at Wolverhampton, 137; for Queenstown, 244; want of, 510, 829
 Motion, primary chronic disease of organs of, 348; disorders of following hemiplegia, 821
 Mozambique, sanitary condition of, 762
 Muir, Sir W., portrait of, 639; verses on retirement of, 765
 Muirhead, Mr. H., thought-willing and thought-reading, 592
 Mules, Mr., tubercle of retina, 742
 Müller, Miss, physical education of girls, 548
 Mulliner's patent India-rubber collar axles, 823
 Murchison scholarship in clinical medicine, 436, 921
 Murder of Lord F. Cavendish and Mr. Burke, resolutions concerning, 752
 Murmur, cephalic, of anæmia, Dr. Gibson on, 82
 Murmurs, frequency of in the puerperal state, 306
 Murphy, Mr. S., legislation regarding metropolitan bakehouses, 663
 Murray, Dr. J. C., inhalation of chloroform, 357
 Murrell, Dr. W., aconite and acointia, 555
 Muscles and Nerves, Dr. C. Richet on Physiology of, *rev.*, 783
 Museum, annual, of British Medical Association, institution of, 869
 — Dupuytren, M. Houel's Catalogue of, *rev.*, 193
 — Parkes, meeting of Executive Committee, 163; meeting of subscribers, 603
 — of University College, Messrs. Beck and Shattock's Catalogue of Specimens of Surgical Pathology, *rev.*, 231
 Musical festival in Birmingham, 481
 Mussels, poisoning by, Mr. C. Anderton on, 500; Mr. A. R. Barnes on, 576; Mr. J. Farrar on, 939
 Mutilation, self, 60, 72, 105; Dr. T. Partridge on case of, 188
 Mutton, New Zealand refrigerated, 926
 Mydriatic, homatropine as a, 523
 Myers, Dr. W., filaria sanguinis hominis, 51
 Myopia in France, 755
 Myosarcoma of kidney, 541
 Myrtle, Dr. A. S., contraction of palmar and plantar fasciæ, 48
 Myxœdema, discussion on, 89, 92; improving under treatment, 424; Mr. W. Gowan on a case of, 772
 Myxoma, cases of, 542; of peritoneum, 778
 N.
 Naphthol ointment in psoriasis, Mr. B. Squire on, 47; Dr. Cavafy on, 156
 Napier, Dr. A. L., homicide by infection, 326
 Naples, death-rate of, 822
 Napper, Mr. A., proposed testimonial to, 278, 322, 793
 Nasal catarrh. *See* Catarrh.
 Naval Hygiene, Dr. J. D. Macdonald on, *rev.*, 193, 388
 Navy, medical service of, training of officers, 33, 106, 136, 213; courts-martial on surgeons, 62, 213, 472; leave and duties, 69, 136; successful candidates, 359; appointments, 212, 248, 327, 481; nursing in, 559, 639, 839; tropical uniform for, 797; proceedings of Association regarding medical officers of, 858, 865, 867; proceedings of Parliamentary Bills Committee, 882
 — French, changes in medical service of, 281
 Neck, congenital tumour of, 191
 Needle removed from back of child, 218; from a fowl, 586
 Needle-manufacturers, phthisis among, 952
 Nephrectomy, cases of, 396, 437; for scrofulous kidney, 500; for pyelitis, 579; incisions for, 639; and nephrotomy, 686. *See* Kidney
 Nephritis, infective forms of, 311
 Nephro-lithotomy, 158, 167
 Nerve, optic, inflammation of, *see* Neuritis; coloboma of sheath of, 385; disease of in retinal hæmorrhage, 741
 — sciatic, stretching of in locomotor ataxy, Mr. H. E. Spencer on, 116
 — spinal accessory, resection of, 642
 — ulnar, paralysis of from cold, 910
 Nerves, fifth and facial, paralysis of in a child, 15
 — motor, Dr. A. Waller and Mr. De Watteville on influence of galvanic current on, 767
 Nerve-centres, peripheral trophic influences on, 315
 Nerve-disorder in infancy, anomalous, 342
 Nerve-stretching in traumatic tetanus, Mr. H. E. Clark on, 11; Mr. H. Morris on, 47; Mr. W. I. Wheeler on, 156; letter on, 293; Dr. J. Althaus on dangers of, 11; in locomotor ataxy, Mr. H. E. Spencer on, 116; in infantile paralysis, Dr. R. M. Simon on, 264; Mr. J. Symington on physics of, 770
 Nervous Diseases, Functional, Dr. L. Putzel on, *rev.*, 54; percussion in, Dr. Mortimer Granville on, 339; letter on, 643
 Nettleship, Mr. E., diabetic cataract, 120; atrophy of optic disc after phlegmonous erysipelas of orbit, 384; choroido-retinitis in inherited syphilis, *ib.*; sclerotomy, 908

cavities from, 335; acute, peculiarity in urine of, 388; memorandum of Collective Investigation Committee on, 430; parasitic, of dogs, 744

Pneumothorax in a coat, 191; acute perforative, with recovery, 343

Pocket-Book. Professional, *rev.*, 18

Pocket-case, surgical, 420, 705, 805

Poisoning, analysts in cases of, 469, 481, 688, 717; obscure case of at Inverness, 551, 501; statistics of, 889

— by aconite, 24

— by aconitine, German, 803

— by arsenic, 237; proceedings of Provincial Medical and Surgical Association regarding, 858

— by belladonna and aconite, Mr. W. S. Simpson on, 224

— by bichromate of potash, 506

— by borax, supposed, 589

— by bromide of potassium, 616

— by carbolic acid, 271, 748; Dr. R. H. Wilbe on, 939

— by carbonic acid, Mr. G. K. Given on, 11

— by castor-oil, 788

— by chloroform, 775

— by chromate of lead in weavers, Dr. R. C. Smith on, 8

— by coal-gas, 113

— by cyanide of potassium, stomach from case of, 740

— by fungi, 949

— irritant, 239, 409, 603

— by laburnum, 100

— by lead, 507, 558, 787

— by mussels, Mr. C. Anderton on, 500; Mr. A. R. Barnes on, 576; Mr. J. Farrar on, 582

— by nitrate of potash, Mr. R. H. Wolstenholme on, 304; Dr. R. Cross on, 500

— by nitric acid, 235

— by opium, hypodermic injection of atropia on, 602

— by oxalic acid, stomach from case of, 740

— by phosphorus, 498

— by souse or brawn, 396

— by stramonium, Mr. H. C. Taylor on, 538

— by strychnia, Mr. R. Cockburn on, 574

— by tinned meats, 350

— by tobacco, 509

— by whiskey and fusel-oil, 684

Poisonous and patent medicines, 126; hair-washes, 669; crayons, 669, 724

Poisons, inquest concerning at Guy's Hospital, 31; sale of, 129, 467, 748; schedule of, 202; fine for sale of, 433

Police and sanitary regulations, Select Committee on, 434, 212

Pollard, Dr. F., experiments on animals, 543

— Surgeon-major, death of, 639

Polygraph, a portable, 91

Polyp, disseminated, of rectum, 700

Polypoid growth of conjunctiva, 157

Ponfick, Dr., actinomyces in man, 545

Pons Varolii, hemorrhage into, 739

Poor, medical attendance on the, 70, 180, 286; home treatment of in Paris, 129; dead, in hospitals, 168; proceedings of Provincial Medical and Surgical Association regarding medical relief of, 849, 850, 851, 852, 853

Poor-law: alleged punishment of sick paupers, 33; alleged inhumanity, 58, 98, 141; boarding-out of pauper children, 71; letter regarding appointments, 71; censure of a medical officer by Local Government Board, 137; the Local Government Board and Mr. Donahoe, 213; meetings of Council of Medical Officers' Association, 213, 500; certifying of lunatics and imbeciles, 214, 759; superannuation of medical officers, 215, 562; deputation regarding, 719; medical attendance on workhouse officers, 250; scandal at Sheffield workhouse, 290; the Honiton guardians and Mr. Pullin, 328, 320; the Swaffham guardians and medical relief, 360, 521; what is a pauper? 406; death of a medical officer, 415; medical officers of infirmaries and coroners' fees, *see* Coroner; workhouse medical officers and certifying factory children, 799; proceedings of Association regarding legislation, 851, 852, 854, 855, 856, 857, 858, 864, 869, 870, 872; proceedings of Parliamentary Bills Committee regarding, 882; the Doncaster guardians and Mr. Sykes, 927; club-patients and parish relief, 928

— Ireland, charges against medical officers, 27, 100, 835; superannuation of medical officers, 64, 213, 288, 354; deputation to Chief Secretary regarding superannuation allowances, 132; the case of Dr. J. E. Kenny, 243, 327, 474; Dr. O'Neill and mistakes in diagnosis, 243, 328, 463; report on the Belfast Workhouse, 243, 284; Cork Workhouse, 283, 474; Kilkenny Union Infirmary, 760; Lismore union, and Dr. O'Reilly, 835, 920

— Scotland, proceedings of British Medical Association regarding legislation, 875; of Parliamentary Bills Committee, 882

Poor-law medical service in Italy, 550

Pope, health of the, 715

Popoff, Dr. W. A., corpus luteum, 778

Porencephalus, 911

Porter, Surgeon-major, memorial of, 327

Post mortem examinations in hospitals, 468, 830, 918

Potash, nitrate of, Mr. R. H. Wolstenholme on poisoning by, 304; Dr. R. Cross on, 500

— salts of, action of on heart, 942

Pott, Dr. R., aseptic vaccine lymph, 591

Potter, Dr. G. W., hospital for North London, 719

Pregnancy, at old age, 9; Fallopian, 14; with epithelioma of cervix uteri, *ib.*; complicated by uterine fibroid, 229; in a prolapsed uterus, Dr. P. Boulton on, 340; complicated with rheumatism, Mr. A. Harvey on, 499; complicated with albuminuria, 504; peculiar skin-eruption during, 702; plea of in bar of execution, 854; extraction of teeth during, 945

Prescription, a fatal, 99

Presentation to Dr. W. G. Smith, 73; Mr. G. Jones, 104; Mr. B. Wills Richardson, 171; Dr. Aickin, 215; Dr. Eberle, 254; Mr. W. McEwen, 283; Mr. C. B. Gaffney, 291; Mr. St. George Ashe, 301; Dr. T. Hewitt, 443; Mr. A. E. Chesshire, 611; Mr. James Irvine, 639; Dr. G. H. Savage, 684; Mr. J. E. Adkins, 963

Presentations during labour, causes of, 821, 944

Preston, Surgeon-major A. F., 481

Pre-Waterloo veteran, 128

Primipara at unusual age, Mr. R. J. W. Oswald on, 616

Princess Louise at the Victoria Hospital for Children, 125

Prisons, responsibilities of surgeons of, 587, 680; medical officers of, 845, 921

— Indian, mortality in, 347, 488, 605, 632

— in Ireland, sanitary condition of, 349, 406; resolution of Parliamentary Bills Committee regarding surgeons of, 825

— in Paris, contagious diseases in, 166

Prizes, of Royal College of Surgeons, 170, 832; Montefiore, at Army Medical School, 201; of Geneva Red Cross Convention, 240; of French Society of Hygiene, 249; for original research in Australia, 358; of Sanitary Institute of Great Britain, 429; of Royal Belgian Academy of Medicine, 631; Middlemore, in Ophthalmology, 636; for life-saving apparatus, 684; of Provincial Medical and Surgical Association, 848, 851, 853, 856, 857, 859; of British Medical Association, 864, *see* Medal; Stewart, 874; Wood, 874; Middlemore, 877, 913; Boylston, 950. *See also* Medal

Prosecutions, unjust, of medical men, 865

Prostate, colloid scirrhus of, 542

Prostatic calculi and median lithotomy, 86; obstruction, Mr. K. Harrison on treatment of, 377

Provident Dispensaries for London, discussion on, 27; meeting regarding, 641; letter on, 845

— Dispensary, Battersea, report of, 248

— Bedford, report of, 443

— Brompton, report of, 839

— Coventry, staff of, 235

— Twickenham, report of, 600

Prurigo of Hebra, 579, 906

Pruritus ani, treatment of, 366, 726

— vulva, 726, 765, 803

Psammoma of spinal cord, 741

Psoriasis, Mr. B. Squire on naphthol ointment in, 47; Dr. Cavafy on, 156

Psychology of infants, 826

Public Health, births and deaths in London, 22, 60, 235, 391, 509; health of foreign cities, *see* Cities; reports of medical officers of health, Kensington, 55; Jarrold, 70; Belper, *ib.*; Bolton, 71; Birmingham, 213, 800; Mid Warwickshire, 289; Taunton, *ib.*; Andover, 535; Martley, 560; Salford, 584, 690; Barnsley, 600; Bury St. Edmunds, *ib.*; Richmond, 601; Carmarthen, *ib.*; Tyne Port, *ib.*; Wellington, 603; Aston, 758; Alnwick and Canongate, *ib.*; King's Norton, *ib.*; West Sussex, 759; Derby, 799; Bethnal Green, *ib.*; Long Eaton, 800; Mid-Cheshire, *ib.*; Exmouth, *ib.*; Durham, 801; St. Mary Church, 840; St. Giles, *ib.*; Torquay, 841; Doncaster, *ib.*; Dr. Eulenburg's Handbook of, *rev.*, 54; extension of Registrar-General's weekly returns, 54; births, deaths, and marriages in London in 1881, 130; vital statistics of New York, 315; health of Berlin in 1881, 327; reports of medical officers of Local Government Board, 361; the Bolton Improvement Acts, 405; sanitary condition of Hull, 441; committee on sanitary legislation through private Bills, 470, 912, 926; death-rate in the Dolgelley district, 500; death-rate at Ipswich, 602; district medical officers as medical officers of health, 799; public health in the Teesdale Union, 840; proceedings of Association regarding legislation, 856, 857, 868, 870; proceedings of Parliamentary Bills Committee, 883; administration of Act in rural districts, 910

— Ireland, fever at Queenstown, 27, 132; health of Cork, 101, 714; health of Dublin, 133, 205, 247, 284, 317, 326, 475, 634, 793; Registrar-General's returns, 133; health of Belfast, 244; health of urban districts, 475; quarterly report of health of Ireland, 475; zymotic diseases in town districts, 835

— Scotland, health of Edinburgh, 26; health of Glasgow, 63, 131, 204, 399, 513, 713, 835, 919, 954; mortality in eight principal towns, 64, 131,

132, 204, 317, 399, 473, 513, 552, 592, 633, 673, 752, 792, 834, 919, 954; quarterly report of Registrar-General, 316; defects in regulation, 405; health of St. Andrew's, 473; prosecution under Public Health Act, 792, 919

Puerperal convulsions, Mr. W. E. Green on nitroglycerine in, 573

— eclampsia with hyperpyrexia, Mr. A. J. Routh on a case of, 576

— fever. *See* Fever

— mania, early abortion in, 805, 932

— septicæmia, Dr. J. C. Ferrier on, 497

— state, frequency of cardiac murmurs in, 305; Dr. W. B. Roud on typhoid fever in, 459

Pullin, Dr., and the Honiton guardians, 328, 320

Pulmonary cavities, Dr. W. Ewart's Gulstonian lectures on, 333, 369, 415, 453, 493, 530, 569

Puma, fracture of femur in a, 291

Punjab, small-pox and fevers in, 671; mortality in, 791

Purdon, Dr. C. D., obituary notice of, 103

Purefoy, Dr., noma pudendi, 821

Purpura, varieties and causes of, 53; double optic neuritis following, 119

Purser, Dr., dissemination of tubercle, 544

Pustule, malignant, cases of, 942

Putzel, Dr., Common Forms of Functional Nervous Diseases, *rev.*, 54

Pyæmia from otitis, 272; case of, 818

Pye, Mr. W., new material for splints, 391, 564

Pyelitis, removal of kidney for, 579; calculus, followed by iliac abscess, 663

Pylorus, obstruction of, 504; excision of, 549, 833, 910

stricture of, 741

Pyonephrosis, scrofulous, 664

Q.

Quackery, discussion on, 52; conviction for, 484, 590; proceedings of Provincial Medical and Surgical Association regarding, 852, 853

Quarantine, evasion of, 26; and commerce, 314; in the Suez Canal, 521, 588; in Egypt, 828

Queen, visit of to Mentone, 316, 355, 394, 438, 475, 509, 542, 589; address of Royal Medical and Chirurgical Society to, 380; address of Royal College of Physicians of London, 394; address of King and Queen's College of Physicians, 400; physician to in Scotland, 792; addresses of Provincial Medical and Surgical Association to, 851, 853, 854

Quennell, Mr. S. M., a warning to hospitals, 563

Quill, Dr. R. H., movement of troops, 359

Quinine, sulphate of, in rheumatic fever, 905; iodate and bromate of, 909

R.

Rabagliati, Dr., duration of life in England, 404, 804

Rabbit, tinea favosa in a, 968

Rabies in Paris, 713

Races, struggle of, 591

Radio-carpal joint of a horse, chronic synovitis of, 268

Radius, dislocation of head of in children, Mr. A. Benson on, 422; Dr. W. Sneddon on, 499; Dr. W. J. Mackie on, 615; Mr. B. May on, 616; congenital absence of, 741

Rafford, M., the castor-oil plant as a fly-killer, 788

Railway, Great Western, surgeon to, 235

Railway passengers, medical attendance on, 644

Railways, underground, ventilation of, 236; accidents on, and surgeons, 255

Rainfall in India, 367

Ralfe, Dr. C., Demonstrations in Physiological and Pathological Chemistry, *rev.*, 55; renal calculus undergoing disintegration, 740

Ramskill, Dr., tabes dorsalis, 378; functional paraplegia, 379

Raoult-Deslongchamps, M., Treatment of Fractures, *rev.*, 623

Read, Mr. W. J., consultants and fees, 894

Reade, Deputy Surgeon-General, 91

Recreation-grounds, 63

Rectal alimentation, Dr. W. J. Tyson on, 420; Mr. H. E. Spencer on, 450

Recto-vaginal fistula, 267

Rectum, Dr. Marion Sims on shot-wounds of, 262; scirrhus of, 308; disseminated polyp of, 700; stricture of treated by colotomy, 782; Mr. Reeves on, 902

Redmond, Mr. J. M., iodoform in ulcer of stomach, 657

Reeves, Mr. H. A., left inguinal colotomy in rectal stricture, 902

Reflexes and pseudo-reflexes, Mr. A. De Watteville on, 736

Registrar-General, extension of weekly returns, 60; resolution of Committee of Council regarding appointment of, 878; for Ireland, returns of, 133

Registration of diseases and deaths, 716; of deaths, resolution of Provincial Medical and Surgical Association, 848; of births and deaths in Ireland, proceedings of British Medical Association regarding, 865; of births and deaths, proceedings of Parlia-

790; deaths from in London in 1881, 130; relations of to cow-pox, 122, 247; and antivaccinationists "cranks," 250; means of spreading, 434, 631; errors as to mortality from, 170; in birds, 350, 602; regulations regarding in Melbourne, 630; in emigrants, 602; ectrotic treatment of variolæ in, 699; pre-eruptive stage in, 701; Mr. M. D. Makuna on affection of eyes in, 812; two hundred and fifty years of in London, 41.

Smith, Mr. E. Noble, splints on horses' legs, 222; fuscular deformities, 629; treatment of caries of spine, 266.

— Mr. H., central necrosis of head of humerus, 266.

— Dr. H. F., preventable asphyxia, 218.

— Mr. Herbert A., scarlet fever, 38, 142.

— Dr. Heywood, uterine tumour, 14.

— Dr. J. Greig, antiseptic ovariotomy, 812.

— Dr. J. Lewis, Treatise on Diseases of Infancy and Childhood, 222, 664.

— Mr. Priestley, sclerotomy in glaucoma, 343.

— Dr. R. C., poisoning by chromate of lead in weavers, 3.

— Dr. R. Shingleton, gall-stones, 726; codeia in diabetes, 933.

— Mr. S. W., case of catalepsy, 218.

— Mr. Thomas, aneurysmal varix of hand, 397, 820.

— Dr. Walter G., idiopathic pericarditis, 17; presentation to, 73; ovarian dermoid cyst, 271; pyæmia from otitis, 272; peculiarity in urine of pneumonia, 385; chronic Bright's disease, 386; peculiar form of sensory paralysis, 781.

— Mr. W. Johnson, treatment of angular curvature of spine, 703.

Smoke, exhibition of apparatus for abatement of, 15, 198, 235, 951; Lord Mayor's dinner, 401; prosecution for not consuming, 178; and fog, 237.

Smyth, Mr. T. A., case of, 435.

Snake-bites, alleged antidote to, 313; in the Punjab, 459.

Sneddon, Dr. W., injury peculiar to children, 499.

Snell, Mr. S., sympathetic iritis after enucleation of eye, 742; mercury in sympathetic ophthalmia, 796; eserine and pilocarpine in glaucoma, 811.

Snow, Dr. H. L., attendance on widows of medical men, 37.

— Dr. W. V., antiseptic treatment of lung-disease, 226.

Soap-stone and butterine, 127.

Social problem, a grave, 35, 106, 175, 217, 404.

Society of Arts, Albert medal, 949.

— Charity Organisation, Glasgow, proceedings of, 495.

— Charity Organisation, London, convalescent committee of, 631.

— Clinical, of London, officers and council, 59; myxodema, 89, 424; annual meeting, 03; xanthopsia, 158; nephro-lithotomy, *ib.*; suppression of urine after ovariotomy, 269; erythema iris, *ib.*; aneurysm of aorta, 260, 343; swallowing an ear of rye-grass, *ib.*; acute pericarditis pneumothorax, *ib.*; eye-ball tension, 344; chinney-sweep's cancer, 424; aneurysm of axillary artery, *ib.*; splenectomy, 462; nephrectomy for scrofulous kidney, 500; remarks on meetings, 544, 829; extirpation of kidney for calculus pyelitis, 579; partial removal of kidney for pyelitis, 580; antiseptic ligation of arterial trunks, 660; spina bifida cured by injection of iodine, 661; congenital intestinal obstruction, *ib.*; primary perichondritis of larynx, *ib.*; report on hyperpæmia in acute rheumatism, 607, 905; amputation of penis, 820; pectichiosis rheumatica, 820; aneurysmal varix of hand and fingers, *ib.*; removal of epitheliomatous ulcer by scraping, *ib.*; removal of loose cartilages, *ib.*; cerebro-spinal syphilis, *ib.*; disorder of movement following right hemiplegia, 821; rheumatic fever treated by iodide of potassium and sulphate of quinine, 905; prurigo of Hebra, 906; ichthyosis of entire body, *ib.*; lupus-psoarisis, 907; double hæmorrhagic pleurisy, with formation of cholesteroline, *ib.*.

— Epidemiological, filaria sanguinis hominis, 51; filaria and other parasites in relation to epidemics and epizootics, 51; climate of Indian hill sanatoria, 89; infection of diphtheria transported by wind, 463; policy and practice of Glasgow in epidemic diseases, 700; on pre-eruptive stage in small-pox, 701.

— Harveian, removal of osseous tumours from auditory canal, 120; encysted dropsy of peritoneum, *ib.*; annual meeting and conversation, 199; headache in children, 307; peliosis rheumatica, 383; treatment of common diseases of skin, *ib.*; erythema iris, 581; menorrhagia, *ib.*; primary and secondary vaccination, *ib.*; meningitis in children, 662; pathology of lead-palsy, *ib.*; scarification in acne rosacea, 780; rotheln, *ib.*.

— Humane, French, 352.

— Hunterian, officers and council, 279.

— of Hygiene in Madrid, 914.

— Medical Benevolent, Birmingham, annual meeting, 830.

— Medical, British and American, in Paris, 203.

Society, Medical, of Cambridge, paralysis of left fifth and facial nerves in child, 15; delirium tremens, *ib.*; cancer of œsophagus with ulceration into aorta, 124; dislocation of patella edgewise, *ib.*; sudden death from blow with fist, *ib.*; sarcomatous tumour of humerus, 301; new artery-compressor, *ib.*; perforation of popliteal artery after excision of knee, *ib.*; cylindrical epithelioma of stomach, 502; contracted toe, *ib.*; nature and treatment of acne, 944; drainage-tubes as dilators, *ib.*; Dudgeon's sphymograph, *ib.*.

— Medical, of College of Physicians in Ireland, alkapton in urine, 17; idiopathic pericarditis, 10; the late Dr. Reuben J. Harvey, 230; disease from drinking impure water, *ib.*; Salisbury's views on phthisis, *ib.*; coloboma of choroid and of sheath of optic nerve, 385; urine of acute pneumonia, *ib.*; ascariis lumbricoides, 621; temperature-charts in fever, *ib.*; apparent recovery from Addison's disease, *ib.*; the late Sir E. B. Sinclair, 781; peculiar form of sensory paralysis, *ib.*; peritonitis caused by caseous mesenteric glands, *ib.*; acute diphtheritic endocarditis in chronic valvular disease, *ib.*; skeleton respirator for antiseptic inhalations, 782; enteric fever, 908; fatal eczema, 909; quinine iodate and bromate, *ib.*.

— Medical, of London, Lettsomian lectures, 23; Proceedings of, 336; officers and council, 351; anniversary meeting, 395.

— Medical, of Manchester, amputation at hip-joint for osteomyelitis, 16; paralysis of infancy, *ib.*; bilateral athetosis with aphasia, *ib.*; contraction of limbs, *ib.*; rodent ulcer of auricle and external auditory meatus, *ib.*; absorption of neck of femur, 17; principal varieties of idiocy, *ib.*; officers and council, 73; sarcoma of lower jaw, 334; retinal periarthritis, *ib.*; transfusion apparatus, *ib.*; tumour of both ovaries, *ib.*; Goyder's stencil plates, *ib.*; simulated fracture of neck of femur, *ib.*; tubercular ulceration of intestine simulating typhoid fever, 503; dementia from hereditary syphilis, *ib.*; progressive facial hemiatrophy, *ib.*; theory of gout, *ib.*; excision of tongue, 703; exfoliative dermatitis, *ib.*; tricuspid and mitral stenosis, *ib.*; staphylophary and uranoplasty, *ib.*; spontaneous fracture in early infancy, *ib.*; thrombosis of left innominate vein, *ib.*; facial palsy from a fall, 910; paralysis of ulnar nerve from cold, *ib.*; labio-glossopharyngeal paralysis from mental shock, *ib.*; arterio-venous aneurysm, *ib.*; Stokes's amputation, *ib.*; excision of pylorus, *ib.*; Microscopical Section: micrococci from fresh urine, 53; Hodgkin's disease, 54; staining from nitrate of silver, *ib.*; officers and committee, 202; lupus, 503; epithelioma of lung, *ib.*; sarcoma of eyeball, *ib.*; rodent ulcer, *ib.*; perichondroma, enchondroma, etc., 503; phlegmonous gastritis, 911; porcephalus, *ib.*; epithelioma of conjunctiva, *ib.*; epithelioma of pharynx, *ib.*; micro-organisms in osteomyelitis, *ib.*; melanotic alveolar sarcoma, *ib.*; lupus of vagina, *ib.*.

— Medical, Midland, latent fracture of dorsal vertebra, 160; fracture of anterior fossa of base of skull, *ib.*; supracondylar osteoma for genu valgum, *ib.*; disease of knee, 368; disease of ear and of brain, *ib.*; specimens, *ib.*; necrosis of finger, *ib.*; calcareous degeneration of placenta, *ib.*; scirrhus of rectum, *ib.*; uterine fibroid, *ib.*; death after ovariotomy, *ib.*; hydatids of peritoneum, *ib.*; treatment of eczema, *ib.*; fracture of base of skull, 502; foreign body in eye, *ib.*; extroversion of bladder, *ib.*; laceration of cervix uteri, *ib.*; Aix-les-Bains and sulphur-springs of Savoy, *ib.*; calculi removed from perineum, *ib.*; diseases of hip-joint, *ib.*; keloid, *ib.*; laceration of bladder, *ib.*; myxomatous polypus of bladder, *ib.*; ulcerative endocarditis, *ib.*; injury of kidney, *ib.*; aneurysm of aorta, 702; thrombus of abdominal aorta, *ib.*; calculi imbedded in walls of bladder, *ib.*; epithelioma of cervix uteri, *ib.*; ovariotomy, *ib.*; rapid lithotomy, *ib.*.

— Medical Missionary, Edinburgh, 312.

— of Medical Officers of Health: Report of Medical Inspectors of Local Government Board, 52; hospital accommodation for infectious disease, 50; sanitary staff of large towns, 53; duties of medical officers of health, 270; calf-vaccination, *ib.*; infectivity of scarlatina, 502; necessity for alteration in laws respecting revaccination, 662; position of legislation concerning metropolitan bakehouses, 663; whooping-cough, *ib.*; notification of infectious disease, 779; sanitary legislation for prevention of infection by milk, *ib.*; closure of schools affected with infectious disease, *ib.*; suggestions for reorganisation of sanitary service, *ib.*; administration of Public Health Acts in rural districts, 910; fever hospital at Nice, *ib.*.

— Medical, of State of New York, annual meeting, 291.

— Medico-Chirurgical of Glasgow University, officers and council, 929.

— Medico-Chirurgical, West Kent, 363.

— Medico-Ethical, Preston, officers and council, 500.

— Meteorological, annual meeting, 139; monthly meetings, 479, 642.

— National Health, annual report of, 237.

— for Newly Born Infants in Paris, 202.

— Obstetrical of Dublin: Hegar's dilators, 101;

821; nitrous oxide as an anæsthetic in labour, *ib.*; craniotomy, 387; supernumerary finger and toes, *ib.*; mucous growth of fundus uteri, *ib.*; cases of convulsions, *ib.*; fibrous tumour of uterus, 620, 944; sessile vascular tumour of uterus, 620; blighted ovum, *ib.*; concealed hæmorrhage, *ib.*; hypertrophy of uterus and dilatation, 821; imperfect development of genital organs, *ib.*; noma pudendi, *ib.*; causation of presentations during labour, 821, 944; asexual fetus, 944; ovarian cyst, *ib.*; treatment of displacements of uterus, *ib.*.

Society, Obstetrical of London: ovarian tumour with adherent Fallopian tube, 14; transluent sac, *ib.*; conjoined twins, *ib.*; uterine tumour, *ib.*; Fallopian pregnancy, *ib.*; pregnancy with epithelioma of cervix uteri, *ib.*; anatomy of ganglion cervicale uteri, *ib.*; spasmodic dysmenorrhœa and sterility, *ib.*; examination of midwives, 769; officers and council, 170; fibroid tumour of uterus, 229; mummified fetus, *ib.*; uterine fibroid complicating pregnancy, *ib.*; salicylic cream, *ib.*; dysmenorrhœa and sterility, 229; doubtful case of double vagina, 344; retention of menstrual fluid in one half of double uterus, *ib.*; uterine fibroid, removal by laparotomy, 426, 580, 778; extra-uterine foetation, removal by laparotomy, 426; fibroid resembling placenta, *ib.*; histological results of laceration of cervix uteri, *ib.*; tracheloraphy, *ib.*; exomphalos, 530; ovarian tumour, *ib.*; microscopic sections of diseased ovary, *ib.*; dermoid tumour, *ib.*; unilateral vaginal oophorectomy, *ib.*; extra-uterine foetation with removal of fetus and hypertrophied placenta, 581; myxoma of peritoneum, 778; corpus luteum, *ib.*; natural history of dysmenorrhœa, *ib.*.

— Odonto-Chirurgical of Edinburgh, resolution regarding education of dental surgeons, 399.

— Odontological of Great Britain: officers and council, 127; alveolar periostitis and diabetes, 308; cases of interest, *ib.*; president's address, *ib.*; administration of anæsthetics, 382; gutta-percha for taking impressions, *ib.*; syphilitic teeth, 701; recurrent epulis, *ib.*; extraction of teeth during pregnancy, 945; connection between mechanical injury and caries of teeth, *ib.*.

— Ophthalmological of Great Britain: vascular disease with retinal hæmorrhages, 119; double optic neuritis following purpura, *ib.*; epithelioma of cornea, 120; spasm of accommodation, *ib.*; hard chancre on conjunctiva of lower eyelid, *ib.*; diabetic cataract, *ib.*; new perimeter, *ib.*; fibro-sarcoma of lacrymal gland, *ib.*; glioma of retina, *ib.*; atrophy of optic disc after phlegmonous erysipelas of orbit, 381; suppurative panophthalmitis following ligation of common carotid artery, 381; choroido-retinitis in inherited syphilis, *ib.*; choroidal hæmorrhage without perforation of eyeball, 382; double optic neuritis after head-injury, *ib.*; double neuro-neuritis after contusion of brain, *ib.*; extensive retinitis following injury of head, *ib.*; deficiency of visual acuteness in a seaman, *ib.*; growth at corneal margin, 741; disease of optic nerve in retinal hæmorrhage, *ib.*; tortuosity of arteries and veins of retina, *ib.*; sympathetic inflammation after enucleation of eye, 742; bony tumour of conjunctiva, *ib.*; detachment of vitreous humour, *ib.*; primary tubercle of iris, *ib.*; tubercle of retina, *ib.*; specimens shown by card, 742, 908; discussion on sclerotomy, 907, 916, 943.

— Pathological of Dublin: melanotic sarcoma, 271; vesical abscess, *ib.*; ciliary staphyloma, *ib.*; ovarian dermoid cyst, *ib.*; epithelioma of fundus uteri, 272; perforating ulceration of vermiform appendix, 273, 386; pyæmia from otitis, 272; embolic hemiplegia, *ib.*; ulcer of stomach, *ib.*; dislocation of hip with true ankylosis, *ib.*; spontaneous laryngeal fistula, *ib.*; diseased aortic valves with hypertrophy of left ventricle, *ib.*; pleural effusion with collateral hyperæmia of lung, *ib.*; chronic Bright's disease, 320; stricture of sigmoid flexure of colon, *ib.*; needle from a fowl, *ib.*; necrosis of lower jaw from cancer oris, *ib.*; malignant disease of bladder, *ib.*; disease of suprarenal capsules, *ib.*; aneurysm of abdominal aorta, *ib.*; cancer of stomach, fatal through hæmorrhage, 387; sarcoma (?) of breast, *ib.*; primary chronic rheumatic arthritis of bursæ, *ib.*; note on meeting, 474; melanotic sarcoma of eyeball, 544; large sarcomas, *ib.*; calculi from bladder and urethra, *ib.*; excessive granulation-tissue, *ib.*; sequestrum from os calcis, *ib.*; epithelioma of tongue, *ib.*; epithelioma of œsophagus, 544, 622, 664; etiology of disseminated tubercle, 544; fibro-lipoma simulating umbilical hernia, *ib.*; lympho-sarcoma of mediastinum, 622; pathology of resection of knee-joint, *ib.*; fracture of bodies of vertebrae, *ib.*; pulmonary gangrene, 622, 663; injury to eye causing amaurosis, 622; exophthalmic goitre, *ib.*; medullary sarcoma of orbit, *ib.*; spasmodic torticollis, *ib.*; paronychia gangrenosa, 663; tridermia, *ib.*; ovariotomy, *ib.*; lithotripsy, *ib.*; calculus pyelitis followed by iliac abscess, *ib.*; malignant rheumatic carditis, *ib.*; deposit of crystalline ammonio-magnesium phosphate in joint, *ib.*; scrofulous pyonephrosis, 664; traumatic suppurative cystitis and hyalitis, *ib.*; rupture of spleen, *ib.*.

— Pathological of London, squamous epithelioma

[illegible]

T. Drapes on, 316; Mr. C. B. Lockwood on influence of rheumatic diathesis on initial lesion of, 773; cerebro-syphilis, 780
 Syphilitic soft sore, Mr. W. Whitehead on iodoform in, 780; disease of heart, 547; teeth, 701; iritis, 781
 Syrup of hydnobromate of iron and quinine, 464; concentrated lemon, 464; of hydriodic acid, 465

T.
 Tabes dorsalis beginning with paralysis of right fifth nerve, 378; Dr. Dowse on diagnosis of, 731, 769
 Tait, Mr. Lawson, death after ovariectomy from previous tapping, 308; hydatids of peritoneum, *ib.*; Listerism in abdominal surgery, 543; vivisection, 558, 677, 710; simple and antiseptic ovariectomy, 538
 Talford, Sergeant, and poor-law medical reform, 853
 Talipes calcaneo-valgus, 781
 Tanmaning, an unhealthy village, 231
 Tapeworm in the infant, 331, 410
 Tasmania, compulsory vaccination in, 26
 Tax on Carriages. *See* Carriages
 Taxation and sickness, 62
 Taxis in hernia, principles regulating, 53
 Tay, Mr. Warren, optic neuritis after head-injury, 382
 Taylor, Mr. J. W., embolism of superior mesenteric artery, 307
 — Dr. W. E., obituary notice of, 552
 Teale, Mr. T. P., ether *versus* chloroform, 338
 Teesdale union, public health in, 840
 Teeth, artificial, swallowing of, 76; syphilitic, 701; extraction of during pregnancy, 945; connection between injury and caries of, *ib.*
 Temperature of atmosphere, 22; high, *see* Hyperpyrexia
 Temperature-charts in fever, 621
 Temporal bone, fracture of external auditory process of, 190, 341; large sequestrum of, 543
 Testimonial to Professor Virchow, 37, 433; to Miss Grant, 205; to Mr. Napper, proposed, 278, 322, 793; to Dr. Kirkwood, 954. *See* Presentation
 Tests, physiological, in criminal trials, 431
 Tetanus, nerve-stretching in, Mr. H. E. Clark on, 11; Mr. H. Morris on, 47; Mr. W. L. Wheeler on, 156; letter on, 293
 Thackeray, Dr., prizes given by, 848, 851, 853
 Thames, pollution of the, 418, 446, 590; Royal Commission on, 527
 Theca vertebralis, wounds of with discharge of cerebro-spinal fluid, 657
 Thermometer with permanent index, 122; clinical, 705
 Thin, Dr. G., treatment of common diseases of skin, 383; the Association for Advancement of Medicine by Research, 517
 Thomas, Dr. Danford, and medical witnesses, 444, 520, 560; registration of diseases and deaths, 716
 — Mr. H., calcareous degeneration of placenta, 308; scirrhus of rectum, *ib.*
 Thompson, Mr. C. E., catalepsy, 156
 — Mr. F. H., tricycles, 805
 — Sir H., tumour of bladder removed by perineal section, 540; cheap editions of lectures, 888
 — Mr. Herbert, *post partum* hæmorrhage, 695
 — Mr. J., fees for attendance on families of medical men, 142
 Thomson, Sir C. Wyville, obituary notice of, 406
 — Mr. W., after-treatment of excision of joints, 113; obstruction of pharynx by food, 271
 Thoracentesis and injection of purified air in empyema, 658
 Thornton, Mr. J. K., ovarian tumour and adherent Fallopian tube, 14; encysted dropsy of peritoneum, 120; suppression of urine threatened after ovariectomy, 269; extra-uterine foetation removed by laparotomy, 426, 581; dermoid tumour, 580
 Thorp, Mr. C. W., carbolic acid in hæmorrhoids, 48
 Thought-reading, 592, 710
 Throat and Nose, Dr. Morell Mackenzie's Manual of Diseases of, 91
 Thrombosis of innominate vein, 704
 Thuillier, M., anthracic inoculation at Buda-Pesth, 489
 Thumb, mixed-celled sarcoma of, 13
 Thyroid gland, malignant disease of, and paralysis of laryngeal muscles, 542; tumour of, 619
 Thyrotomy for removal of foreign bodies, 777
 Tibia, osteoma of, 267; backward dislocation of, 342
 Tillaux, M., resection of spinal accessory nerve, 642
 Tilt, Dr. E. J., therapeutic action of aconite, 497; tracheolarynx, 809
 Tinea tonsurans, Dr. R. Living on, 496; favosa, in a rabbit, 968
 Tipperary, population of, 834
 Title of doctor, 686, 845, 970
 Tivy, Mr. W. J., radical cure of hernia, 698
 Toe, contracted, 502
 Toes, arrest of development of, 243; supernumerary, 387, 471
 Tongue, Mr. H. T. Butlin on diagnosis of epithelioma of, 223; ichthyosis of, 426; epithelioma of, 544; excision of, 703, 781
 Tongue-tie, Mr. J. B. James on treatment of, 340

Tonsils, treatment of hypertrophy of by ignipuncture, 130; Dr. J. Bishop on treatment of hypertrophy of, 265; Mr. G. Stoker on removal of, 378; sarcoma of, 425
 Tonsil-forceps, new, 428
 Topography, medical, 847, 858
 Torquay, sanitary report of, 841
 Torrance, Mr. R., chronic oedema of glottis treated by scarification, 266
 Torticollis, spasmodic, 622
 Tossill, Mr. L. H., ectropion treated by transplantation of skin, 9
 Tothorick, Dr. J. Y., hystero-epilepsy, 379
 Tracheloraphy, 426; D. E. J. Tilt on, 809
 Tracheotomy, mediastinal emphysema and pneumothorax in connection with, 306; piece of egg-shell removed by, 307
 Transfusion of blood, apparatus for, 384
 Transplantation of skin, Mr. L. H. Tossill on ectropion treated by, 9; of conjunctiva, 40
 Traumatic malignancy, Mr. R. Barwell on, 52, 187; letter on, 403; Mr. H. B. Walker on, 458; Mr. W. H. Cripps on, 653
 Trespass, law of, 669
 Treves, Mr. F., Scrofula and its Gland-Diseases, 271, 583
 Trials, criminal, physiological tests in, 431
 Trichina spiralis, 160
 Trichinosis in France, 513
 Tricycles, 606, 685, 725, 805, 894
 Tripe, Dr. J. W., necessity for alteration in laws respecting revaccination, 662
 Triplets, Mr. J. Howe on case of, 226; cases of, 894, 932
 Trocar, new antiseptic, Dr. J. Ward Cousins on, 273
 Troops, movement of, 359
 Tubercle, Dr. S. Coupland on, 186; of iris and ciliary body, Dr. J. R. Wolfe on, 290; etiology of dissemination of, 544; bacilli of, 709; of iris, 742; of retina, *ib.*; Ehrlich's method of staining bacilli of, 916
 Tubercular vomica from an eland, 426; ulceration of intestine simulating typhoid fever, 503
 Tuberculosis, bovine, in a nyghlan, 14; true and false, 95; Koch's researches on, 706
 Tuck, Mr. B. J., ether *versus* chloroform, 356
 Tuckey, Dr., needle from a fowl, 386
 Tuke, Dr. J. B., English lunacy laws, 31
 Tumour of abdomen, 619
 — of bladder, removal by perineal section, 540
 — of brain, 49, 307; hæmorrhage into, 426; calcareous, 578
 — of cerebellum, 657
 — of conjunctiva, bony, 742
 — dermoid, 580
 — of eyeball, 158, 384, 618
 — fibro-adenomatous, of anus, 619
 — of fibula, cystic, 704
 — of forehead, 384
 — of humerus, sarcomatous, 501
 — intrathoracic, 578, 740
 — of larynx, fibrous, 12
 — of neck, congenital, 191
 — omental, 480
 — of orbit, 618
 — of ovary, 14, 384, 580
 — of side, 619
 — from spinal cord, 659
 — of thyroid gland, 542, 619
 — of upper jaw, myeloid, 782
 — of uterus. *See* Uterus
 Tumours arising in skin-folds of dog, 50; osseous, removed from ear, 120; of larynx, removed by galvanocautic method, 777
 Turner, Dr. F. C., hepatic abscess, 425; membranous laryngitis, 426; miliary aneurysms in cerebral hæmorrhage, 741
 — Mr. J. S., the Dentists' Act, 37, 141
 Twins, conjoined, 14, 35; numerous, 723
 Tympanic plate of temporal bone, fracture, 190, 341
 Tyne-port, sanitary report of, 601
 Tyson, Dr. W. J., rectal alimentation, 420; stricture of pylorus, 741

U.

Ulcer of stomach, 13, 272, 423; rodent, of ear, 16; of eyelid, 503; perforating, of colon, in typhoid fever, 88; perforating, of vermiform appendix, 272; of stomach, iodoform in, 657; perforating, of duodenum, 704; epitheliomatous, removal by scraping, 820
 Ulceration, tubercular, of intestine simulating typhoid fever, 503
 Undertakers on commission, 644
 United States and the Geneva Convention, 281
 Uranoplasty, 703
 Ureter, calculus in, 425
 Universities, degrees in, 845, 931
 University of Aberdeen, foundation of chair of Pathological Anatomy by Sir Erasmus Wilson, 99, 242, 513; medical bursaries in, 242; Greig bursary, 282; science degree, *ib.*; chair of Natural History, 673, 752; pass list, 683

University of Athens, students in, 291
 — of Berlin, vacation lectures, 234; teaching staff of, 244; resignation of Professor Langenbeck, 827
 — of Bombay, Dean of Faculty, 165
 — of Bonn, professorship of surgery, 165
 — of Brussels, pass lists, 760, 841
 — of Cambridge, Shuttleworth scholarship, 136; local examinations, 278, 314, 350, 439; pass list, 329; teaching of anatomy, 362; degree of Bachelor of Surgery, 443, 681, 967; professorship of Animal Morphology, 521, 747, 827; rooms for morphology and histology, 747; honorary degrees, 870
 — of Dublin, pass lists, 329, 407, 763
 — of Durham, pass list, 721
 — of Edinburgh, honorary degree conferred by, 242; examiner, 283; court, 283, 551; professorship of Natural History, 469, 592, 632; honorary degrees, 473, 684; proposed alteration of ordinance, 551; number of candidates for examinations, 552; pass list, 682, 721; bursaries and scholarships, 833; chair of surgery in, 919
 — of Glasgow, proposed professorship of Pathology, 318, 410, 558, 672; close of winter session, 518; examiner in surgery, 551; university reform, 672; note on, 925
 — of Graz, professorship of Anatomy, 433
 — for Hungary, proposed new, 639
 — of London, election to senate of, 65, 98, 101; meeting of convocation, *ib.*; admission of female graduates to convocation, *ib.*; boards of studies, *ib.*; meeting of Senate, 470; appointment of assistant-registrar, *ib.*; resolution of condolence with Duke of Devonshire, 709; resolution concerning Mr. C. Darwin, 711; claims of on Gresham College, 715
 — of Oxford, grant to Linacre professor of Physiology, 215; representative in General Medical Council, 234; medical endowments at, 274; sanitary state of lodging-houses, 829; honorary degrees of, 859, 869, 949; proceedings of Parliamentary Bills Committee regarding Faculty of Medicine, 885
 — Queen's, in Ireland, dissolution of, 205; honorary degrees, *ib.*
 — of Rome, professorship of Experimental Hygiene, 519
 — Royal, of Ireland, matriculation examination, 100; position of graduates of, 479; fellowship, 552, 593; meeting of senate, 593; examiners, *ib.*; fees for examinations, 714; examinations, 920
 — of St. Andrew's, pass list, 682
 — of Sydney, medical school in, 829
 — of Vienna, chair of pathology in, 198; honorary degree, 433
 Urethra, Mr. W. Whitehead on new method of irrigating, 497; cyst of complicating labour, Dr. J. Dickinson on, 613; Mr. R. Harrison on a case of stricture of, 940
 Uric acid, Mr. E. A. Cook on estimation of, 535
 Urine, alkaptan in, 17; micrococci in, 53; suppression of threatened after ovariectomy, 269; peculiarity of in acute pneumonia, 385; Mr. O. Bowen on oil-globules in, 575; case of suppression of, 795; Mr. H. Meymott on retention of, 816; albuminous, bacteria in, 894
 Uterine hæmorrhagics, Dr. J. B. Hicks on, 935
 — pains, Dr. D. J. Mackenzie on, 255
 Uterus, tumours of, 14, 229, 308, 426, 580, 620, 778, 925, 944; removal of, 61, 96, 133, 199, 539; inversion of complicating labour, Mr. G. C. Searle on, 117; epithelioma of fundus of, 272; double, retention of menstrual fluid in half of, 344; Dr. Fancourt Barnes on hour-glass contraction of treated with nitrite of amyl, 377; mucous growth of fundus of, 387; prolapsus of complicating labour, Dr. J. Dickinson on, 613; sessile vascular tumour of, 621; inversion of, 644; removal of fundus of by abdominal section, 782; Dr. V. G. Webb on pregnancy with prolapsus of, 938
 — cervix of, pregnancy with epithelioma of, 14
 — dilatation of canal of, in spasmodic dysmenorrhœa and sterility, 14, 229; Hegar's dilators of, 161; histological results of laceration of, 426; laceration of, 502; epithelioma of, 702; Dr. E. J. Tilt on laceration of, 809

V.

Vaccination, compulsory, in Tasmania, 26; in Switzerland, *ib.*; as a preventive of small-pox, 59, 749, 790, *see also* Small-pox; fees for, 132, 438; an original certificate, 158; prosecutions for refusal of, 205, 359; successful, grants for, 228, 254, 292, 405, 502; Dr. W. B. Carpenter on, 245; Bill for removal of compulsory clauses of Act, 248; returns of officers, 361; in central provinces of India, 362; from crusts, 398; in New York, 551; primary and secondary, 581; in Bengal, 713; in British Burma, 791; proceedings of Provincial Medical and Surgical Association regarding, 848, 852, 853; proceedings of Parliamentary Bills Committee of British Medical Association, 883; in Ireland, Irish Medical Association on, 890; in Illinois, 949; in London, 951; alleged death from, 110

Williams, Dr. P. H., appointed Secretary of British Medical Association, 424
 ——— Mr. R., ophthalmic cases, 157
 ——— Mr. Rogers, sarcoma of bladder, 268; suppuration of wrist joint, 16; thickness of skull, 167; calculus formed on a shell, 578
 ——— Mr. T. Watkin, appointed Secretary of British Medical Association, 424
 Williams, Dr. J. L., treatment of hæmorrhoids, 544
 Willoughby, Dr. E. F., reorganisation of sanitary service, 424
 Wilson, Sir Erasmus, professorship of Pathology in University of Aberdeen, *see* University; Egypt of the Past, 232; health of, 547, 548, 549, 550, 551
 ——— Dr. J. C., Treatise on the Continued Fevers, 424
 Windle, Dr. B. A., exophthalmic goitre, 622; rupture of uterus, 424
 Wine, unf fermented, 324; adulteration of, 314
 Witnesses, medical expert, fees to, 432; medical, and the coroner for Central Middlesex, 444, 550, 560. *See also* Medical Witnesses
 Wolfe, Dr. J. R., tubercle of iris and ciliary body, 224; Diseases and Injuries of the Eye, *rev.*, 428
 Wotter, Anne, Mrs. R. H., poisoning by nitrate of potash, 424
 Women, married, in factories, 27; institutions for diseases of in Glasgow, 212. *See also* Hospital
 Wood, Dr. Alexander, superintendents of imbecile asylums, 517, 580
 ——— Mr. Samuel, prize offered by, 324
 Woodman, Dr. J., early vaccination, 255; anaesthetics, 287; the law of lunacy, 927
 Work, use, Belfast, report on, 24, 254
 ——— Cork, inquiry at, 154
 ——— Sheffield, scandal at, 154
 Workhouses, training nursing in, 60; medical officers of, and certificates for the factory inspectors, 205; medical officers of, 205; assistant medical officers of, 205
 Wotter, Anne, Mrs. R. H., poisoning by nitrate of potash, 424
 Wounds, influence of sexual excitement on, 224
 Wray, Dr. C., spasms, 424
 Wright, Mr. G. A., aneurysm, 424
 ——— Mr. H., tapeworm in the infant, 410
 Wright, Mr. G. A., aneurysm, 424
 Writings, minute suppuration of, 424
 Wrote, Dr. A., appointed Editor of British Medical Journal, 361

Yates, M. A. H. (1967). Tabulating deaths from infectious diseases. *Journal of the Royal Statistical Society* **30**, 1-10.

Yates, D. L. P. (1967). The incidence of primary amoebic meningoencephalitis. *Journal of the Royal Microscopical Society* **87**, 1-10.

Yates, M. A. H. (1968). The mortality in amoebiasis, and a reply to Dr W. M. MacCallum's criticism of certain points raised in my paper. *Journal of the Royal Microscopical Society* **88**, 1-10.

[illegible][illegible]

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED FOR THE ASSOCIATION BY ERNEST HART.

LONDON: SATURDAY, JANUARY 7, 1882.

AN ADDRESS

ON THE

SURGICAL AIDS TO MEDICINE.*

By T. CLIFFORD ALLBUTT, M.A., M.D., F.R.S.,
Senior Physician to the Leeds Infirmary.

GENTLEMEN,—As I rise to address you this evening, I know not which is the stronger feeling in me—the pleasure—the honest pleasure I may frankly avow in the distinction your invitation confers upon me, or the diffidence which tells me I am unworthy of the duty to which I am called. Your kindness gives me courage to believe that I shall at least have gentle judges.

The subject of an address like the present should, I venture to say, be a practical one. It should come home to every man's experience, and concern itself with every man's craft. To deal more widely with things, to take views of them so lofty that the details of our daily work recede into the distance is more proper in essays written for the student. These can be tested by no ready touchstone, but will be judged by time and longer labour. For this reason I have chosen a subject to-night upon which each one of my hearers can be the instant critic, and which deals with the details of our common practice. By the title *Surgical Aids to Medicine*, given to my paper, I wish to signify the relation of help which the surgeon can give to the physician, and to speak of those maladies which, though belonging to the sphere of the physician need the hand of the surgeon for their adequate treatment.

It has been too hastily said that specialism has been the bane of modern medicine, and that the divergent paths of our closer researches have led us away from those comprehensive views of our art which alone can give us mastery as practitioners.

If this assertion be made as a due warning against quackery, or as a paradoxical way of impressing upon us that analysis alone without synthesis may be profitless, then, accepting it at its true value, we may take it at its worth. But I fear the charge against specialism means more than this—is no mere denunciation of selfishness, of pettiness, or of strenuous trifling, but is aimed against subdivision of labour as a mode of progress. I scarcely need combat such an opinion as this, nor seek to show you that, without the devotion of gifted men to narrow fields of investigation, the science which inspires our art cannot prosper. Whither they have preceded we must follow, and with them seek to embody their new gains with the old. Not only must this be true of the remoter deviations of medical inquiry, but it is true also of the larger contingents of our art. That any one part of medicine can fail to depend upon, and to interosculate with the rest, is of course impossible; but on the other hand, in respect of our limited faculties, we must do provisionally and artificially what nature does not do—if we are to grasp firmly, we must limit our embrace. The old standard divisions of medicine into medicine, surgery, and midwifery, are then designed not in the following of nature, but for the sake of our own infirmities. Even when medical science was more restricted than it is to-day, no man could attain a fine and progressive mastery over more than one of these great divisions, and with the increase of time such a range of power becomes less and less attainable.

By taking parts from each, distinction may be reached partly upon surgical partly upon medical lines, and such integrating kinds of work are invaluable to us; but so far as I know, no one man was ever both a great surgeon and a great physician. Not only is the field too large, but the mental habit seems different; and we are thus compelled to recognise our limitations, and, labouring each in our own sphere, take good heed of the dangers of isolation, and avoid them as well as we

may. Perhaps the majority of my hearers are not devoted exclusively to medicine, surgery, or midwifery, respectively, but are engaged in the attractive field of general practice. There is something very fascinating in the freedom of that practice which, rapidly gleaning the chief results of the more special workers, binds them into temporary unity, and, seeking rapid and effective combinations for instant needs, develops a class of men inferior to none, if not superior to any in dexterity and versatility, in variety of knowledge and readiness of resource. Yet, even in the ranks of general practice, the distinction between physic and surgery is not lost; and not only in later life, but even in the wards of our hospitals, our better students betray some personal leaning and fitness for the one branch of their profession or the other. Thus it is, perhaps, that the border subjects lying between surgery and medicine are neglected, and the threads are not tied which should weave the two into a single work. If I may command your patience for a little while, I will drive the shuttle across this division.

My first introductions into the No-man's land between medicine and surgery were twofold. One of my revered masters—the late Professor Trousseau—interested himself deeply in the extension of surgery to the relief of medical cases. After the manner of his countrymen—less bound by the traditional habits which led their English brethren some years later gravely to consult with each other how far the operation of morphia injection was permissible to their order—Trousseau took pleasure in operating with his own hand upon cases of empyema, of pericardial effusion, and so forth. It is not given to many physicians to train their fingers to the skilful use of the knife or the needle, but Trousseau's practice taught his pupils the value of early and effective surgical aid, and the calamitous results of its neglect. The next point of contact between surgeon and physician which engaged me, was in the field of diseases of the eye. I need not stay to estimate for this audience the great advances which have been made in this branch of clinical observation. Not the least of the advantages of the ophthalmoscope to me was, that it brought me, twenty years ago, into close collaboration with my surgical colleagues in Leeds—colleagues with whom I have worked in intimate association from that time until now, and to whom I owe more than I can adequately record or acknowledge. Working and reasoning with them, we have learned together to pull down the wall of somewhat jealous separation which too often divides the physician from the surgeon, to the great disadvantage of both, and to create a fellowship and community of purpose which, I venture to think, must greatly enlarge the powers of both. The united efforts of physician and ophthalmic surgeon have discovered a new region of facts and inferences that I will now scarcely enter upon, so well is it known, so far has it become the property of the whole profession. To two points only will I refer:—first, to the ill effects of latent strain of accommodation, and secondly, to optic neuritis not secondary to cerebral disease. There is no passing or superficial malady which is so vexatious as headache, and returning headaches sometimes prevent all the industry of young students. In many cases, no doubt, these headaches are more strictly neuralgic; but Mr. Brudenell Carter and others have proved that in many cases the headaches recurring on application to study are not due to cerebral overstrain, but simply to overstrain of the eye. An irregular cornea, or an unnoted defect of focal vision—and such defects are often latent—has caused a continued strain upon the highly nervous ciliary region of the eye, the pain of it has spread itself over wider nerve-districts, and a pair of spectacles has at once restored the sufferer to full powers of application. This striking discovery is now becoming well known, but it has been more recently suspected that, in some of the cases of optic neuritis discovered in young women and others in whom there is no cerebral disease, the inflammation of the disk may be due to previous strain of accommodation. If it be true, as Mr. Mason of Bath tells me, that in some of these cases a neglected optic neuritis may result in meningitis, we see before us a grave responsibility, and a wide field for successful effort in taking such order that the vision of young people shall be duly tested before they are put to continuous study. To another ophthalmic surgeon, Mr. Liebreich, we owe no less valuable teaching, who has pointed out to us how many spinal and other deformities, weaknesses and pains, are due to the dis-

* An Address delivered at the Inaugural Meeting of the Midland Medical Society, October 19th, 1881.

I am certain that the surgeon to cure intonationless intonation have as yet been unsuccessful, and this awful melody continues to challenge our skill.

I may pass by the wire coil and other devices to refer to the only hopeful procedure, namely, the method of galvano-puncture. Although I was among the first of those who tried the operation, and have had a long experience of it, yet I regret to say that increase of experience has diminished my faith; and, notwithstanding a few partial successes, I must still rank this remedy as of less average value than the treatment by rest, with large doses of iodide of potassium.

Not only does surgery help us in the treatment of diseases of the chest, but it is indispensable even for diagnosis. To distinguish between fluid and solid gatherings in the chest is at times impossible without the needle, and the same is true of like difficulties in the liver and elsewhere. Indeed the aspirator, and the familiarity with finely made trawls of various kinds, has given us new arms against obscure disease both in respect of diagnosis and treatment, in these and in many other organs.

Paracentesis of the liver is now as readily employed as in the case of the pleura. Hepatic abscesses are sought for by the needle, and their contents evacuated by exhaustion with a readiness and success, that a very few years ago would have seemed wildly improbable and dangerous. Yet the surgeon, if hepatic abscess be suspected, thrusts the instrument in by way of the axillary line, near or below the costal margin, and if he fail at first to draw pus away, does not hesitate again and again to repeat his bold incursions in various directions. No harm comes of this boldness, and the success of the operation in appropriate cases has quite changed and reversed their former gloomy prognosis. Hydatid cysts are rapidly emptied and cured in like manner; and I can scarcely forbear to refer to the complete surgical cure of a case of hydatid of the liver under my own care, in which, by repeated aspiration alone, a group of large sacs were gradually destroyed, though two of them suppurated freely. The defect in hepatic surgery which yet remains is the imperfection of topical diagnosis, so that punctures have in some cases to be repeated in vain before the abscess is tapped, and, after all, some collection of pus may escape the instrument.

The surgery of the gall-bladder is as yet in its immature youth. In extreme cases, as published by Lawson Tait and others, bold intervention on a heroic scale has saved life; but I look forward confidently to more than this—to tapping of the gall-bladder as the systematic and the only means of permanently curing those miserable cases in which the passage of gall-stones, repeated time after time, embitters, and even shortens the days of patients otherwise healthy. I know of no cases so distressing in which the physician is more helpless.

Few practitioners will look back with any content to their cases of ascites. Under all circumstances, but especially in cases of hepatic origin, this symptom has proved as intractable as its treatment by purgation has been distressing both to doctor and to patient. Is it not true that one has been wont to shrink from a case of ascites as from a hopeless strife? Here, surgery again has come to our aid. In early tapping we have a prompt, safe, and fairly effective relief—cure in such cases we cannot hope for. Late tapping is an opprobrium of medicine, but I have learned in recent years to tap as soon as ascites is prominent, and to repeat the operation as needed, using of course other remedies meanwhile. A few tapplings generally succeed in reducing the tendency to fill, the patient gains a substantial respite, and is saved the discipline of pulv. jalapæ co., and elaterium.

In diseases of the kidney we may now resort, not to the aspirator only, but to operative means far more radical.

In cases of impacted calculus, and of pyelitis with or without calculus, the physician, calling in the surgeon, cuts down upon the diseased viscus, and under the baptism of antiseptics, opens, cleanses, and even extirpates the part; his temerity and success being limited as yet rather by imperfection of diagnosis than of mechanical means. Even in incurable cases, a drainage-tube in the loin offers an easier outlet for septic fluids and particles, and relieves the sleepless torment of vesical irritation. While these words are written, there lie in the Leeds Infirmary no fewer than three cases—under Mr. Wheelhouse, Mr. Teale, and Mr. Jessop respectively—in each of which the loin has been opened and drainage-tubes inserted into the kidney with complete success, so far as success in those cases was possible. In these cases, as in all others to which surgical methods are extended, aid is given too late, is not asked for till mischief is beyond repair. As we gain knowledge and confidence this will be otherwise, and I shall not again witness, as I witnessed a few years ago, the slow destruction of a bright and promising young life by a calculus impacted in the kidney, without endeavouring at least to reach the offending body. Mr. Teale some time ago operated in such a case, but dared less than he would dare now, and the necropsy showed him that, had he explored the first portion of the ureter, he would have felt and easily removed a stone which, unremoved, destroyed the patient. In later days, the whole kidney has more than once been extirpated with complete success; and such cases

were shown at Guy's Hospital during the recent meeting of the International Congress in London. The spleen also has been removed successfully so far as operation is concerned, but without benefit to the patient, and apparently with the result of causing distressing nervous symptoms. These, no doubt, were due to some accidental injuries to nerves which might hereafter be avoided. The safe opening and exploring of the abdominal cavity is, perhaps, the greatest achievement of modern surgery, and by it medicine largely benefits. By it especially are we strengthened against the dangers of intestinal obstruction. In cases in which the obstruction is hernial in character—in which, that is, by some twist, snare or fold, the gut is obstructed as in a hernia—I do not hesitate to say if, after a fair trial of complete rest with opiates and fomentations no relief seems probable, and death faces us—I say that the risk of opening the peritoneum and searching for the strangulation fades into little before the risk of *laissez faire*. In chronic obstruction, and where cancerous or other fixed obstacles may be inferred, then the propriety of such interference must be judged in each case by its own circumstances. I can only say that, in the many cases I have known thus dealt with, I have found no reason wholly to discourage the larger operation on account of its added dangers, and in more than one of them it has been distinctly helpful by giving the line for colotomy or otherwise.

Before leaving this subject, I would refer to a rule of my colleague, Mr. Jessop, who says that some cases of repeated or continuous wearing, aching pain of the abdomen, are explained by the discovery of umbilical hernie, too small to cause obstruction or to catch the eye. Since I had this hint I have seen two such cases, and have cured them by reposition and the application of a button truss. Gastrostomy is as yet one of the difficulties of the surgeon, though it seems that the new method of securing the stomach to the incision before piercing the viscus may prove more hopeful. Mr. M'Gill, of Leeds, has just succeeded in a case of this kind. If gastrostomy should be robbed of its terrors it might be pressed into the service of the physician not only for the relief of cases of oesophageal obstruction, but also for the dressing of gastric ulcers, and for dilatation of strictures of the pylorus.

Kussmaul's method of catheterising the stomach in dilatation and catarrh of that organ does not seem, if I may judge by a recent essay of my friend Dr. Wade, to find favour in Birmingham. In a paper of my own, published two or three years ago, I expressed a contrary opinion, which time has strengthened. As in a dilated and never empty bladder decomposition is constantly going on, so in such a stomach a fermenting remnant is always left behind, to vitiate the incoming food. By completely emptying and purifying the viscus alone can we prevent this abnormal fermentation, and put the stomach in a position to recover its normal state.

Rectal diseases often simulate maladies which belong to the sphere of the physician, such as irritable bladder or uterus, diarrhoea, lumbago, sciatica and the like; and sad are the oversights of the physician who is not ready with that handy little instrument, the forefinger. By it he may again and again be led to the discovery of cancer of the rectum or uterus, of pelvic abscess, of displaced uterus, of prostatic disease, rectal syphilis, stricture of the sphincter ani, hæmorrhoids, fistula, and other local affections, all distressing, and some destructive.

Forgive me if my words to you to-night seem in this, and other matters, to be too trivial and too homely for such an audience, but I am driven to dwell on these familiar things by the sadness of lives wrecked for the lack of timely insight and timely skill. Undiscovered hæmorrhoids are not uncommonly the simple but most effective cause of a broken constitution. Unfortunately, they are too often concealed, purposely or not, by the patient. There is an unlucky notion abroad that the discharge is a safety-valve, and its suppression dangerous—a notion strengthened by the sense of relief which it gives to dilated vessels, and of the fulness and weight which these cause in the pelvis. Women, again, are naturally shamefaced in such a matter, even to their own sex, and being accustomed to the recurrence of sanguineous issues, they regard the bleeding of piles with the less anxiety. Finally, the obscurity of the discharge, and its loss in a dark water-closet, generally conceal from the sufferer some part at least of the mischief which is undermining him.

Let no weakly or anæmic person then escape inquiry on this subject, and you will help or save many a life. Be it remembered that long continued bleeding is not to be repaired at once. Even in the comparatively young, a large or continued hæmorrhage may leave its mark for the rest of the life, and take the use and happy vigour from length of days. Probably the whole organism and its parts have suffered too long from inanition to recover their normal tone, or the bleeding has so overstrained the blood-making organs that they never can again turn out a full tale of blood; or in some other way the organism, having long revolved in an abnormal equilibrium, cannot be brought back to its normal orbit. In some cases, indeed, continued hæmorrhage brings on ultimately a

There is a great deal of business at the fair, and I will make some business of the money I have away of home people, which, at the same time, I have answered very well.

One surgical aid to medicine, gentlemen, I have reserved for the pleasure of making it my last word to night. This, although not mechanical, has done more than any one of those gifts of surgery to mankind to enlighten our darkness, to fortify our reason and to guide our handicraft—I mean the discovery and demonstration of that great agency which, dimly guessed at for many years, has but recently come fully into light—the work of germinal matter, or catalytic matter in the processes of death. These revelations we owe to many workers, perhaps to none more than to M. Pasteur, who is neither physician nor surgeon. But the working of these agents must be demonstrated in the simple and visible before it can be realised in the complex and invisible—on the surface of the body before the inward parts; and I am speaking to you as to one man when I say that which surgeons owe to the genius of Mr. Lister is but the beginning of the debt due to him from physicians. To him we owe that demonstration upon the outer surfaces of the body of the forces and changes which fail not to reach and disturb the innermost; and I would dwell upon the name of Mr. Lister as the last I will cite to-day of the surgical aids to medicine—an aid without whom many of the measures I have advocated to night would have been impossible.

SELECTIONS FROM CLINICAL LECTURES,

Delivered at the London Hospital.

BY JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the Hospital; Consulting-Surgeon to Moorfields Ophthalmic Hospital; and Professor of Surgery and Pathology in the Royal College of Surgeons.

THE PRE-CANCEROUS STAGE OF CANCER, AND THE IMPORTANCE OF EARLY OPERATIONS.

GENTLEMEN,—The patient who has just left the theatre is the subject of cancer of the tongue in an advanced stage. As I demonstrated to you, the lymphatic glands are already enlarged. It is hopeless to think of an operation, and there is nothing before him but death, preceded and produced by a few months of great and continuous suffering. His case, I am sorry to say, is but an example of what is very common. Not a month passes but a case of cancer of the tongue presents itself in this condition. The cases which come whilst the disease is still restricted to the tongue itself are comparatively few; nor does this remark apply only to the tongue. "Too late! Too late!" is the sentence written but too legibly on three-fourths of the cases of external cancer concerning which the operating surgeon is consulted. It is a most lamentable pity that it should be so: and the bitterest reflection of all is, that usually a considerable part of the precious time which has been wasted has been passed under professional observation and illusory treatment. In the present instance, the poor fellow has been three months in a large hospital, and a month under private care. I feel free, gentlemen, to speak openly on this matter, because my conscience is clear that I have never failed when opportunity offered, both here and elsewhere, to enforce the doctrine of the local origin of most forms of external or surgical cancer, and the paramount importance of early operation. I have tried every form of phraseology that I could devise, as likely to impress this lesson. Nearly twenty years ago, I spoke to your predecessors in this theatre concerning the "successful cultivation of cancer"; telling them how, if they wished their patients to die miserably of this disease, they could easily bring it about. The suggestion was, that all suspicious sores should be considered to be syphilitic, and treated internally by iodide of potassium, and locally by caustics, until the diagnosis became clear. More recently, I have often explained and enforced the doctrine of a pre-cancerous stage of cancer, in the hope that, by its aid, a better comprehension of the importance of adequate and early treatment might be obtained. According to this doctrine, in most cases of cancer of the penis, lip, tongue, skin, etc., there is a stage—often a long one—during which a condition of chronic inflammation only is present, and upon this the cancerous process becomes engrafted. I feel quite sure that the fact is so. *Phimosis* and the consequent *balanitis* lead to cancer of the penis; the soot-wart becomes cancer of the scrotum; the pipe-sore passes into cancer of the lip; and the syphilitic leucoma of the tongue, which has existed in a quiet state for years, at length, in more advanced life, takes on cancerous growth. The frequency with which old syphilitic sores become cancerous is very remarkable; on the tongue, in par-

ticular, cancer is almost always preceded by syphilis, and hence one of the commonest causes of error in diagnosis and procrastination in treatment. The surgeon diagnoses syphilis, the patient admits the charge, and iodide of potassium seems to do good; and thus months are allowed to slip by in a state of fools' paradise. The diagnosis, which was right at first, becomes in the end a fatal blunder, for the disease which was its subject has changed its nature. I repeat that it is not possible to exaggerate the clinical and social importance of this doctrine. A general acceptance of the belief that cancer usually has a pre-cancerous stage, and that this stage is the one in which operations ought to be performed, would save many hundreds of lives every year. It would lead to the excision of all portions of epithelial or epidermic structure which have passed into a suspicious condition. Instead of looking on whilst the fire smouldered, and waiting till it blazed up, we should stamp it out on the first suspicion. What is a man the worse if you have cut away a warty sore on his lip, and, when you come to put sections under the microscope, you find no nested cells? If you have removed a painful, hard-based ulcer of the tongue, and with it perhaps an eighth part of the organ; and, when all is done, and the sore healed, a zealous pathological friend demonstrates to you that the ulcer is not cancerous, need your conscience be troubled? You have operated in the pre-cancerous stage, and you have probably effected a permanent cure of what would soon have become an incurable disease. I do not wish to offer any apology for carelessness, but I have not in this matter any fear of it.

EMPIRICISM AND SPECIFICS.

The patient whom we are about to discharge from Talbot ward, cured of severe pemphigus, was admitted for a special purpose. He was sent in by my friend and former pupil Dr. Tom Robinson, in order that he might be cured. You will say that the hope of cure is the motive which brings most of our patients to us. True; but in this instance there was something more than this. Dr. Robinson could easily have cured him himself, but he sent him here in order that I might do the miracle of cure under your eyes, and thus claim your belief in the efficacy of drugs. You will remember his state when admitted; he was covered from head to foot with bullæ; the trunk was less severely affected than his limbs, head, and genitals; on these, there was nowhere a space as large as the palm free from bullæ, and on the trunk also there were a considerable number. He was in a miserable condition from pain and irritation. The eruption had been out about ten days, and it affected the mucous membrane of his mouth as well as the skin. You may remember that we kept him in bed for a few days before we used the magician's wand, in order that all might see that there was no natural tendency to amelioration. More bullæ came out; then, without making the slightest change in diet, we ordered a few drops of a tasteless solution of arsenic to be swallowed three times a day. The result was that, at our next visit, most of the bullæ had dried, and there were no fresh ones. He continued to improve greatly for ten days, when suddenly a few fresh small bullæ seemed to threaten a relapse. We doubled the dose of our remedy, making the dose eight instead of four drops; and, from that day, with the most trifling exception, the recovery has been uninterrupted. With such a fact before you, let me beg of you, gentlemen, to believe in drugs, and to treat empiricism with respect. In the prescription which I ordered, I availed myself solely of empirical knowledge; I prescribed, just as any old woman might prescribe, that which I knew would do good. Concerning the nature of pemphigus, I knew nothing; of its cause, absolutely nothing; of its clinical relationship, but little; of the *modus operandi* of arsenic, I knew scarcely more; but this I did know as a fragment of assured conviction, that arsenic would cause the pemphigus eruption to disappear, and the patient to regain his health. Far be it from me to speak slightly of scientific work; let us by all means work as hard as we can in the laboratory and microscope-room, and penetrate as far as we possibly can into the mysteries of disease; let us never weary in our search after causes, or in our endeavour to find practical application for the facts of physiology. But, whilst doing this, let us remember that, as regards the relief of suffering, much of our usefulness must be based upon knowledge which is nowise scientific, but simply a matter of experience and memory. We have many specifics for many maladies, or rather for many symptoms, and he is the most successful practitioner who has stored in his memory the largest number of them. As years go on, we shall add many more to our list; and I doubt not that there are those who now listen to me who are destined to give help in their discovery; for discoveries in this direction are rarely made by single observers, but rather by the concurrent work of many experimenters, all keeping their eyes open, willing to try new things, and resolute to store faithfully the results of their observations. Iodide of potassium for tertiary syphilis, the bromide for epilepsy and as an anaphrodisiac, iodoform for phagedæna and specific ulceration, balsam

of distinction between the malady in question and common psoriasis. The latter begins as a point, which, spreading at its edge, becomes a papule, which, again enlarged at its border, becomes a patch, possibly a very large one. Thus, psoriasis patches are always almost round, nummular, *i.e.*, like coins or rings, whilst those of lichen ruber are irregular, in lines or particles. In the case in question, most of the eruption was arranged in this manner, but some patches were not. On the elbow-tips and over the ulnæ were patches which, in mode of formation and in accumulation of scales, could not be distinguished from common psoriasis. Our treatment of the case was exactly that of the latter disease—tar externally, and arsenic internally. In nine cases out of ten, these remedies will cure lichen psoriasis pretty quickly. Some of you may remember a man whom we had under care six months, a splendid specimen of the disease. He had been sent to me by Mr. Forshall of Highgate. It was a first attack, and occurred to a healthy young man. I prescribed arsenic and tar. Through Mr. Forshall's kindness, I had an opportunity of seeing this man again last week. He told me that about six weeks' use of the remedies quite cured him, and that he has, during the last four months, remained without treatment quite well. In our last case, however, we have not been so fortunate. Our patient was of very peculiar nervous system, in fact almost insane, and the influence of arsenic appeared to be to excite her. Several times we had to suspend it on account of the irritable condition which it appeared to produce, and finally she was discharged from the hospital uncured, in consequence of the trouble which she gave in the ward. As a rule, I have found lichen psoriasis more easily influenced by treatment than common psoriasis. The cure is also usually more complete. The periods of immunity are also longer, often not less than several years; whereas psoriasis, however good the cure, usually relapses, I think, within the year.

CHRONIC SYNOVITIS, ARTHRITIS, OR STRUMA: IMPORTANCE OF THE DIAGNOSIS.

We have had lately a great many cases of synovitis of the knee-joint. I think you will have observed that, roughly, we may divide all the cases of chronic synovitis into two groups, those which are connected with struma, and those which are of an arthritic nature, in the conventional sense of that term. This division is of considerable practical value. Under the arthritic head, I comprise all that are associated with gout, rheumatism, or rheumatic gout, and all gonorrhœal rheumatism; and of all these, we may say that we expect them to get well. Sometimes there is stiffening, sometimes effusion is very long in disappearing; but still, in nearly all cases, in the end the patient again walks on the limb. It is very different with the strumous group. Here the tendency is to pulpy thickening of the synovial membrane, and to incurable conditions. It may be that destructive changes are warded off by long rest, but the patient is disabled, and the limb useless. We have half a dozen of this kind of knee now in our hands, not bad enough for amputation or excision, but still so bad as to prevent walking. In these cases, we are obliged to forbid walking, whereas in most of the arthritic cases, unless exercise causes pain, it may be permitted with impunity. A considerable variety of conditions is presented in this group, and especially is the arthritic process modified by the age of the patient. The older the patient, the more chronic and the less painful is rheumatism. You know that I am in the habit of insisting upon the importance of the patient's diathesis, even in cases of synovitis which is called traumatic. We admit a great many cases in which free synovial effusion has followed a sprain or contusion. In these cases, if the effusion lasts long, or if it is in excess of what its supposed cause will account for, you must suspect the arthritic diathesis. The patient is rheumatic or gouty. We have had numberless illustrations of this. Sometimes it is difficult to get at the exact facts. In the case of a man who has just left us, the synovitis persisted in spite of treatment, and relapsed after an apparent cure. It appeared likely that the case might end as hydrops articuli. I had repeatedly taxed the man with being gouty, but we could get but little evidence. Last week, his employer called on me; I then learned that the man had been for thirty years employed as a bottler in wine vaults, and that his habits of free wine drinking had often nearly cost him his place. I was told that no objection was made to a bottler drinking as much wine as was good for him, and that complaint only resulted when so much was taken as to interfere with his efficiency as a workman. It is not easy to imagine a position more likely to produce a gouty state of system. We have since let this patient leave the hospital, supplied with a knee-cap. He still has some fluid in the joint, but he can walk without any pain. Exercise, which would of course be most injurious if the disease were strumous, will not hurt him.

Dr. BEAMISH, late medical officer of the City Prisons, Cork, has been granted a retiring allowance of £110 *per annum*.

A FEW REMARKS ON YELLOW FEVER, AND ON THE MOVEMENT OF TROOPS.

BY SURGEON-MAJOR J. P. H. BOILEAU, B.A., M.D.

Diplomate in State Medicine, University, Dublin, etc.

THE return of the 1st Royal Lancaster Regiment (1st 4th Foot) from the West Indies, has recently been made the subject of a short paragraph in a contemporary. The regiment arrived in England in November last, having been ordered home from Barbadoes, on account of the prevalence of yellow fever at that station, and in consequence of the officers and men of the corps having suffered very severely from the disease. The paragraph states, that it was anticipated that a regiment from Malta would be ordered to Barbadoes as soon as the local authorities considered the epidemic to have passed off, and after the barracks had been thoroughly disinfected.

It seems to me, judging from the lessons of the past, that the authorities will not hastily order a regiment from Malta to Barbadoes under present circumstances. I will narrate a few cases which seem to justify me in forming this opinion; and first, that of the 84th foot, in 1867.

I served in the Malta command during the years the 84th was stationed in the island—1865-67. The first year was that of the great cholera epidemic there, and in that year sickness and mortality were very high in the 84th; during the year 1866 continued fevers were much more prevalent and fatal than usual in the command. The 84th left Malta early in 1867, and landed in Jamaica in April; it was immediately marched up to the hill station of Newcastle; in May, 18 cases of fever were admitted to hospital; in June suspicion arose as to the true nature of the disease, and before the end of the month a case proved fatal. The disease—yellow fever—spread, and the regiment lost 13 men in July, 13 in August, and subsequently 5 more. Further particulars will be found in the 9th Volume of the *Army Medical Department Reports*.

The 1st-4th Foot, which has returned from Barbadoes, arrived there in January, 1879, and like the 84th, it came from the Mediterranean, from Gibraltar, where it had been stationed upwards of four years. The sad experience of this regiment in Barbadoes is too fresh in the minds of your readers, to need dwelling on here.

The 2nd-3rd Foot arrived in the West Indies in July 1864, also from Gibraltar. Soon after its arrival it suffered from an epidemic of remittent fever, which was the cause of 182 admissions into hospital in November, and 133 in December. Officers, men, women, and children were alike subject to it. The Royal Artillery also were affected by the epidemic, "but by no means to so great an extent" as the 3rd regiment.—*Vide Army Medical Department Reports*, Volume 6.

The 1st-21st Foot went from Malta to the West Indies in April, 1860. During the nine months of 1860 that it was in Barbadoes, 84 cases of remittent fever were admitted, and two died; and it is worthy of notice that the year before the regiment left Malta, it was exceptionally healthy; for whilst the admissions for fever were "exceedingly numerous" in other regiments, the 1-21st was "the only corps which appeared to have enjoyed a marked exemption from the disease."

Now, contrast the above cases with that of the 29th Foot, which after two years in Malta, went to Canada in July, 1867, and thence, in December, 1869, to the West Indies, (relieving the 84th). I was then the assistant-surgeon of the 29th, and served with it continuously for more than three years in Jamaica and in Barbadoes. I well remember that, as we lay off Port Royal, in view of the dreaded palisades, we contemplated our future abode on the distant hills, between three and four thousand feet above us, with many and with mingled feelings, for *inter alia*, had we not the unfortunate experience of the regiment we were about to relieve as a subject for our reflections? Yet, as the sequel proved, we need not have troubled ourselves with a single gloomy foreboding; for the fates were singularly propitious to us. During the three years and three months that I served with the 29th in the West Indies, I attended altogether but two fatal cases (mitral valve disease, the sequel of rheumatic fever, and a case of acute hæmorrhagic phthisis in a young recruit). We lost not a single man, woman, or child from any endemic or epidemic disease; nor indeed from any zymotic disease whatever, either at Newcastle, Jamaica, or at Barbadoes, nor did we invalid any, to the best of my recollection.

The 98th Foot relieved the 29th in the West Indies, in March 1873. It came from Bermuda, and its medical history, in the West Indian command may be found in the *Army Medical Department Reports*, volume 15, page 77, and volume 16 page 75, etc. Suffice it to say here, that the sun of health which had shone so brightly over the 29th, with

ness or rashness, but in that of increased caution, combined with an earnest desire that we should avail ourselves of the means of knowledge placed before us.

My cases were all treated on Listerian principles, the pedicles transfixed and tied with catbolised silk, and enclosed within the abdominal cavity.

PERINEAL CURVE AXIS-TRACTION FORCEPS.

By S. MACVIE, M.B., C.M., CHIRNSIDE, N.B.

RECENT attempts to obtain the advantages of axis-traction in forceps operations have resulted in contrivances so cumbrous as little likely to be adopted by the main body of the profession. I am, therefore, induced to describe a modification of the double curved forceps for the attainment of the same object, which I have lately successfully employed, and which has the merit of simplicity to recommend it. This modification does away with the necessity for traction-rods and all other extra aids; and consists simply in the addition of a perineal curve to the ordinary double curved forceps.

Taking Simpson's "intermediate" forceps to work upon, I have added about two inches to the length of the stem of the blades, that is, of the part intervening between the commencement of the cranial curve and the lock. This additional length I have so bent that, with the blade *in situ*, it shall curve round the fourchette and pass backwards over the perineum until it touches a line prolonged downwards through the traction axis of the blades. At this point, I have again bent the stem, so that the remaining part of the added length and the handle thereon shall continue in the traction axis line.

Such is the modification. Briefly, I have neutralised the pelvic curve by the addition of a perineal curve, so that the focus of resistance lies in the line of traction; and the instrument, in this respect, becomes practically a straight forceps. Nor is this advantage obtained at any cost, except the addition of one-and-a-half inches to the total length of the instrument. The "perineal curve" simply re-confers the power of axis traction which was sacrificed by the adoption of the pelvic curve, and without limiting the range of applicability bestowed by the latter. Therefore in the ordinary "intermediate" forceps, thus modified, we have an instrument of the widest utility, endowed with the power of axis traction; suitable wherever forceps are required, except where the obstruction is exceedingly high; and neither unhandy in the simplest nor inefficient in the most difficult cases. This modification is also valuable since it is equally applicable to the "long" forceps, and, moreover, it deprives the short straight forceps of the single superiority it possesses.

I do not pause to contrast in detail the merits of the "perineal curve" with other contrivances for the same purpose. In principle, they are identical. But in efficiency the former is fully equal to the latter; while for handiness and simplicity it is much superior. But I may mention a few particulars in which my experience shows that it excels the instrument out of which it has grown.

1. With the tip of the blade directly in the line of the handle, its introduction is easier and its adaptation more precise.

2. When the under (posterior) blade is introduced first, the handle lies far behind the fourchette, and entirely out of the way of the introduction of the upper blade.

3. For the same reason, the operator is less interfered with by the patient's thighs, both while introducing the blades, and during the extraction of the head; and suffers less loss of power from the handles projecting far in front when the head is passing under the pubic arch. In fact, from first to last, the operator occupies a more commanding position.

4. The lock, being well behind the fourchette, cannot possibly inflict any injury upon the soft parts during the adjustment of the handles.

5. The instrument, being practically straight, is capable, when the head has fully entered the pelvis, of aiding the movement of rotation. This is an advantage afforded by no other instrument whatever at such an early stage.

6. Lastly, and mainly, it confers all the advantages of axis-traction. These need not be enumerated. But it may be permitted to say, that it does so with the slightest departure from the simplicity of the instruments in common use; and with no departure whatever from the manipulative procedure at present practised.

Messrs. Young and Sons, North Bridge, Edinburgh, are the makers.

Dr. J. E. A. BALL, of Biard, Texas, reports, in an American contemporary, the case of a negro woman who gave birth to a child at the age of sixty. The age of the mother was authenticated by the record of her birth, in possession of her former owner.

ON A CASE OF ECTROPION SUCCESSFULLY TREATED BY TRANSPLANTATION OF SKIN FROM THE ARM.

By LOUIS H. TOSSWILL, M.B.,

Surgeon to the West of England Eye Infirmary at Exeter.

At a meeting of the South-Western Branch of the Association held at Exeter on October 5th, 1881, I showed a patient from whose arm and forearm I had removed large pieces of skin on July 28th, 1881, transplanting them to his left upper and lower eyelid respectively. The operation has proved so successful, that I propose to describe the case somewhat in detail; and I have the more reason for doing so, because the operation in question appears to have been but rarely performed in this country.

C. W., a boy, aged 10, was severely burnt about the head and face several years before he came under my care, the result being an amount of disfigurement which exceeded anything that I remembered to have ever seen before. The whole of the left side of the face and forehead presented one uniform surface of dull white cicatricial tissue; the outer two-thirds of the left upper lid was much everted, even when the boy looked straight in front of him. The edge of the upper lid was dragged up close to the margin of the brow, against which the lashes rested, with their points directed upwards; and when the boy attempted to close his eye, or to look downwards, the eversion became still more marked. There was considerable conjunctivitis with opacity present in the left eye, due in part probably to the eyeball remaining uncovered during sleep, so that he appeared to be staring at anyone standing by his bedside. The position of the edge of the left lower lid was shown by a row of lashes, apparently growing from the cheek, an inch or so below the eyeball, and the mucous membrane was to a considerable extent replaced by what could not be distinguished from ordinary skin. Over this surface the tears were continually flowing, and had produced an excoriation. In addition, the almost complete eversion of the lower lid, over which the saliva was constantly running, the right eye with an opaque and staphylomatous cornea (sight quite lost), and a considerable ectropion of the right lower lid, produced an amount of deformity which was certainly unusual in its extent. As the dense cicatricial tissue extended over the whole of the left side of the face, and along the forehead to the outer side of the right eye, and also partly involved the right side of the nose, and the skin immediately beneath the right lower lid, there was no healthy skin available for the formation of a flap, whether sliding or otherwise, and it appeared to me that there was only one operation which presented even the very faintest hope of success. The boy being placed under chloroform, I made an incision parallel with the edge of the left upper lid, as shown by the row of lashes mentioned before, and about a quarter of an inch above it, and dissected the remains of the lid well down over the eyeball. I then made a similar incision just below the edge of the lower lid, as evidenced by the lashes growing from the cheek, and dissected up the remains of the lid, until the two lids thus formed could be easily approximated, leaving a large raw surface above and below the eye, from which the bleeding was so free, that one or two small arteries had to be twisted. I then pared slightly the edge of each lid, and united them with two or three strong silk sutures; next, I cut off from his right arm, with a sharp triangular knife, a semicircular piece of integument, about two and a quarter inches in length, by one and an eighth in breadth, carefully cleaned it from all areolar tissue and fat, and secured it in the gap above the eye by means of four fine silk sutures. The flap for the raw surface beneath the eye was obtained from the forearm, and was about two-thirds as large as the flap from the arm. It was carefully cleaned of areolar tissue like the other, and fastened into its bed by means of five fine silk sutures. Goldbeaters'-skin was placed over both lids, and over this abundance of cotton-wool, which was kept in its place by an ordinary roller bandage. The outer dressings were changed at the end of four days, but the goldbeaters'-skin was not removed until the sixth day, when some of the stitches were removed from the flaps. The remaining sutures were removed two days later. Eleven days after the operation, the stitches which united the lids were removed, and the latter were found to be firmly grown together. On the following day, the lids were separated by means of a bistoury, when the cornea was found to be much improved in appearance. The dressings were gradually left off, but were not entirely discontinued until about a month after the operation.

The graft on the upper lid remains almost exactly the same in size as when first placed in its bed; and even now, four months after the operation,

The patient, however, has been completely cured by the treatment, and the lid tissue has been longer exposed, not even when the patient is in the prone position. In the lower lid, notwithstanding the absence of the conjunctiva, the efficiency of lid-tissue is shown by the fact that the patient is usually, but this defect I hope to rectify by the use of a conjunctival autograft. I must add that, in sleep, the patient's eyes are closed, and that his cornea now presents a nearly normal appearance.

H. ANDERSON, M.D.,

Since writing the above, two short papers have appeared in the *Journal of Mental Hygiene* on the subject of reduction of delinquents by manipulation; but neither of them appear to me to have the advantages of the plan above described.

ENTERIC FEVER IN INDIA.

[illegible]

analysis, the water was found to contain an undue proportion of organic matter. *The well was then closed, and the fever ceased soon afterwards.* The italics are mine. It is noted that all who drank of the impure water did not "suffer any injury". There is nothing remarkable in that: everyone exposed to the contagion of small-pox or scarlet fever does not "suffer injury".

In this example the disease was clearly traced to its source. In scores of instances it is not possible to do so, as soldiers, in spite of all precautions, in their rambles in the neighbourhood of their cantonments, partake of beverages the water of which is taken from sources over which the authorities have no control. My readers will not fail to notice in the above extract what is said about the cases of continued fever being none other than mild enteric, as giving valuable support to another part of my argument at the Congress.

W. C. MACLEAN, Netley.

NERVE-STRETCHING IN TRAUMATIC TETANUS.

In the report of the proceedings of the Surgical Society of Ireland in the JOURNAL of December 17th, Mr. Wheeler is said to have described his case of traumatic tetanus treated by nerve-stretching as being "the first recorded (save that of Paul Vogt) in which nerve-stretching had proved effective in curing acute traumatic tetanus", and he believed it was the only case in which the operation had been done with that object in the United Kingdom. In the *Glasgow Medical Journal* for July 1879, I published the details of a case of acute traumatic tetanus in which this mode of treatment was tried with success, and I also referred to seven other cases where nerve-stretching had been performed by British surgeons for the relief of this disease. Since that time, three or four other cases have been published in the medical journals. While I believe my own to have been the first successful case in Great Britain, I am quite sure that Mr. Wheeler's is not even the second, as at least one unrecorded case has come under my notice, and no doubt there are others of which I have not heard.

Mr. Wheeler is to be congratulated on the successful issue of his case; but it would not have detracted from the merit of the operator if he had recognised the work of other surgeons in the same department.

HENRY E. CLARK, Glasgow.

A CASE OF CARBONIC ACID POISONING.

EARLY on the morning of December 16th, I was called out by a man who lived a few miles off, to see one or two of his children, who were affected, he said, "with something like lock-jaw". On arriving at his residence, a small, new country farmhouse, I was told that one of the children was dead, and this I soon found to be quite true; and I therefore directed my attention to the living. I was brought to the bedside of a young girl aged apparently about 18; and, on a brief examination, I found her cold and wan, and in a queer sort of half-stupid, half-comatose condition; the eyes half-open, and the eyelids slowly but very imperfectly performing their accustomed functions. The pupils presented nothing abnormal. She appeared not to understand or comprehend any remark or question I addressed to her at this time, although she evidently at least heard my voice. Immediately on reaching the house, I had been informed that this girl and another some years younger, together with their little brother, aged 4 or 5, who then lay dead in an adjoining room, had retired to rest the previous night all in their usual good health; and that, as there was no fireplace in the room, they had taken a small tin dishful of clear coals and had placed them under the bed; the last one getting into bed, moreover (as came out afterwards at the inquest), shutting the bedroom door. Of course, on hearing this statement, and on inspecting the bedroom itself, which I found exceedingly small, with an exceedingly small window and low ceiling, and without the slightest provision of any description whatever for anything in the shape of ventilation, but quite the reverse, I had no difficulty in arriving at a diagnosis in the case.

My treatment was sufficiently simple, and yet rapidly successful. I threw open the window, applied a hot bottle to the feet, and placed an extra blanket on the patient. The latter precautions were, perhaps, rendered the more necessary as the poor patient, when discovered, was lying half-naked across the edge of the bed, with the dead brother on her arm; and in this condition and position the poor creature may have lain no one knew how long, probably two or three hours. In the course of a very short time, vitality and consciousness had so far returned that the patient was able to reply quite intelligently, though apparently still with some little difficulty (chiefly, it seemed to me, from a peculiar stiffness of the articulation of the lower jaw), to my questions and remarks; and, still a little later, perfect consciousness resumed its sway. Afterwards, and before I left the house, the patient

became a little nervous and excited; and I deemed it prudent to allay these symptoms, which I did effectually by the hypodermic injection of a small dose of morphia and atropine, and no further medical treatment of any kind was called for in the case.

The younger girl, who occupied the position in the bed next to the wall, escaped without any apparent injury; she merely vomited slightly afterwards, but was not unconscious at any time.

I inspected the deceased child the next day, at the request of the coroner. The body presented nothing striking in any way. The features were perfectly tranquil; and this showed, I think, that death must have been quite painless. The skin maintained almost its natural colour *post mortem*, and even about the lips and gums hardly any bluish or other abnormal colour was evident. The pupils were quite normal; I mean they were neither much dilated nor much contracted.

I need hardly say that my opinion to the coroner's jury was that, from all the circumstances of the case, the boy must have died from carbonic acid suffocation; and this opinion they of course endorsed by their verdict.

GEORGE K. GIVEN, Medical Officer, Gortin, Co. Tyrone.

THE DANGERS OF NERVE-STRETCHING.

IN Dr. Cavafy's able paper on nerve-stretching which has lately appeared in the JOURNAL, only the advantages, but not the dangers, incident to the operation of nerve-stretching in locomotor ataxy, have been dwelt upon. It may, therefore, not be out of place to mention that at least five fatal cases have already been recorded; viz., one by Socin (mentioned by Dr. Cavafy); another by Langenbuch, who originated the operation; a third by Billroth and Weiss; a fourth by Berger; and a fifth by Benedict. In most of these cases, the cause of death appears to have been undue violence used in stretching, whereby the medulla oblongata would appear to have received a shock. Thus, in Benedict's case, severe vomiting and singultus, together with complete paralysis of the bladder and bowels, supervened after the operation; dyspnoea and cyanosis eventually set in, and the patient died comatose on the ninth day.

The operation cannot, therefore, be considered a slight one; and, in advising it, we must be careful not to conceal the risks attending it from the patient and his friends. Nevertheless, I think that it will keep a prominent place in the therapeutics of tabes spinalis, since in numerous well-observed cases the improvement has been most marked and satisfactory, not only in the sphere of the stretched nerve, but far beyond its territory. It will, however, be incumbent upon us to avoid undue violence in stretching, and not to resort to it at all in patients in whom there is the least suspicion of an affection of the medulla oblongata, such as asthma and certain cardiac and respiratory diseases.

JULIUS ALTHAUS, M.D.

THERAPEUTIC MEMORANDA.

SALICYLATE OF SODA AS A LOCAL APPLICATION IN ACUTE RHEUMATISM.

WITHOUT entering into the question of salicin, salicylic acid, or salicylate of soda being "specific" in the treatment of acute rheumatism, I think that anyone who has had an opportunity of testing these remedies will be bound to admit that all three preparations have been useful in the highest degree in controlling the fever and giving relief to the affected joints. Neither in hospital nor in private practice have I met with any symptoms which I could consider as serious drawbacks to the use of salicin or its compounds. I will not give statistics, and I will only briefly allude to a severe case of polyarthritis acuta in a young lady, aged 19, where joint after joint became red, swollen, and exquisitely painful and tender. I tried many local applications, besides internal remedies, without giving much relief, until I applied lint soaked in a solution of salicylate of soda, under a cover of oil silk, to the affected joints. The relief was speedy and great. I have since tried it in a few cases in private practice with success; and am now using it, more extensively, in cases under my care in the North Staffordshire Infirmary. I have previously used, with some benefit, local applications of potash and soda; but the relief from pain with the salicylate has been so marked in the few cases in which I have tried it that I venture to publish the result, with the hope that further experience in other hands will not prove that I have been too sanguine in regarding it as a simple and efficient method of relieving pain.

CHAS. ORTON, M.D. DUR., F.R.C.P.E.

pulsated strongly, and was the seat of a very perceptible thrill or *pulsation*. The patient was kept in the recumbent position, and ordered a restricted dietary, with a limited quantity of fluids, and iodide of potash in ten grain doses three times a day. After a few days of this treatment his pulse, which had been full and strong (80), became weaker and slower (68), while some aching pain which had been complained of in the calf of the leg, disappeared. The effect of even moderate flexion in entirely preventing pulsation in the aneurysm was now noticed. The fact was demonstrated to the hospital class, and it was determined to try, after some days, a combination of the treatment by flexion, and that by digital compression. Two days later, (July 9), at 3 p.m. pain was felt in the aneurysm radiating upwards and downwards, along the limb; this pain became very severe, and the patient was seen by Mr. Coppinger at 9 p.m. Pulsation in the sac had then disappeared, and on inquiry it transpired that the patient, who took an intelligent interest in his own case, had tried, on his own account, the effect of flexion, and had kept the limb in the flexed position for two days. This position was now maintained and morphia administered hypodermically to relieve the pain.

On examination the next morning, the aneurysm was found replaced by a solid non-pulsating tumour, while pain was no longer felt in the limb. The man remained in the hospital for a fortnight, and was then discharged cured.

This case is of interest as an illustration of the value, in suitable cases, of the treatment by flexion introduced into this country by Mr. Ernest Hart. A flexed position of the limb voluntarily maintained for about 48 hours, proved, in this instance, sufficient to induce consolidation in the sac, and a permanent cure of the aneurysm.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 3RD, 1882.

SAMUEL WILKS, M.D., F.R.S., President, in the chair.

Squamous Epithelioma of the Upper Jaw.—Mr. BUTLIN said that his colleague, Mr. Morrill Baker, had removed the tumour from a woman aged 48. The patient stated that she had only noticed the disease two months earlier. When admitted, there was a swelling of the alveolar process and the hard palate, extending nearly to the middle line; but there was no swelling below the eye. The teeth had disappeared from the jaw; and, at the bottom of the socket of one tooth, was the opening of a sinus, discharging a foul fluid. At the operation, it was found that the disease extended much more widely than was anticipated, and the woman died five days afterwards from exhaustion. Mr. Butlin exhibited drawings of the microscopical appearances. These showed that the growth was a squamous epithelioma, and contained a number of epithelial nests. He had brought a similar case before the Society last year. It was the disease known in France under the name of "epithelioma terebrans", and was of importance owing especially to the insidious manner in which it progressed. In both his cases, the growth had not attracted attention until within a few months of death.

Mixed-celled Sarcoma of Phalanx of Thumb.—Mr. BUTLIN showed the growth, which had been removed from a young girl; it had existed for eighteen months before removal. The growth had no capsule; and, on microscopical section, it was found to be a mixed-celled sarcoma, with a well-marked alveolar structure and some giant-cells. Mr. Butlin had suggested that it might be connected with the periosteum; but Dr. Wilks of Ashford, who removed it, said that it was freely movable, and apparently not so related. Mr. Butlin was inclined to suppose that it had sprung from the outer surface of the periosteum.

Morphea Alba.—Mr. STARTIN showed a woman, who presented a large patch of indurated waxy tissue at the outer aspect of the right thigh. The disease seemed to be situated in the connective tissue and the corium; it had not altered materially while under observation.

Xanthelasma.—Mr. STARTIN also showed this patient, who was a girl five years old. The disease appeared as small closely-set yellowish nodules, and occupied the extensor aspect of the elbow-joints, the buttocks, and the popliteal spaces. It had been first noticed when the child was about three years old. This patient had a brother, aged two years, who was beginning to exhibit the same condition.

Neurotic Excoriation.—Mr. STARTIN exhibited a child, who presented a condition which he believed to be of the same nature as the disease described by Sir Erasmus Wilson under the above name. The patient was four years of age. The skin in the affected part appeared

as if rubbed by some hard substance. The excoriated surfaces were seen best on the abdomen and loins; their condition fluctuated a good deal; sometimes the patches became nearly healed, and then again broke out.—Dr. RADCLIFFE CROCKER wished to know how Mr. Startin distinguished this disease from eczema. In this case there had been discharge, with eruption about the plexuses of the joints, and there had been a discharging sore of the scalp. He failed to see any evidence of nerve influence. Many of the cases of so-called "neurotic excoriation" had an element of suspicion about them; often they were self-induced. Mr. Sangster, who had showed a similar case at the International Medical Congress, now admitted that in his case the disease was produced by imposture.—Dr. STEPHEN MACKENZIE was inclined to agree with Dr. Crocker. The eruption was in the characteristic situations for eczema, and the mother stated that there had been a discharge from the head at one time.—Mr. JONATHAN HUTCHINSON thought that the case of xanthelasma was an extremely interesting one; he had never seen a case exactly the same. The child had some curious outgrowths in connection with the bones of the fingers. He had grave doubts whether it could be described as xanthelasma. He had seen this case a few months ago, and the patches were not increasing in size. With regard to the case of neurotic excoriation, he thought that, on the trunk, the patches did bear some relation to the nerve distribution; they had somewhat the oval outline of patches of herpes zoster. No doubt they were of an eczematous character; but the case was at least not one of ordinary eczema. He suggested that a committee be appointed to examine and report on the patient with xanthelasma and her brother.—At the request of the President, Mr. Startin, Mr. Jonathan Hutchinson, and Dr. Radcliffe Crocker, were appointed to act on a subcommittee for this purpose.

Bilharzia Hematobia.—Dr. CAVAFY introduced Dr. Zancarol (of Alexandria), who exhibited some specimens of the ova of this parasite *in situ*; and also an adult male. The specimens were obtained from two cases which occurred in the Greek Hospital, at Alexandria. The first was an Arab, aged 45; he had suffered from dysenteric symptoms during life; the colon contained large vegetations. Microscopical section showed that these vegetations contained numerous ova in the tissue between the mucous and muscular coats. The ova, as is usual when occurring in this situation, were each provided with a large lateral spine. The second case was also that of an adult Arab, who died after the operation of lithotomy. The mucous membrane of the bladder showed numerous vegetations, and was ulcerated in places. In these vegetations also, there were numerous ova. Each ovum was provided with a spine, but here its situation was terminal, and not lateral. The adult male worm exhibited was removed from the portal vein. It was of a filiform shape, and was about one inch long. The adult parasites were only found in the portal, mesenteric, and vesical veins: in the veins copulation was effected—the female entering a canal in the body of the male. From these veins the ova escaped to the mucous membrane of the intestine and bladder; and there led to the vegetations and ulcerations described. He believed that the frequency of vesical calculus in the natives of Egypt was due to the alterations in the mucous membrane of the bladder produced by these ova.—Dr. NORMAN MOORE said that a patient, a medical man, under treatment now at St. Bartholomew's, had been the host of Bilharzia for some months, but had quite recently noticed filariz in his blood at night. The natives of Central Africa believed that the parasite entered by the urethra; and, before crossing a river, tied up the orifice of the canal. Was there any truth in this idea?—Mr. BRYANT wished to know what were the clinical symptoms to indicate the presence of the ova in the bladder.—Dr. ZANCAROL, in reply, said that he had not himself met with the filaria in a case of Bilharzia, and he had only once heard of such a thing. He did not think that the theory, that parasites entered by the urethra, deserved serious consideration. The disease in Egypt was only found in persons who drink the undistilled water of the Nile; it was therefore seldom met with, except in the Arabs. The chief symptom was hematuria. Microscopical examination of the urine yielded evidence of the embryos; they resembled pumpkin-seeds in form, and were provided with cilia; they remained active in the urine for about twenty-four hours. Patients could be the hosts of the Bilharzia for many years, and experience no inconvenience beyond slight attacks of cystitis and hematuria. Attention to hygienic details and rest were of most value in treatment, but the symptoms invariably recurred after apparent recovery.—Dr. WILKS thanked Dr. Zancarol, on the part of the Society, for affording it the opportunity of seeing these very interesting specimens.

Ulcer of Stomach.—Mr. KESTIVEN showed this specimen. There were several ulcers on the mucous surface of the stomach, and at the bottom of one was a small perforation. The patient was an unmarried female aged 20; she was only ill for a short time, and urgent sym-

of dysmenorrhœa associated with sterility which the author had treated, pregnancy having followed in five, or one half of them. The dysmenorrhœa was of that kind known as spasmodic or obstructive, characterised by severe colicky pains in the hypogastric and sacral regions, either before the menstrual flow or coincident with it. The author preferred to drop the title obstructive, as he knew no evidence to prove that there was a want of patency of the cervical canal; and Dr. Duncan had passed a probe into the uterus at the height of the pain without meeting with obstruction. He believed that the spasm of the uterine muscular tissue was of itself sufficient to give rise to the severe pain, without any obstruction. Case I, aged 32, married four years, applied on account of sterility; its association with dysmenorrhœa was then elicited. On two occasions, at an interval of two months, several dilators were passed, the highest No. 14. The dysmenorrhœa was relieved after the first menstruation; pregnancy occurred three months after the second. Case II, aged 29, married three years, sterile, applied for severe dysmenorrhœa. Two dilators only (Nos. 7 and 8) were passed, producing very severe pain. The next period took place without pain, and was followed by pregnancy. Case III, aged 22, married two years, complained of spasmodic dysmenorrhœa. Dilators 7 and 8 were passed; three periods comparatively free from pain followed, then pregnancy. Case IV, aged 24, sterile, married two years and a half, applied for severe dysmenorrhœa, aggravated by marriage. Bougies Nos. 7 and 8 were passed only a few days before a period, which, when it occurred, was in no respect freer from pain. Two periods followed with hardly any pain, and then pregnancy. Case V, aged 25, married three years and a half, sterile, applied for dysmenorrhœa. Dilators 6, 7, 8, 10, and 12 were passed. One period occurred without pain, and then pregnancy. The author concluded: 1. That the method was simpler and safer than any other proposed; 2. That the dilatation might be performed with safety at the house of the consultant; 3. That a very small amount of dilatation was necessary; 4. That the operation should be performed within a week or ten days after a period; 5. That it should be done, not on successive days, as hitherto recommended, but all at once; that the first bougie should be a small one; and that there should not be sufficient difference between the size of successive bougies to cause a splitting of the mucous membrane; 6. That pregnancy appeared to occur on account of the dilatation having cured the conditions on which the dysmenorrhœa depended. In none of his cases was there either stenosis or constriction of the canal by acute flexion. The theory, therefore, of permanent constriction being discarded, in what did the impediment lie? Was it a spasmodic constriction causing ejection of the semen? Of the five cases in which the sterility was not cured, one—a hospital case—was lost sight of; one was relieved of her dysmenorrhœa for a time; but, it having returned again as badly as ever, was treated by an intrauterine stem, and cured. Of the remaining three, in all was the dysmenorrhœa relieved; but pregnancy had not yet resulted.—Dr. GRAY HENWITT had found that, in the large majority of cases, relief of dysmenorrhœa was obtained by simply maintaining the canal of the uterus in a state of straightness. In cases where the uterus was unduly soft and pliable, dilatation was not necessary; but in long-standing cases, dilatation was a great assistance in the treatment. He had used a two-bladed dilator acting on the principle of a glove-stretcher. This instrument produced the same kind of effect as the dilators now exhibited. He had cured many cases of sterility, some of ten, or even thirteen years' standing, by the above treatment. In regard to diagnosis, cases of very soft flexed uterus were sometimes overlooked, owing to the apparently easy passage of the sound.—Dr. HEYWOOD SMITH said that the author had referred to the President's experiments on the flow of fluid through bent tubes; but the substances used in such experiments had no analogy to the uterine canal, which was of varying thickness, and of such a substance as rendered its canal obnoxious to impressions upon its inner surface from any flexion. His father, when assistant-lecturer to Dr. Rigby at St. Bartholomew's in 1836, had used Mackintosh's bougies for the treatment of dysmenorrhœa and sterility; and, since the foundation of the Hospital for Women, that procedure had been practised with the greatest possible advantage. He thought it best to have the sounds straight in their uterine portion, not curved, like the dilators shown.—Dr. CARTER had obtained exceedingly satisfactory results from the use of graduated sounds, both as regards dysmenorrhœa, and sterility when it accompanied it. When the flabby condition of uterus mentioned by Dr. Hewitt existed, he found that dilatation alone was not sufficient; and in such cases he had employed an intra-uterine stem with the best results. He had found it better not to pass the sounds within four or five days.—Dr. ROUTH said that he did not see what advantage the method had over that of dilatation, first by tangle-tents, and afterwards the employment of an intra-uterine pessary. A plan analogous to Dr.

Duncan's had been in use in early days at the Samaritan Hospital; but it had been proved that it was not so free from danger as stated to-night, and it had been abandoned. When such men as Sir James Simpson and Dr. Marion Sims had discarded the dilators because of their danger, clearly they should not be lightly resumed. The effect was transitory, unless pregnancy occurred very soon after; and the pain induced was sometimes very great. In the case of flexion, it was often difficult to pass even a bent sound; and the use of a straight dilator in such cases would be liable to set up inflammation. With either Dr. Wynn Williams's pessary or his own, an uterus was not only kept dilated, but it reduced the uterus. The comfort of such instruments was such, that women did not like to part with them; but he always removed them after eight or twelve months; and pregnancy frequently followed.

The discussion was then adjourned.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, DECEMBER 2ND, 1881.

DR. BACON, M.A., in the chair.

Case of Paralysis of the Left Fifth and Facial Nerves in a Child.—Mr. WHERRY showed a child, aged 3, with atrophy of the left eye and paralysis of the fifth and facial nerves on the same side. The cornea was opaque and could be touched without any reflex movement of lid or eye-ball. There was loss of sensation on the left side of the face, nose, supra-orbital region, and inside of the mouth. The teeth on the left side were absent or decayed. The food collected in the left cheek. There was paralysis of the left orbicularis palpebrarum and the facial muscles. On the left side the nasal mucous membrane was discharging, the left auditory meatus usually blocked with secretion, and the membrana tympani dull. The ophthalmoscope revealed no disease in the sound eye. The perspiration induced by a Turkish bath at 150° did not differ in amount on the two sides of face and forehead. The child is stated to have been quite well and its eyes bright and clear till it was seven months old, when it "had a cold in the eye" and did not seem to mind a towel rubbed across the eyeball. There was no history of syphilis. The child was in other respects healthy. Mr. Wherry considered all cases of paralysis of the fifth nerve interesting to ophthalmic surgeons.—Dr. LATHAM believed that the disease must be localised in a small spot about the course of the fifth nerve and anterior to the Gasserian ganglion. If the fifth nerve were divided anterior to the Gasserian ganglion, inflammation of the conjunctiva, ulceration of the cornea, discharge of the humours of the eye, with loss of smell on the paralysed side, took place—but not if the nerve be divided at a point posterior to the ganglion, though that operation was followed by loss of sensibility on one side of the face, of the conjunctiva, and the anterior portion of the tongue. Disease affecting the nerve at a point anterior to the ganglion would explain many of the symptoms in the case under discussion, but not all; there was discharge from the child's left ear and it was deaf on that side—symptoms independent of the fifth nerve. As, however, the ganglion rested upon the petrous portion of the temporal bone, disease of this bone at a spot anterior to it, and involving the branches of the nerves by pressure or otherwise, would account for all the symptoms. He regarded the case as a striking illustration of the antagonism between the sympathetic and cerebro-spinal nervous systems—a point to which, several years ago, he had directed attention in explaining some of the phenomena of sick headache or megrim. The ulceration of the cornea, etc., was dependent upon excessive or uncontrolled action of the sympathetic on the vessels of the part modifying its nutrition; for if, before dividing the fifth nerve anterior to the Gasserian ganglion, the superior cervical ganglion were removed, no ulceration of the cornea took place; and even after ulceration had taken place, complete destruction of the eye could be prevented by removing the cervical ganglion, though this was hardly an operation to be recommended on a human subject.—Dr. SMITH (Newport) referred to a case, in his practice, in which a woman, aged 30, with bad teeth, had had herpes frontalis on the right side, with pain in right eye and dimness of vision; the left eye was also affected. The ophthalmic and inframaxillary nerves were both involved, and pain and tingling remained after recovery from other symptoms.—Mr. WHERRY agreed with Dr. Latham's theory of localisation, and said that the fibres of the facial were involved as well as the three divisions of the fifth, which might be accounted for by disease of the petrous bone. The teething was also to be noticed; no signs of teeth appearing until the child was eighteen months old. The child was perfectly well until the usual period of first dentition.

On the Treatment of Delirium Tremens.—Dr. LATHAM thought the subject offered scope for considerable difference of opinion. If sleep were obtained, recovery generally ensued quickly; but was the induction of sleep a *sine quâ non* in treatment? If sleep did not ensue, sub-

not differ from simple but extensive caries of the anterior wall of the meatus.

Absorption of Neck of Femur.—Mr. JONES exhibited a lad, aged 18, the neck of whose right thigh bone was undergoing interstitial absorption. This change followed, and appeared to be directly traceable to, a fall on the trochanter major, which the patient sustained ten months ago. The injury, of a very slight character, was not immediately followed by any untoward symptoms. The patient was able to continue working, although he experienced a dull, aching pain in the upper part of the injured limb. The pain was followed by gradual stiffness of the hip-joint, and a diminution in the length of the limb. When he was admitted into the infirmary, the limb was strongly everted an inch and a quarter shorter than its fellow, and was ankylosed at the hip. The trochanter was nearer the middle line, and the distance between its upper margin and the anterior superior spinous process of the ilium was half an inch less on the diseased than on the sound side. Under the influence of an anæsthetic, the limb could be freely moved, rotated inwards to a very unusual degree, and the head made to project behind, and almost on a level with the trochanter. Examination also revealed an alteration in the head, which was of an oval flattened shape. The result of the examination made it evident that decided alteration in the head of the femur had occurred. The head was nearer the trochanter major, as well as altered in shape. It was also on a lower level than was natural at the patient's age. While the patient had been under observation, the limb had further shortened by three-fourths of an inch—so that it was quite two inches shorter than the other leg.

Principal Varieties of Idiocy.—Dr. SHUTTLEWORTH read a paper on the principal varieties of idiocy, with special reference to physical abnormalities associated therewith. The paper was illustrated by numerous photographs, arranged in series, and by specimens and microscopic preparations.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, DECEMBER 7TH, 1881.

J. W. MOORE, M.D., Vice-President, in the Chair.

Alkapton in Urine.—Dr. GEORGE C. ARMSTRONG exhibited a specimen of the urine of a little girl apparently in perfect health, whose mother he had attended three years ago in the worst puerperal convulsions he ever saw. The child's mother remarked that the child's urine, although perfectly normal in appearance when first passed, on being allowed to cool, assumed a deep colour and stained the child's linen. He sent some of the urine to Professor Tichborne, who had made the following analysis. "The specific gravity of this urine at 60° Fahr. was 1025. Albumen was absent. It was acid to test-paper, and, on standing, gave a slight deposit, consisting of urate of ammonia and a little mucus. The urea was scanty, and not sufficient to account for the high gravity; it was 1.2 per cent., or 5.25 grains per fluid ounce. This urine presented a great peculiarity; it contained a substance which is only met with occasionally, and which has been termed alkapton. Bödeker met with a case, and Lionel Beale mentions a case in which Dr. Johnson found it in the urine of an infant. This body stains the linen, particularly when the urine becomes alkaline. It behaves like sugar, and reduces copper, and probably it may be viewed in a somewhat similar light pathologically. Estimated as a sugar, it would give about eight grains to the fluid ounce. The urine was examined for the bile-reactions, but gave none." Dr. Armstrong said he put some of the urine into small bottles, and, having hermetically sealed them, left one exposed to light and air, and put the other into a dark place. The latter specimen, after six hours, was not changed in any way.—Dr. J. W. MOORE said that, although this urine, after a manner, "behaved like sugar", as Dr. Tichborne's analysis stated, yet the reaction was very different. Under the influence of liquor potassæ without the aid of heat, it struck a dark brown colour. Urine containing grape-sugar, according to his experience, did not change when liquor potassæ was added to it, except under the influence of heat. Again, with sulphate of copper, the reaction of the urine was very incomplete—not at all so complete as that given by grape-sugar. The results of the microscopical examination of the deposit of the urine were completely negative. The deposit he experimented with consisted of a little mucus, epithelium, and a few small oil-globules, the presence of which may have been accidental.—Dr. WALTER SMITH said that, upon testing the samples with which Dr. Armstrong and Dr. J. W. Moore had kindly supplied him, the results confirmed the statements originally made by Bödeker in reference to so-called "alkapton" in urine. These were: 1. Strong alkalis darken the urine without the application of heat, and the coloration proceeds from the surface of the liquid down-

wards—i.e., oxidation co-operates with the alkali; 2. Reduction, at least partially, of the copper test; 3. Non-fermentation with yeast. From various considerations, Dr. Smith thought it probable that the peculiar substance or substances in the urine exhibited belonged to the "aromatic series" of chemical compounds, the physiological relations of which group have been investigated with remarkable success during the past five years. Pending further investigation, it would be premature to express a definite opinion on the subject in question.—Dr. FINNY asked whether the urine was dextro-gyrate or sinistro-gyrate.—Dr. SMITH replied that he had not yet made an examination with the polariscope.

Idiopathic Pericarditis.—Dr. WALTER G. SMITH related three cases of idiopathic pericarditis which came under his notice within the past three years in the Adelaide Hospital, two of them in the course of last spring. By "idiopathic pericarditis" the author understood inflammation of the pericardium occurring independently of injury or other local cause, or of extension from the neighbouring parts, and exhibiting no demonstrable relationship to rheumatic fever, chorea, the exanthemata (e.g., scarlet fever), renal disease, pyæmia, tuberculosis, or the puerperal state. Cases of isolated partial pericarditis, attended with trivial or no symptoms, were not taken into account. In the first case, that of a girl aged 22, the diagnosis was verified by a necropsy; in the second, that of a young man aged 18, it was confirmed by such a careful observer as the late Dr. Hayden; and in the third, that of a lad aged 14, the symptoms and other evidence were sufficient to warrant the diagnosis which was made. While all would readily grant that primary pericarditis was of comparatively exceptional occurrence, Dr. Smith thought it must be admitted that its rarity was apt to be overestimated; and in this opinion he was supported by Dr. Bäumlér. The recognition of this fact would tend to keep observers more on the alert to detect a formidable disease which often commenced insidiously; and it emphasised the necessity for accurate examination of the heart, repeated at short intervals, in all cases of acute febrile disturbance.—Dr. J. W. MOORE said it should be borne in mind that, in one of the three cases, there was apparently a hereditary tendency to pericarditis. The father of the patient had suffered from rheumatic inflammation of the pericardium.—Dr. HENRY KENNEDY said that in the course of thirty years he had seen some nine or ten cases of the kind, and he had a strong conviction that they generally occurred in strumous subjects. This remark applied to the first case detailed by Dr. Smith. The profuse acid sweating in another of the cases raised a suspicion of a rheumatic origin. It did not follow that rheumatic pericarditis might not exist without the joints being affected. He had twice seen pericarditis precede the pain and swelling of the joints in a rheumatic attack. As a rule, when pericarditis occurred in a person of rheumatic diathesis, and in the course of rheumatic fever, the pains subsided materially, and all the anxiety of the patient was referred to the heart.—After some remarks from Dr. PATTON, Dr. FINNY said he thought it very probable that, in Dr. Smith's second case, the disease was of rheumatic origin, and affected primarily the internal pericardial surface. He concurred with Dr. Kennedy as to the possibility of rheumatic fever expending its whole violence on the pericardium alone.—Dr. WALTER SMITH, in reply, said the word "strumous" was very elastic, and he neither affirmed nor denied the existence of strumous pericarditis. He would venture to lay stress chiefly upon three things in connection with cases of pericarditis: first, the general symptoms of the patient; secondly, the fact that physical signs, as an exclusive means of diagnosis, were sometimes insufficient; and, thirdly, that there were varying degrees of implication of the muscular tissue of the heart. In other words, the clinical evidence pointed to a frequent coexistence of myocarditis with pericarditis; and the great danger of pericarditis lay in that direction, and not in the serous inflammation itself.

A DIFFICULT QUESTION.—Two experts—Mons. De Beauvais, physician to the Paris Humane Society, and Mons. Brouardel, Lecturer on Medical Jurisprudence in the Faculty of Medicine—were recently called upon for a decision, in a case where two people being drowned in a boat-accident, as to which died the first. The survivors appeared in court, and described in detail how and when the sufferers, M. and Madame Rivoire, disappeared under the water. Dr. Brouardel declined to offer any opinion, as no *post mortem* examination had been made. Dr. Beauvais, after hearing the detailed account of the accident, considered it possible that Madame Rivoire outlived her husband. The plaintiffs have asked for the postponement of the trial, and for a consultation of medical experts, for which they have chosen six local medical men. This singular case is tried at Marseilles.

BRITISH MEDICAL ASSOCIATION : SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 7TH, 1882.

PRIVATE BOARDING-SCHOOLS.

THE soothing conviction that Dotheboys Hall is a thing of the past, and that schoolmasters of the type of Squeers were finally crushed and abolished by the weight of popular indignation heaped on them by Charles Dickens, will be rudely disturbed by the report of the case of *Denman v. Cripps*, which lately engrossed the attention of the Chancery Division of the High Court of Justice for five days, and upon which Mr. Justice Kay delivered an intrepid and luminous judgment. This case was an action brought by Mr. Denman, who was formerly the master of a flourishing school at Chertsey, as the purchaser of a school for boys called Cliffe House, at St. Margaret's, near Dover, claiming to set aside the purchase on the ground of fraud and misrepresentation, on the part of the defendant, Mr. Cripps, the vendor of the school; and claiming repayment of the sums paid by the plaintiff as purchase-money under the agreement. With the alleged misrepresentations made at the time of the sale, and with the legal questions raised during the trial, we are not concerned; our interest being aroused only by the evidence which appears to have been adduced, in so far as that throws light on the state and management of the establishment at St. Margaret's. According to such evidence and the judgment of Mr. Justice Kay, the school was an old-established one, and was certainly at one time in a prosperous condition and good repute, averaging from 120 to 140 boys. The former master having died, it passed, in 1873, into the hands of Mr. Cripps, who appears to have conducted it with some success for three or four years, when it contained about one hundred boys, but with waning fortune since 1876. From that date, the number of pupils gradually diminished; and, in the opinion of Mr. Justice Kay, the reason of that diminution was patent, for there had been numerous complaints made by parents of the management of the school. The defendant, in the witness-box, did not recollect the complaints, or thought they were frivolous, and, in fact, appears to have treated them with indifference; and, the progress of the case showed that were only too well founded. Itch and ringworm, according to the evidence, existed in the school; and some parents seem to have expressed the greatest indignation at their children being sent home with these diseases, amongst healthy brothers and sisters, without any intimation having been previously given that they had anything the matter with them. It was quite true, the judge observed, that such diseases might get into a school in an accidental manner, but that was not the case here; and that the neglect to give notice to the parents of the condition of the boy was almost inconceivable. One of the letters to which he referred, from a parent, in July 1876, described the boy's body as being full of vermin, which actually ran about the hands and arms of those who d him. A medical man was called on behalf of the defendant; evidence, instead of assisting Mr. Cripps's case, went to show that itch and ringworm were contagious diseases, brought on generally from dirt and want of attention; and that boys with such affections should be immediately isolated, in order to prevent them from spreading. Under such circumstances as were described, it was easy to account for the falling off of the school; and, moreover, it appeared that Mr. Cripps was the master of three other schools, so that the seminary at St. Margaret's only enjoyed his supervision at

somewhat uncertain intervals, being often left for long periods in charge of ushers and servants. Mr. Bourke, formerly a master in the school under Mr. Cripps, is reported to have said that, at a time when it contained sixty-five boys, he had to conduct its educational course with the help of an assistant and two pupil-teachers, the proprietor taking no part in the intellectual, moral, or religious training of the youths entrusted to his care. Another former master is reported to have characterised St. Margaret's as a low school—the lowest class school he had known. Sea-bathing, the judge thought, was one of of the attractions which induced parents to send their boys to St. Margaret's; but the lowness of the terms was, perhaps, even more influential in securing that result. The rate of board was represented to be from £23 to £35 *per annum*, but many boys were taken at as low as £20, which, when food and housing were taken into calculation, could not leave much margin for education and supervision. Even as to food, allegations seem to have been made that it was not good nor sufficient; and, although these were not fully established, it would seem that there had been no superabundance of meat. The butcher's bill showed that the supply of meat at one time was equal to one pound and a half per week to each boy, which, allowing for bone and cooking waste, would leave about two ounces and a quarter of animal food *per diem* for each growing boy. Such is the effect of the evidence in this case as commented on by Mr. Justice Kay.

The school at St. Margaret's, it seems, had been carried on mainly by means of that mighty engine, advertisement; and it was suggested at the trial that Mr. Temple, his successor, might have kept it going by giving publicity in the same way to its stupendous advantages. It was unfortunately true, Mr. Justice Kay said, on this branch of the case, that there were many guardians and relations of children whose only object was to get rid of them by sending them to such low class schools as these. Several of the relations of the boys had been called as witnesses to show that the school was properly conducted; but he could not derive much information from the class of men who had given their evidence. With the conduct of one man in particular, the grandfather of a boy, he was exceedingly disgusted. He seemed to think it an amusing thing to send two grandsons to a cheap school, and never to ask any questions as to how they were cared for. Such a man deserved, in Mr. Justice Kay's opinion, to be held up to public reprobation. His lordship added that he could not allow this case to be disposed of without saying that he feared there was something wrong in the feelings of Englishmen, when such schools as these were possible; and he sincerely hoped that the improvements now being effected in education would bring about a better state of things, and that it would in future be impossible, even for low class schools, to be so mismanaged as this had been.

The concluding observations of the learned judge, which were strong and emphatic, but not more so than was warranted by the circumstances of the case which he had been passing under review, are certainly deserving of thoughtful consideration. It is impossible to believe that the case which called for such strong observation from Mr. Justice Kay is a solitary instance of the kind. There are probably in this country a great number of cheap private and adventure boarding-schools, in which gross abuses exist. The number of such schools has increased greatly of late years, for the middle and trading classes have shown a growing disposition to imitate the aristocracy, and send their boys away from home to be educated. If young lords go to Eton and Harrow, why should not young shop-keepers and farmers go to a genteel boarding-school, and acquire that manliness and those graces of deportment and admirable traits of character which may be picked up, it seems, anywhere but in the home circle, and which always grow luxuriantly in a heterogenous crowd of uncouth and mischievous boys? And thus the schoolmaster, whose mission was at one time confined to actual instruction, has now intrusted to him the whole care of the bodily, mental, and moral welfare of the boy for three-fourths of the year. In the progress of a complex civilisation, parentage by deputy is becoming more and more common and complete. Wet-nurses, nurses, kindergartners, governesses, tutors, masters, and professors, have supplanted old-fashioned fathers and

inspector, for two assaults, occasioned by compelling her to be twice examined, which was done by lifting up and partially removing her clothes, to ascertain whether she had recently been delivered of a child.

It appears from the evidence of the physician who alone examined her the first time, and by the testimony of him and the surgeon who examined her on the second occasion, that no force was used on either examination to induce the girl to submit to the same; and that the former was only partial and incomplete; but, when about to examine her subsequently, she said, "I have already confessed, and there is no use in your examining me"; and, while not resisting the inspection, she did not expressly consent to it. As no evidence was offered against the inspector of police, the case against him was abandoned. During the progress of the trial, Mr. Justice Lopes said that, "unless the jury are convinced that the girl gave her consent to the examination, the defendants had no right to do it.....I think there is a great difference between consenting and submitting. But, if she really consented, thinking they had the power to compel her, that would do." In his charge to the jury, he further remarked that "the main question was, Had the plaintiff actually consented to the examination which took place on the second occasion? If not, then the examination would be an assault illegal and unjustifiable, and the plaintiff would be entitled to their verdict. But if she consented, then they must find for the defendants.....They were dealing only with the second case; and it was for them to say whether it looked like the girl consenting, when she told the doctors that it was no use their examining her, as she confessed all..... The order given by the magistrate was a foolish one, and Dr. Jobson must have known little of the law.....The defendants had acted extremely foolishly; and the damages might be such as to show in unequivocal terms that neither magistrates, nor policemen, nor medical men may infringe on the rights of any person." A verdict was accordingly returned for £50 damages for the assault.

Another case of great importance of a similar kind has been before our courts, viz., that of *Latter v. Braddell and Wife and Another*. In this, the plaintiff, who was a woman of about twenty-eight years of age, was a housemaid in the service of Captain and Mrs. Braddell. On account of some information given to the latter by a charwoman, Mrs. Braddell suspected that the plaintiff was pregnant; and, about the end of December 1880, the defendant told the plaintiff to pack up her things, and leave the house before twelve o'clock that day, as she was in this condition. On the plaintiff denying this charge, Mrs. Braddell said, "The doctor will be here presently, and then we shall see", and requested the plaintiff to go to her bedroom. Dr. Sutcliffe, the third defendant, who had, unknown to the plaintiff, been previously sent for, arrived, and was asked by Captain or Mrs. Braddell to examine the plaintiff to see if she were pregnant. On the doctor going into the plaintiff's bedroom, she cried, and asked him what he was going to do, as she did not like to be examined. He replied that he was a professional man, and asked her to take off her dress. She strongly expressed her objection to this treatment, and to stripping herself, and cried nearly the whole time. No third person was present during the examination; and, after it was finished, the doctor said she was not pregnant, and that he should speak seriously to Mrs. Braddell about the matter. The latter, however, dismissed the plaintiff from her service, and even refused to give her a character.

An action was then brought by this housemaid against the defendants, which was first tried at the Manchester Spring Assizes in 1880, before Mr. Justice Denman, when the jury disagreed, and were discharged without giving a verdict. It was also re-tried at the following assizes in the same city, before Mr. Justice Lindley, who withdrew from the jury the case against the plaintiff's master and mistress, as he considered there was no evidence against them of the plaintiff's non-assent on which the jury could reasonably act; and a verdict was, therefore, found for Dr. Sutcliffe. With the assistance of the Vigilance Association, a rule was afterwards obtained requiring the defendants to show cause why the verdict should not be set aside, and a new trial

was had, on the ground that Mr. Justice Lindley ought not, as against Captain and Mrs. Braddell, to have withdrawn the case from the jury, and that it was against the weight of the evidence. Upon the motion in support of the rule being argued before this learned judge and Mr. Justice Lopes, they differed in their decision. The former adhered to the opinion upon which he acted at the trial; while the latter considered there should be a new one granted, and expressed himself to the same effect as he did in the case of *Agnew v. Jobson and Others*. The rule was consequently discharged.

On the refusal of a new trial, a further application was made for such to the Court of Appeal, before Lords Justices Bramwell, Bag-gallay, and Brett, on February 23rd, 1881, when it was held, in support of the view of Mr. Justice Lindley, that, to maintain the action, the plaintiff must have been overpowered, or have had reasonable cause to think that violence would be used to cause her to be examined; but that the evidence showed that she reluctantly submitted to it, and that no threats or violence were used by the doctor, nor could she suppose, from the way in which he acted, that force would be used against her; therefore, that the case was rightly withdrawn from the jury as against Captain and Mrs. Braddell, and that the verdict of the jury in favour of Dr. Sutcliffe was right. In his decision upon this case, Lord Justice Brett very properly said: "I cannot conclude this judgment without expressing my abhorrence of the whole conduct with regard to this unhappy girl from beginning to end. I cannot conceive how right-minded people should presume, because they suppose—even if it had been true—that a young girl is in the family-way, that they should immediately take it into their heads that they are insulted. Why on earth should they have sent to the doctor? If they did not like to keep the girl, why not let her go away as quietly as possible? This idea of having servant-girls examined by doctors is, to my mind, absolutely wrong, and it is conduct which everybody ought to scout." Some strong reasons were given by Mr. Moreton, the junior counsel for the appellant, the plaintiff in this cause, in support of the judicial statement, when he said that, in a case of this kind, the mistress has a very great power over a servant; for she can accuse her of being pregnant, and can send her out of the house at a moment's notice, without even board-wages, and dismiss her without a character; and, therefore, all these grievances may be made known to her to compel her to submit to the examination referred to; the girl assented without her will, as she felt that a worse wrong might be done to her, therefore she was not in a position to assent. Mr. Justice Lindley, also, on the motion for a rule for a new trial, said: "I protested most energetically against the theory that a master and mistress had a right to submit a servant to such treatment as this; I was not going to allow that to pass."

After the decision of the Court of Appeal in this case, the committee of the Vigilance Association contemplated an appeal to the House of Lords, but on further consideration they thought that, if the decision should be reversed and a new trial directed, the plaintiff, after so long a time had elapsed, might fail to get a verdict; and although the law upon this subject which might be declared by the Law Lords would be probably more satisfactory than that notified by the Court of Appeal, it would be far from supplying the exigencies of justice and morality. The committee have, therefore, resolved that it would not be advisable for the plaintiff to appeal to the final appellate tribunal, but to make the judgment of the Court of Appeal the ground of an application to Parliament for the amendment of the law; and they propose to frame a Bill for this purpose. The committee is of opinion that the law should be so amended that personal examinations of this kind, whether of men or women, for whatever purpose, unless done at the express request of the individual examined, should be declared to be an indecent assault, and "that neither submission nor request should be a valid plea, but nothing less than express request".

Again, at the Leeds County Court, on the 6th of May 1878, before Mr. Serjeant Tindal Atkinson and a jury, an action was brought, under the direction of the Vigilance Association, against a surgeon to re-

cover damages for an alleged indecent assault upon a domestic servant about eighteen years of age. In the early part of that year, she was arrested by two police-officers on a charge of concealment of birth; and although she admitted having had a child, she was afterwards examined by the surgeon to ascertain if this were a fact, but without being asked for her consent. She was afterwards charged before the magistrates with the same offence, and committed to the assizes, when she was acquitted. The county court judge very rightly stated that it was no part of the duty of the surgeon "when a girl was arrested on a charge of this kind before she had been before the magistrates, and for the purpose of obtaining evidence against her, she being entirely powerless in their hands, to make an examination of that girl without her consent; and it would be for them to say, under the circumstances in which she was taken from her place by the detective officers, whether she would be likely to consent. Before the examination took place, she admitted having had a child. The jury would ask themselves, if that admission was made, why examine further? There was no legal authority at all to examine this girl." After a short absence, the jury returned a verdict of £25 damages for the plaintiff.

It is also well to bear in mind that the unnecessary examination of a woman's person for medical or surgical treatment was also denounced in the case of *Rex v. Kosinski*, in which it was decided by the judges in 1824, upon points reserved for their consideration by Mr. Justice Bayley, who tried the case at the Spring Assizes at Lancaster in the previous year, that if a medical man unnecessarily strip a female patient under the pretence that he cannot otherwise judge of her illness, it is an assault if he himself take off her clothes.

From the decision, and the verdicts at the Durham Assizes and the Leeds County Court, and the judicial statements to which we have referred and which we have quoted, it need scarcely be said that the medical profession are under a strong obligation to be exceedingly careful in examining the person of girls and women, in order to avoid actions for assault, with claims for substantial damages, for so doing. The case mentioned by our correspondent will, he says, be brought before the Criminal Court; and we shall be anxious to know the result, and to have a full report of the judicial remarks at its trial.

LIFE PEERAGES.

There is a vacancy now in the list of life-peers, and a lawyer will, no doubt, be appointed to the vacancy, as the object of making these life-peers was to strengthen the Court of Appeal in the House of Lords. But why should not a successful career in medicine as surely lead to a seat in the House of Lords, as work in the Church or at the bar, in the Army or Navy, or in the Civil Service of the State at home or in the colonies? When the average duration of the life of the whole population is increased by work in sanitary science, why should men like Farr and Simon be rewarded by the barren honour of putting the two letters G.B. after their names, when Lord Nelson is rewarded by a posthumous baronetcy for defeating a king of France? In one of the *Academy's* issues at Manchester, Mr. Benjamin Wells asked us, "Why should a baronetcy be the highest honour that can be conferred upon members of our profession? Is baronetcy or knighthood worthy of a life devoted to the service of the community, when we are on the bench of judges, or even at the law, or in the army, or navy, who have been rewarded by baronetcy or peerage? Can any member of the House of Lords be greater in power to his country than that member who would save a great number of persons from a watery grave by his judicious and prompt disposal of the human excrement that accumulates in the remnant of every day in the progress of a sanitary reform?"

We have already referred to the manner in which the list of life-peers is made out for the monarch, and we are glad to see that, according to Mr. Simon Wells, we may agree with him that "there is no doubt that the peerage, or baronetcy, would be a great reward of honour, and a great honour, if the help of the medical profession in sanitary science is acknowledged. That is, it is a reward to the

recent ill-devised Acts of Parliament, and the imperfect machinery put in action for their execution, must force upon the nation the conviction that medical science ought to be properly represented in Parliament, and especially in the House of Lords. None of our leaders have time for electioneering or the turmoil of party struggles in the House of Commons; whereas many of them are well fitted for the more dignified position, and would be quite able to devote their time and energy to sanitary legislation in the senate."

An active member of the House of Lords, of distinctly legislative capacity, activity, and knowledge, could, for example, do more in one session to diminish the smoke-nuisance, than the useful association which has produced the interesting exhibition at South Kensington may do in a generation.

SIR ERASMUS WILSON, at a cost of nearly £30,000, has erected a new wing and chapel to the Margate Sea Bathing Infirmary, and the building will shortly be opened by the Prince and Princess of Wales.

THE Order of the Cross and Collar of Knight Commander of the Crown of Italy has been conferred upon Sir William Mac Cormac by King Humbert, in recognition of his distinguished scientific attainments.

DR. ERNEST HARTMANN, the well-known German biologist, is engaged on a scientific mission in Ceylon, after completing which he will proceed to India.

THE temperature on Tuesday was recorded as being 47 at Yarmouth, 57 at Hurst Castle, and 50 at Jersey; while in London the reading of the thermometer was 42 degrees.

THIRTY-two deaths are recorded from small-pox in the metropolis last week. Twenty-nine of the thirty-two fatal cases of small-pox belonged to the South, and four to the East groups of registration districts.

A CHAIR of physiology is being established by the Trinity Medical School, Toronto, at its own cost. The preparations being made are such as will place physiological teaching in Canada on a level with the best of that study in Europe.

THE Newport (Isle of Wight) Town Council have refused to comply with several directions from the Local Government Board as to the appointment of a medical officer for the island, refusing to resent the centralising policy of that authority.

THE National Council of Health reports 25 deaths from small-pox last week in Pittsburgh, 14 in Cincinnati, 11 in New York, and 11 in Philadelphia, and 25 deaths from small-pox in Dakota, where the disease is of a most malignant type.

DR. EDWARD A. LORRY has been elected Mayor of Boston, Massachusetts. The *Poston Medical and Surgical Journal*, in an article expressive of disapproval at the appointment, states that, having been for ten years city physician, and having also served on the school committee, and as a trustee of the city library, Dr. Lorry is practically acquainted with the details of various departments of the government.

AN inquest has been held on the body of a child aged three months which was found suffocated by its mother's milk. It is said to have been suffering from bronchitis, but Dr. McLachlan, of Philadelphia, who saw the child shortly before its death, was of opinion that the cause of death was pneumonia. The jury, however, dissented from this view and returned a verdict of "Death from natural causes."

IN 1880, 100,000 births and 100,000 deaths were registered in London. According to a report of parliament, the births exceeded by 147, and have since by 158, the average number in the corresponding week of the last two years. The annual death-rate from all causes, excluding those occurring in the last preceding weeks from 1880 to 1881, was 1.1 per 1,000, but during the year 1881 it was 1.2.

THE commission of inquiry relative to the Lunatic Asylum at Colombo has been appointed. The "cottage" principle, which was insisted upon by the Home Government, seems to have involved an unnecessarily large outlay, and to be, after all, but ill-adapted to such institutions within the Tropics. The *Ceylon Observer* remarks that, in spite of the large expenditure upon this building, it is now found to be insufficient for the accommodation of more than half the number of patients.

THE inquiry into the circumstances of the death of a painter named Fullam, who recently died in the Borough Lunatic Asylum, Birmingham, has been adjourned a third time. The medical officers are said to have been charged with treating the deceased for a complaint other than that from which he died, while the attendant is accused of brutally illtreating the deceased. The surgeon who made the *post-mortem* examination stated that death resulted from rupture of the bladder and peritonitis, the rupture being probably caused by violence; while it is contended that the two resident medical officers, who had nearly seven hundred patients between them, treated deceased for inflammation of the bowels. The whole of the facts of the case had been laid before the Home Secretary and the Lunacy Commissioners, and the Commissioners have intimated their intention of instituting an additional inquiry at the conclusion of the inquest.

THE HOSPITAL SATURDAY FUND.

CHEQUES have been issued during the past week to one hundred and five participating institutions, the amount of the award varying from £5 to a small dispensary, to nearly £400 awarded to a well-known hospital. In three cases the Distribution Committee have been obliged to withhold the cheques, as the institutions have not agreed to the conditions required by the Board of Delegates.

THE BRITISH MEDICAL BENEVOLENT FUND.

A YEAR ago, an appeal was made in this JOURNAL on behalf of this most deserving institution, which, we are glad to say, met with much support. It is gratifying to observe that an increased interest in the matter has been awakened in the Branches of the Association. For many years, the secretaries of the South-Eastern and other Branches have made endeavours to augment the fund by keeping it systematically under the notice of their constituents, and much good has resulted therefrom. Last summer, the South Wales and Monmouthshire Branch decided that each of its members should pay five shillings annually to the fund; and the secretaries of that Branch issued a circular to their colleagues in the other Branches, urging them to follow their example. This communication having been laid before the Council of the Metropolitan Counties Branch, the president and secretaries were instructed to issue an appeal on behalf of the fund, along with the circular calling for the annual subscription to the Association and Branch; and this has been just done. A similar step has been taken by the Glasgow and West of Scotland Branch. We trust that similar activity is being shown on the part of all the Branches, the officers of which, especially at this time of the year, have large opportunities of making the Medical Benevolent fund and its merits known to their professional brethren; and that the endeavours made to improve its resources will be attended with early and great success. The publication of the following extract from the circular of the Metropolitan Counties Branch will probably be interesting, and be productive of good. The facts are derived from a recent report of the fund. "The fund was established for the relief of medical men in temporary difficulty or distress, and for their widows and orphans; and also for granting annuities to those who are quite incapable of providing for themselves after sixty years of age. It was originally founded, forty-seven years ago, by the Provincial Medical and Surgical (now the British Medical) Association. In the administration of the fund, there are no salaries nor office expenses. The entire administrative expenditure, including collector's commission, the printing of the report, postage and stationery, amounted to a little over £100 in 1880. Much of the distress which the donation department

is called upon to relieve is capable of alleviation only; the applicants are in absolute poverty, and unable, from ill-health or incapacity, to do anything towards their own maintenance, and the aid given helps to keep them from starvation or from the workhouse. In other cases, a widow or daughter is maintaining herself and, perhaps, a family, by teaching, or by letting lodgings or keeping a shop, or by acting as nurse, or by needlework or work with a sewing-machine. The earnings fall short from some cause or other, and timely assistance saves a deserving hard-working woman from falling into hopeless misery. Again, no year passes in which some widow left utterly unprovided for, often with children, does not come to the fund in the early days of her bereavement. From time to time, a medical man, broken down by misfortune or illness, is driven to seek the aid of the fund. A distinguishing feature of the fund is, that the applicants for aid are put to the least possible trouble and expense, and that they are not required to make public their distress by canvassing. During forty-one years, up to the end of 1880, 3,144 grants of immediate relief were made to applicants, at a cost of £29,786; thereby relieving much misery among the destitute members of the profession, and their widows and children. The Council of the Branch hope that, if you are not already a regular subscriber to this most meritorious fund, you will become so. If each member of the Metropolitan Counties Branch would pay only five shillings annually—and no doubt many will give more—most valuable assistance would be rendered to a good cause."

MEDICAL SOCIETY OF LONDON.

THE Lettsomian Lectures at the Medical Society of London, on the Diseases of the Testicles and their Coverings, will be delivered this year by Mr. H. Royes Bell of King's College Hospital. The subjects of the lectures will be: 1. January 9th. Varieties and Treatment of Hydrocele: Symptoms and Treatment of Hæmatocele: Elephantiasis Scroti: Epithelioma and other Affections of the Scrotum.—11. January 23rd. The Anatomy of the Testicle: Development of Spermatozoa: Abnormal Situation of the Testicles: Varicocele and its Treatment: Nervous and Functional Disorders of the Testicles: Tumours and Imperfections of the Spermatic Cord.—111. February 6th. Acute and Chronic Orchitis: Tubercular Disease of the Testis: Benign Fungus of the Testicle: Simple and Malignant Tumours of the Testicle: Castration. The lectures will be illustrated by casts, diagrams, microscopical and other specimens.

MR. G. H. LAMSON.

MORE than one member of the General Medical Council has communicated with us on the subject of the alleged medical degrees of Mr. G. H. Lamson, who is at present charged with poisoning his brother-in-law. The fact that this individual had been in the habit of falsely assuming various medical titles was officially brought under the notice of the General Medical Council in April last. Anxious, however, not to prejudice the position of a person charged under the weight of so fearful a charge, we abstained from making any reference to the subject. It has, however, now been officially brought under notice in the course of the case presented by the prosecution, and we may refer to the circumstances as being in themselves important and instructive. It appears that G. H. Lamson, when living at Bournemouth, applied for certain appointments in Bournemouth, making use of the titles of M.D. of Paris, L.R.C.P. of London, and S.S.C.Cam., or holder of the sanitary science certificate of Cambridge. It was brought to the notice of the Council, on the authority of Dr. Pitman, the Registrar of the College of Physicians, of Professor Liveing of Cambridge, and of the Secretary of the Faculty of Medicine of Paris, that he did not possess any of these titles. Further, and at the same time, Mr. Lamson employed a flourishing testimonial alleged to have been given him by Professor Humphry of Cambridge, which was also a forged document, as we have Professor Humphry's authority for saying that he never gave any such testimonial. The various facts and documents were brought before the General Medical Council, when it appeared that Lamson was, and is actually, a licentiate of the Royal College of Physicians and

very marked results in one case, and certainly deserves an extended trial in poisoning by aconite as it is a marked cardiac stimulant. Tincture of nuxvomica was used in one case, with marked benefit to the heart and respiration.

FATAL ACCIDENTS IN VARIOUS OCCUPATIONS.

A PAPER on the Rates of Fatal Accidents in Various Occupations was read, on Monday night, at a meeting of the Institute of Actuaries, in King's College, Strand, by Mr. W. J. H. Whittall, of the Clerical, Medical, and General Life Assurance Society. The rapid growth of accident assurance, the passing of the Employers' Liability Act, and the periodically recurring discussions respecting schemes for a National Accident Fund, Mr. Whittall remarked, had created a demand for statistics on the subject of accidents which could not be said to have been satisfied. The tables given in his paper were, he believed, unique as regarded this country. They were based upon a comparison of the male population in each occupation in England and Wales, as enumerated in the census of 1871, with the average of the number of violent deaths occurring to male persons following that occupation in England and Wales during the three years 1870, 1871, and 1872. For the extraction of the particulars relating to these deaths, from the records of the General Register Office, special permission was obtained from Dr. Farr. Accidents to persons under ten years of age had been excluded; and, to make the investigation complete, the whole of the deaths were next classified with respect to age, the influence of age on accidents being among the subjects noted. The total number of deaths classified was 23,455. The first table gave results in 157 occupations, where neither the nature of the occupation nor the results themselves suggested any disturbing influence. Taking them in order of comparative immunity from fatal accidents, the list was headed by authors, etc.; students; total accidents in the three years under investigation 23; population in 1871, 61,085; average annual rate of fatal accidents per 10,000, 1.3. The figures in the same arrangement of number of accidents, population, and ratio for some other occupations were: Protestant minister, 5, 9264, 1.8; schoolmaster, 15, 19,378, 2.6; clergyman, 17, 20,694, 2.7; medical student—assistant, 4, 4514, 3.0; printer, 49, 44,066, 3.7; teacher, professor, lecturer, 15, 13,349, 3.7; domestic servant (general), 80, 68,335, 3.9; tailor, 143, 111,843, 4.3; shoe and boot maker, 257, 197,465, 4.3; barrister, 5, 3580, 4.7; merchant, 23, 15,903, 4.8; commercial traveller, 26, 17,895, 4.8; civil engineer, 8, 5234, 5.1; Civil Service, 37, 25,717, 5.2; butcher, 116, 72,675, 5.3; commercial clerk, 199, 124,787, 5.3; solicitor, 20, 12,314, 5.4; police, 47, 28,330, 5.5; horsekeeper, groom, jockey, 109, 63,878, 5.7; coach, omnibus, cab owner, livery stable keeper, 10, 5558, 6.0; painter (artist), 9, 5005, 6.0; undertaker, 3, 1459, 6.9; actor, 4 (all in 1870), 1899, 7.0; farrier, veterinary surgeon, 14, 6650, 7.0; physician—surgeon, 41, 14,684, 9.3; coachman, cabman, flyman, 183, 56,171, 10.9; plumber, painter, glazier, 356, 103,380, 11.5; horse proprietor, dealer, 6, 1364, 14.7; pilot, 25, 3039, 27.4; bargeman, lighterman, waterman, 354, 29,445, 40.1; and highest, horsebreaker, 18, 1253, 47.9. He then dealt with more obviously dangerous occupations, treating at length of the statistics of accidents affecting railway *employés* and miners, which have been the subject of special returns and reports. Table 5 distinguished for 43 occupations, as far as was possible, accidents in connection with occupation from those which occurred outside the occupation. In the case of coal miners, 2968, out of the total of 3464 fatal accidents in 1870-2, or 85.7 per cent., occurred in connection with the occupation. In the discussion which followed, Mr. Bailey, the president of the Institute, asked if the ratio of non-fatal accidents could be ascertained. Mr. Cornelius Walford said he thought that at present this could not be determined. Remarking on the number of accidents to those having to do with horses, he observed that more persons were killed by horses than by railway accidents. From long experience of accidents, from the actuary's point of view, he next offered some words of warning with regard to the principles on which employers' liability companies and some accident insurance companies were conducting their business. In the accidental insurance business, cycles of disaster occurred with as

much regularity as panics in the commercial world; and, what was more remarkable, these cycles of accidents affected different districts in turns. Mr. Nelson entered at some length into an analysis of Mr. Whittall's paper, comparing its results, especially with regard to railway *employés* and miners, with statistics obtained from other sources. Mr. Adler said, with regard to the ratio of non-fatal to fatal accidents, that investigations at Chemnitz showed that, for 91 deaths, there were 213 total disablements, 369 partial disablements, and 8177 accidents of a lighter character; or, roughly, about 100 accidents to one death.

THE METROPOLITAN ASYLUMS BOARD.

THE Metropolitan Asylums Board has issued its account of the estimated expenditure up to Lady-day next, and a call is made upon the metropolis for £240,000 to meet this expenditure. Of the whole amount, £40,000 is to meet the estimated deficiency from the last estimate; £16,000 is for interest on loans; £2,900 is the whole cost of the central administration; and £2,000 is for law costs. The deduction of the £40,000, to make up the estimated deficiency of the last year, leaves £199,000 for the half-year's expenditure. The Leavesden Asylum is estimated to cost for the half-year £21,480, of which £11,666 is for the cost of provision and clothing the two thousand patients in the Asylum at 4s. 8d. per head weekly. The Caterham Asylum, with the same maintenance account for a like number of patients, is estimated to cost £23,540. The Darent Schools and Asylum, with nine hundred patients at 5s. 6d. per head weekly, are estimated to cost £17,500. Homerton Hospitals, with two hundred fever-patients, costing a minimum of 10s. a week for food and clothing, and one hundred and fifty small-pox patients at a like cost, are estimated at an amount of £17,650 for the half-year. The Stockwell Hospitals, with an equal number of patients of both classes, are estimated to cost £12,870 for the half-year. The Fulham Hospital, with two hundred small-pox patients at 10s. a week, is estimated to cost £8,130. The Deptford Hospital, with four hundred patients, is estimated to cost £20,200. The hospital-ship *Atlas*, with provision for a hundred patients, is estimated to cost £5,000; while the ambulance station and wharf are estimated to cost £1,600. The training-ship *Exmouth*, with six hundred boys on board, provisioned and clothed at 7s. per head a week, is estimated to cost £9,730 for the half-year, the charge including officers' salaries, firing, lighting, medical charges, the rent of a house in Grays used as a sanatorium and storehouse, and also cost of furniture, taxes, and insurance. Of the whole £199,000, the sum of nearly £128,000 will be charged to the "Common Poor Fund" account, and raised from the whole of London, according to valuation—the richer parishes thus paying in excess of the poorer ones, while the balance for "maintenance" is paid by the parishes which have sent the patients.

HOSPITALS IN PARIS.

THE Municipal Council of Paris has passed a resolution, by forty-eight votes against five, in favour of the entire secularisation of the public hospitals of that city. By the terms of the same vote, the credits asked for by the administration for the salaries of the almoners attached to the hospitals have been refused. At the same time, the Council increased the sum set aside for public instruction by 3,500,000 francs.

SMALL-POX AT BOULOGNE.

IN his last report on the health of the Port of London, Dr. Collingridge drew special attention to the recent epidemic of small-pox at Boulogne. On communicating with the authorities, the health-officer learnt that during the first three months of last year there had been one hundred and sixty deaths, mostly amongst the unvaccinated. As there was great difficulty in tracing the progress of the disease, Dr. Collingridge made a personal visit to the seat of the outbreak. He found that small-pox had existed in the town for four months previously. Commencing at the fishing part of the town, Capécure, it gradually extended to other parts, and at the time of the health-officer's visit had entirely left its starting-place. No hospital for infectious diseases exists in the town, the cases being admitted to the general hos-

pital. There is no compulsory removal of patients to hospital, nor any compulsory vaccination, the operation at ordinary times being performed entirely by midwives, by whom it is naturally very imperfectly carried out. Chiefly through the exertions of the English medical men, heifers were employed during the height of the epidemic for vaccinating all such as were willing; but, unfortunately, no public notice was given of this, beyond an advertisement in one newspaper. At this time, the epidemic was fairly on the decline, though one or two cases had just occurred among the English residents, who had previously been quite free. One death occurred in the Train Boat Service. The cases, especially at the commencement, were of a markedly virulent type, just such as one would expect to find where vaccination and re-vaccination are either very imperfectly carried out or altogether neglected. Dr. Collingridge adds that it is a very difficult matter for an Englishman to realise the amount of difficulty there was in extracting the simple facts he has enumerated.

COMPULSORY VACCINATION IN TASMANIA.

AN Act, causing the above measure to come into force, has been passed by the Parliament of Tasmania, and assented to by his Excellency the Governor. Twelve thousand persons in South Australia have been vaccinated during the last two months. The registered number of vaccination cases performed successfully on children under fourteen years of age, in New Zealand, is as follows:—1877, 10,746; 1878, 11,495; 1879, 12,384; 1880, 13,628; total, during the last four years, 48,253.

COMPULSORY VACCINATION IN SWITZERLAND.

THE National Council of Switzerland, at its meeting of December 21st, had a discussion on the law of epidemics, which terminated in the adoption of the principle of compulsory vaccination, by ninety votes against twenty-three. The articles 13 and 14 of the law as regards epidemics now stand as follows. Article 13: Every child born in Switzerland should, according to law, be vaccinated in the first year of its life, or, at the latest, in the second. A longer delay is not permissible, except for hygienic reasons certified by a medical practitioner. Children born in other countries, and not vaccinated when brought into Switzerland, are placed under the same regulation. The vaccination to be certified by a registered medical practitioner. Article 14: No child can be allowed to enter any public or private school unless he possesses this certificate.

THE EVACUATION OF GUARANTINE.

"It seems to be beyond doubt", says the correspondent of the *Globe*, "that two considerable caravans of returning pilgrims have managed to give El-Wich (the Red Sea quarantine station) the slip by making a dash for it. It is the duty of the soldiers to stick at no expedient for bringing back these infected pilgrims, wherever and whenever they present themselves on the Egyptian frontier. But this is difficult, not to say impossible, for two reasons; first of all, the cordon is far too slender to stem a horde of impatient travellers; and second, were it even otherwise, no Mussulman soldier could be got to fire upon a green-turbaned man, come straight from the holy shrine, and consequently reeking with piety—the said soldier would far more likely kneel down and kiss the feet of the pilgrim than shoot at him. From El-Wich, however, I hear that the 8,000 pilgrims who have arrived up till now are most incensed and determined to resist, and that the Egyptian Government has the greatest difficulty in keeping them at all within bounds. There were some deaths from cholera during the week ending December 22nd. The epidemic, however, is not so serious as it was in 1879, and the Egyptian Government is doing its utmost to prevent its further extension."

THE TREATMENT OF CHOLERA IN SWITZERLAND.

THE treatment of cholera in Switzerland is carried out with the Government of India, and is considerably better, and shows that the Swiss are not so backward as some who are desirous of holding their countrymen up to scorn. The *Zürcher Anzeiger* of November 19th contains a long account of the cholera, and the treatment

to dismiss medical officers forthwith from their appointments, without making any "investigation into the cause of dismissal". He is also said to have kept open permanent appointments for more than a year, because the temporary officer is paid less than full pay for the district, and a saving to the Government is thereby effected. The article commences with a statement to which we would invite the attention of those who think of emigrating to this colony: "If a colonist were asked to name the one department in the Government service which, beyond all others, is treated by the executive as a pariah amongst officials, he would have no hesitation in naming the district medical officers." In some instances, medical officers who have been dismissed have been requested as a favour to undertake the work in a district after the death or removal of the person in whose favour they had been displaced. The whole service appears to be in a most unpleasant position, especially for supernumeraries, as they may be required at any time to take over a district in any part of the colony for an indefinite time, and to remove his furniture and family to some part of his new district, without receiving the salary which has been assigned to it by the Combined Court, or without having a house provided for him to rent. As houses are very difficult to obtain, most colonists building their own, this appears to be a special grievance.

SCOTLAND.

HEALTH OF EDINBURGH.

THE annual mortality of Edinburgh during the past six years has been, per 1,000—in 1876, 19.51; in 1877, 20.86; in 1878, 21.53; in 1879, 19.06; in 1880, 21.05; and in 1881, 20.06. During the last week, the death-rate was 19 per 1,000. No death from fever was reported, and only six from other zymotic diseases, of which three were scarlet fever. Four of the six occurred in the New Town, and two in the Old Town.

EDINBURGH ROYAL INFIRMARY.

ACCORDING to the charter of the Royal Infirmary, Edinburgh, an annual meeting of qualified contributors is held the first Monday in each year. Some years ago, when different sides mustered strongly to vote for or against the admission of female students to the wards, the Queen Street Hall was not too large for the meeting then held there; but in these more placid times the council chamber suffices. At the meeting held on Monday, the Lord Provost presided. The report submitted to the meeting showed that at 1st October 1880, there remained in the hospital 253 patients, and at 1st October 1881, there remained 494. Between those dates, 5,288 new cases were admitted; of whom, after treatment in the hospital, 2,801 were dismissed as cured, as relieved, 1,651, and on other grounds 325; while 475 died in the hospital. Of the above number, 480 cases of fever (which included 100 cases of scarlet fever) were treated in the fever hospital in the Old Infirmary building; 2,167 were medical cases, and 2,656 were surgical cases. The average number of children inmates during the year was 1,000, and these were chiefly distributed through the surgical wards. The daily average of patients in the house was 520, the highest number having been 570, and the lowest 434; while the average period of residence was thirty-three days, as compared with the previous year, when the average period of residence was 31.6 days. Of all the cases admitted, 2,110 were from the country, 451 from Leith, and 2,671 from Edinburgh. Of 475 deaths, 70 occurred within forty-eight hours after admission, and these were mostly cases of severe disease, including 10 in the total of medical and surgical cases; the percentage of deaths to admissions was 8.9; deducting them, it was 6.5. In the fever hospital, the percentage of deaths was 11.0; but, deducting those cases which died within forty-eight hours of admission there, the percentage was 7.1. The Convalescent Home at Carston-place received 200 patients, a decrease of 118 as compared with the previous year; 42 were admitted each month; 41 was the average number of patients in the house; and the average number of deaths was twenty-two. In the four departments of the hospital, 15,000 patients

tients were attended to, and in the surgical received the necessary dressings and appliances. As to the financial condition of the Infirmary, the ordinary income was £21,902, and legacies and donations £6,572; conjointly, these went to meet the ordinary expenditure (£31,720), thus leaving a deficiency of over £3,245. The ordinary income for this year exceeds last year's by £362; but the receipts from donations and legacies are less by £11,683. Fees from students constitute an important item in the income: on October 1st, 1879, they were £2,643; on October 1st, 1880, £4,179; and on October 1st, 1881, £3,443. It is a serious outlook for so large and important a charity that its expenditure so far exceeds its income, both ordinary and extraordinary. This is largely due to the Infirmary authorities supporting a large separate fever hospital, which of itself must entail an expenditure of about £3,000 a year; and, as the city has now purchased, and intends converting into a fever hospital, the old Infirmary buildings, it may be reasonably expected the Royal Infirmary will be relieved of the greater part of its fever expenditure. The many and widespread friends of the Infirmary will be glad to know that the managers expect soon to receive a sum of £12,000 from the estate of the late Dr. Hunter. The meeting re-elected the six managers who are to represent them as managers for the next year.

IRELAND.

At a recent meeting of the Cork Town Council, Mr. W. B. Harrington was appointed City Analyst, at an annual salary of £100, and a fee of half a guinea for every analysis made after one hundred during each year.

CHARGE AGAINST A MEDICAL OFFICER.

LAST week, Dr. MacCabe held an inquiry at the Carrick-on-Suir Workhouse, in reference to the death of James Hickey, in consequence, as alleged, of the neglect of Dr. O'Ryan, the medical officer. The deceased was admitted with a broken leg, but persisted in leaving for his home, contrary to the wishes of Dr. O'Ryan, and died shortly afterwards. The evidence exonerated Dr. O'Ryan, but Dr. MacCabe will forward his report to the Local Government Board.

QUEENSTOWN: THE PUBLIC HEALTH ACT.

THE Queenstown Town Commissioners having refused to adopt the provisions of the Public Health Act regarding the removing of patients to hospital, under the 141st section of the Act, the attention of the Local Government Board has been directed to the subject. The board also regret to learn the general order given to the sanitary sub-officer as to disinfection of infected articles of bedding and clothing. For previously, it had been the practice for the sanitary sub-officer to proceed at once, on receiving directions from the medical officers, to disinfect and cleanse premises, and remove infected articles of bedding to the disinfecting chamber, from places where cases of infectious diseases had proceeded, without waiting for the meeting of the sanitary authority, for receipt of a special order in each particular case from that body. But, in consequence of a resolution adopted on the 23rd ultimo, rescinding this arrangement, it has occurred that, in several cases of typhus fever arising in No. 2 district, no disinfection or cleansing of the bedding or premises has taken place; and infection has, and probably will still further, spread from this cause. Eleven cases of fever were admitted to the hospital during December, and it is to be feared that fever will again spread in Queenstown. The Local Government Board have requested that a meeting of the sanitary authority be immediately convened to deal with the cases where disinfection is urgently needed, and with a view to the reconsideration of the resolution adopted by the commissioners. They point out that it is the duty of the sanitary authority not only not to obstruct the operation of the provisions of the Public Health Act, but to enforce, if necessary, its being carried out with activity and despatch, and the sanitary authority will incur a serious responsibility if they neglect to do their duty in this respect.

THE METROPOLITAN DISPENSARY QUESTION.

At a meeting of the East London and South Essex District of the Metropolitan Counties Branch, held on Thursday, December 15th, at the Hackney Town Hall—Dr. BRIDGWATER of Harrow, President-elect of the Branch, in the chair—a discussion took place on this question.

Mr. TIMOTHY HOLMES, in opening the discussion, said: No apology is required for introducing to your notice a matter so important, both to the general practitioners and to the members of the hospital staffs, as the proposal to found provident dispensaries on the self-supporting principle, which will, if successful, relieve the hospitals from the burden of a large proportion of those out-patients to whom, in their present numbers, they cannot possibly do justice, and will also provide general practitioners with an adequate remuneration for a great amount of labour which at present is almost unremunerative. I say that the institution in question will do this if it be successful; and the question which I wish you to discuss to-night is, whether the present proposal contains the elements of success. As I wish this to be merely a business discussion, I shall not spend your time in dwelling on the evils of the present system, on the condemnation of it which has been pronounced by great authorities on all hands, both lay and medical; on the fruitless efforts which have been made to reform it; nor even, except by merely mentioning it and begging you not to forget it, on the indubitable fact that the evil is still growing. While everybody is agreed that medical teaching, true charity, the proper treatment of the most common diseases among the poor, the proper independence and dignity of the poor—in a word, every object which the benevolent ought to have in view in founding hospitals—is swamped under the indiscriminate crowding of our out-patient and casualty-rooms, yet no effectual steps have been taken to mitigate the evil; and, as a natural consequence, it increases with the increase of London. Happily, the great hospitals are beginning to see the necessity of some change. It is now some years since Dr. R. Bridges, then casualty physician to St. Bartholomew's, wrote an account of the casualty department there, which was published in the fourteenth volume of the *Hospital Reports*, and which, therefore, cannot be charged with inaccuracy or exaggeration. The ludicrous and shameful perversion of so-called charity which that discussion revealed, did much to show the absolute necessity of some limitation on the indiscriminate admission of out-patients; and, although only the casualty-rooms were included in Dr. Bridges' paper, yet I believe I am right in saying that the authorities of St. Bartholomew's quite recognise also the necessity for reform in the other branches of out-patient practice; and, coming nearer to this neighbourhood, the same may, I believe, be said for the governors and staff of the London Hospital. This is a favourable augury of success of any well-considered scheme of provident dispensaries. We know, from the experience of the northern towns, that dispensaries of the kind can be managed to the satisfaction equally of the public, of the patients, and of the medical men, in the absence of large eleemosynary institutions. But in London it seems hardly possible to found self-supporting dispensaries on a sufficient scale when the large hospitals and special institutions throw their doors open, without any question or restriction, to any who choose to come in. The assumed willingness of the London Hospital authorities to co-operate as far as they can in a well-devised scheme of provident dispensaries, approved of by the practitioners of the vicinity, has induced me to accept Mr. Wallace's invitation, and introduce the question to you to-night, whether you think our scheme satisfactory. Now, in debating this, you must bear in mind that no man of sense expects the foundation of provident dispensaries to be a panacea for all the evils which the neglect of former generations has entailed on us. We only regard it as one of the necessary preliminaries to the better treatment of what we may call the ordinary maladies of the poorer classes, that they should be provided with the means of procuring proper medical attendance at the dispensary when possible, and at their own homes when necessary, on the principle of insurance—i.e., by small regular payments made during health. That such payments, not exceeding what a working man can well afford, will leave a sufficient income for the medical man, is proved by the experience of the towns aforesaid; but, in order to do so, they require large numbers. Now, provident dispensaries have been started in many parts of London, and have been more or less successful, some very successful, as that at Haverstock Hill, of which I hope Dr. Ford Anderson will give us some particulars, illustrating the working of such dispensaries. But they have all, I believe, contained an admixture of the charitable element. Now, it seemed to those with whom I was acting, that the necessary numbers would be most easily secured if we could amalgamate with the medical departments of the large benefit societies which are

Mr. W. SMITH said he had been medical officer of a provident dispensary, and he considered it was greatly abused by well-to-do persons. The new association had no wage-limit, without which any such system must be injurious. The scale of subscriptions was too low, while, in addition, there should be some limit to the age at which persons were admitted. The system would be worse than club practice, from its admission of women and children, among whom increased averages of sickness were found; while the remuneration was insufficient for the doctors, the remainder would be inadequate for the other purposes of the institution.

Mr. PARAMORE expressed disapproval of the proposal to establish provident dispensaries.

Dr. G. P. BATE gave some results of his experience of club rates. He said that, on a membership of about 1,300, allowing 2s. for a home-visit, in 1879 the rate for consultation at the surgery was 7d., and in 1880 5d.; while, if 1s. 6d. were allowed for visits, the remuneration would be 9d. in 1879, and 6d. in 1880. These rates were inadequate unless they carried with them the attendance of the wives and children at ordinary fees; and if a system became general to include these at similar rates, it must result in the ruin of many respectable practitioners.

Mr. E. G. GILBERT said the rates propounded were unsound, inasmuch as the more healthy male members would have to bear the burden of the women and children; and in addition to this, they were too low to be fair to the medical men. At Reading, where there was a large provident dispensary, the payments averaged 4½d. a consultation, half of which were at the homes of the members. On the other hand, if these institutions could be made self-supporting, he saw no reason for a wage-limit.

Dr. A. E. SANSOM thought the time had arrived when something ought to be done in the matter. If they did not approve the present scheme, they ought to propound another. He would not allow the subject to drop, and hoped to have the opportunity of developing other views in a subsequent paper.

Dr. DUNDAS GRANT said hospitals were supported by the subscriptions of rich people, by the fees received for teaching, and by the gratuitous services of a part of the medical profession. The relief they provided was intended for persons who were not paupers nor well-to-do. At present, hospitals were used by both these classes, which he thought should be prevented. He thought a new instrument ought not to be created until the old ones were reformed and utilised.

Mr. HOLMES, in reply, traced the growth of out-patient work from its origin, and said it had been perverted from its proper function, which should be chiefly that of consultation. With regard to teaching, he undertook to say the number of patients seen in the allotted time put such a thing out of the question. If the proposed system were generally adopted, governors of hospitals would see trivial cases could be provided for in another way, and many persons now getting that for nothing for which they are well able to pay will be debarred from doing so. The remuneration proposed was lower than he could have wished, but higher rates would be undersold, and would throw the classes proposed to be dealt with into the hands of quacks and dealers in nostrums. He left the matter to their consideration, not as a perfect plan, but as one much needed, and the best the circumstances would allow.

The proceedings closed with a vote of thanks to Mr. Holmes for his paper.

THE PATHOLOGICAL SOCIETY.

THE character of the discussions, and the kind of work done by this Society has, as the President has observed at several recent meetings, altered materially within the last few years; theoretical disquisitions have come to occupy more time, and less has been devoted to the mere record of facts. Whether this change has been a source of unmixed advantage, may be a matter of dispute; there can, however, be no question that the Society has never been more flourishing than at the present moment. The report of the Council presented to the annual meeting on the 3rd instant showed that the number of members was greater than at any previous period; that the finances were in excellent order; and that the Society was preparing to adopt the recommendation of its late President, Mr. Jonathan Hutchinson, for the extension and systematising of its labours. Thus, a committee has been appointed to examine past volumes of the *Transactions*, with a view to completing the history of those cases in which it had been left incomplete at the time of their presentation; this committee has already commenced its duties. A standing committee, also, has been appointed to report on any specimens of disease in the lower animals which may be brought before the Society, and arrangements have been made by which this committee will, through the courtesy of the Zoological Society, be enabled to make use of morbid material from the *post mortem* room of the gardens in

Regent's Park. The report paid a graceful tribute to the memory of Dr. George Rolleston, who had been one of the earliest members, and also referred, with becoming expressions of regret and respect, to the decease of two of the honorary members, Dr. Julius Vogel of Halle, and Professor Pirogoff of St. Petersburg. The following gentlemen were elected to serve on the Council of the Society for the ensuing year: *President*: S. Wilks, M.D., F.R.S. *Vice-Presidents*: W. Bowman, F.R.S.; G. Buchanan, M.D.; T. Buzzard, M.D.; *W. H. Broadbent, M.D.; Andrew Clark, M.D.; *John Croft; Jonathan Hutchinson; and S. J. A. Salter, F.R.S. *Treasurer*: G. Johnson, M.D., F.R.S. *Honorary Secretaries*: J. F. Payne, M.D.; H. Morris. *Council*: E. B. Baxter, M.D.; J. Cavafy, M.D.; *W. B. Cheadle, M.D.; *J. Curnow, M.D.; Sir J. Fayer, K.C.S.I., M.D.; W. M. Ord, M.D.; R. D. Powell, M.D.; G. H. Savage, M.D.; *R. Southey, M.D.; T. T. Whipple, M.D.; W. M. Baker; J. N. C. Davies-Colley; *A. H. G. Doran; *T. R. Jones, M.D.; J. Lister, F.R.S.; *J. Langton; *E. Nettlehip; R. W. Parker; W. Tay; and W. J. Walsham.—The gentlemen whose names are marked with an asterisk (*) were not on the Council or did not hold the same office during the preceding year.

CHRISTMAS AND NEW YEAR FESTIVITIES AT THE METROPOLITAN HOSPITALS.

IN every hospital, without exception we believe, the festive season which has just passed, was marked by some effort to amuse and gratify the patients, and to make up to them, as far as possible, for the loss of those home associations which have bound themselves about the last few days of the old year, and the first of the new. We proceed to give particulars of the doings at some of the hospitals, for which we are indebted to the courtesy of members of the medical staff of the various hospitals.

GUY'S HOSPITAL.

At Guy's the usual Christmas fare was distributed to the patients on Boxing Day, as it was thought that the Sunday celebration might curtail the harmless enjoyment allowed when Christmas Day occurs on other days of the week. The customary roast beef and plum pudding were freely served to all who could partake of it (and it is astonishing in a hospital for the sick, how few cannot), while the generosity of the students and members of the staff enabled all to participate in a substantial dessert, and the men patients to smoke tobacco to their heart's content, a privilege which, as it is only conceded once a year, is always highly prized. Each ward was gaily decorated with banners and flowers emblematic of the season, and numerous shields and scrolls bearing inscriptions from Tennyson, Keble, and from other sources, all inspired with mutual feelings of peace and good, were to be seen everywhere on the walls. The aspect of some of the wards was especially attractive and testified to the discrimination and taste of the sisters and nurses, aided in most cases by the dressers and students employed in the respective wards, but where all exerted themselves more or less successfully, it would be invidious to single out any for special commendation. Neither were the inmates forgotten by their outside friends. Gifts of capital toys, from the readers of *Truth*, were supplied to all the young people in the hospital, Christmas trees blossoming with useful presents for young and old were to be seen in most of the wards, and an almost overwhelming amount of Christmas cards and Christmas literature of all kinds, from a legion of well-wishers, were freely distributed among the patients. In one of the large wards a magic lantern exhibition of real interest was held, and in several of the surgical wards, where the patients were well enough, musical entertainments of a very pleasing and effective character, combining the comic with the sentimental element, were given during the week by the sisters and resident students, assisted by a few friends from the outside. If, as Solomon states, "a merry heart doeth good like medicine," a motto prominently displayed in one of the wards, there has been no stint of the old remedy; and since every one testifies to the efficacy of the drug, there is good reason why music should find a place in some future edition of the pharmacopœia. Altogether, the Christmas festivities at Guy's passed off very happily and hopefully.

ST. THOMAS'S HOSPITAL.

At St. Thomas's Hospital the wards were tastefully decorated with flowers and holly. In "Victoria" ward (for children) two Christmas trees, loaded with presents, were kindly provided by friends. The chapel, through the efforts of the hospitaller and matron, was most beautifully decorated with flowers. On Christmas Day, the traditional roast beef and plum-pudding was partaken of by all who could safely be allowed to share it.

The annual entertainment for the patients will not take place till the end of January; but in many of the wards, during the week, tea parties with amusements were provided by the sisters. On New Year's Eve

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held on Wednesday, the 18th day of January next, 1882, in the Council Room, Exeter Hall, Strand, London, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary*.

161A, Strand, London, December 13th, 1881.

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, January 18th, April 12th, July 12th, October 18th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, May 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881. FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting of the District will be held on Thursday, January 19th, at 8.30 P.M., at the house of Dr. Cree, 2, Pemberton Villas, St. John's Park, Upper Holloway. Dr. Woakes will re-introduce the discussion on the Etiology of Diphtheria; its Contagium; the Occurrence of Sudden Death in it—reconsidered. Dr. George Ogilvie will read a paper on Electricity as a Therapeutic Agent.—GEO. W. POTTER, M.D., Honorary Secretary, 12, Grosvenor Road, N.—January 2nd, 1882.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting of the above District will be held on Thursday evening, January 19th, at 8.30 P.M., in the Library of the London Hospital Medical College; Dr. Bridgewater, President-elect of the Metropolitan Counties Branch, in the chair. Dr. Sarsam will read a paper on the Best Means of Providing for the Medical Wants of the Poor who are above the Ranks of Pauperism.—FREDERICK WALLACE, Honorary Secretary, 95, Cazenove Road.—December 22nd, 1881.

BATH AND BRISTOL BRANCH.—The third meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday, January 19th, at 4.15 P.M.; D. Davies, Esq., President.—R. S. FOWLER, E. MARKHAM SKERRITT, M.D., Honorary Secretaries.—Bath, December 1881.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The fourth meeting of the session will be held at the Medical Institute, on Thursday, January 12th, 1882. The chair will be taken by the President, Mr. Bartlett, at 3 P.M. Papers: Dr. Thurstield: Notes on a case of Relapsing Typhoid. Mr. Eales: Notes on a case of Orbital Aneurysm, the result of Injury. Mr. Bennett May: Case of Hæmaturia, with Obstruction of the Ureter. Members are invited to exhibit patients, pathological specimens, new drugs, instruments, or appliances, at the commencement of the meeting.—E. MALINS, M.B., 8, Old Square; E. RICKARDS, M.B., 14, Newhall Street, Honorary Secretaries.—January 4th, 1882.

THAMES VALLEY BRANCH.—The next meeting of this Branch will be held on Thursday, January 26th, at 6 P.M., in the Board Room of the Richmond Hospital. Dinner at the Marlborough Hotel at 7 P.M.—EDWARD L. FENN, M.D., Honorary Secretary, Richmond.

GLASGOW AND WEST OF SCOTLAND BRANCH: MEETING.

THE Branch met on December 15th, in the Royal Infirmary, the use of a room in the hospital being kindly granted by the directors.

Vivisection.—The Branch approved the action of the Council in appointing five members towards a central committee on vivisection which has been formed in Glasgow.

Medical Reform.—The Branch also approved of the action taken by the Council in protesting against the report of the Medical Reform Committee of the Association, where it recommends the abolition of the powers of the Faculty of Physicians and Surgeons in Glasgow.

British Medical Benevolent Fund.—It was agreed to recommend the members of the Branch to subscribe five shillings annually to the British Medical Benevolent Fund; the subscription to be collected along with those of the Association and Branch. Several members spoke warmly of the good which this fund had effected in cases of which they were cognisant.

Demonstration of Cases.—Dr. WILLIAM MACEWEN gave a most interesting demonstration of certain cases in which the surgical aspects of brain-affections were illustrated. He also showed a series of cases in which a modification of the subperiosteal method of resection of the elbow had been performed. An operation of this kind was performed by Dr. Macewen.—A vote of thanks to Dr. Macewen and the Directors followed.

Lunch.—Some of the members dined together at the Bath Hotel.

CORRESPONDENCE.

ENGLISH LUNACY LAWS.

SIR,—My attention has been lately directed to a case which appears to me to illustrate a serious flaw in the English Lunacy Laws. It is enacted that no person (not a pauper) shall be received as a lunatic into any asylum, licensed house, or hospital, without medical certificates (in addition to order and statement of particulars) of *two* persons, each of whom shall be a physician, surgeon, or apothecary (16 and 17 Vic., c. 96, s. 4; c. 97, s. 74. 25 and 26 Vic., c. iii., s. 23. See Schedule F, Nos. 2 and 3). But in 25 and 26 Vic., c. iii., s. 26, it is further enacted—"The order and certificates required by law for the detention of a patient as a pauper shall extend to authorise his detention, although it may afterwards appear that he is entitled to be classified as a private patient."

In the case I speak of, a person in no respect a pauper, being in possession of means amounting to about £4,000 or £5,000, and being well known to be in a fair position, was sent to an asylum as a pauper, under no special conditions of emergency—i.e., there was no special difficulty in obtaining two medical certificates. After a few weeks' residence in the asylum, this person was transferred from the pauper to the private list, and was detained under the original instrument until discharged. If there is any object in greater precautions being observed in the case of the confinement of a private patient than in that of a pauper, it is evident, from the instance adduced, that it is not difficult to evade them. It appears to me that, if a person not a pauper is sent to an asylum as a pauper, under any circumstances of emergency, on his name being removed from the pauper roll and transferred to the private list, the procedure necessary for the detention of a private patient should be observed, otherwise it is quite possible for a person of means to be detained for life on the same instrument as a pauper.

In Scotland, private patients and paupers are received and detained on the same instrument—viz., the order of a sheriff—who grants it after having had submitted to him a petition and statement accompanied by two medical certificates. My experience is that this judicial procedure secures protection to the lunatic, assurance to the public, and security to the asylum authorities. I know of only one instance, and this occurred more than twenty-five years ago, in which the sheriff's order was called in question by a patient; and, although considerable trouble and expense resulted to several concerned, the order was sustained by a decision of the Court of Session, and, on appeal, by the House of Lords.—I am, sir, etc., J. BATTY TUKE.

Saughton Hall, near Edinburgh, December 30th, 1881.

FARMAR AND SEALEY FUND.

SIR,—With reference to my letter, which you were good enough to insert in the BRITISH MEDICAL JOURNAL of October 15th last, in which I mentioned the fact of a subscription being in progress for a testimonial to Corporal Farmar, V.C., and Private Sealey, of the Army Hospital Corps, for their gallant conduct at the disaster of Majuba Hill, and gave a short account of the wounds by which they had been disabled for further military service, I have the pleasure now to state that £170 have been subscribed, and that this amount, equally divided, has been presented to the two men by the Director-General of the Army Medical Department. The sum named includes the liberal donation of twenty-five guineas from the family of the late Surgeon Landon, A.M.D., under whose direction Corporal Farmar and Private Sealey were carrying on their duties at the time that lamented young officer received his fatal wound. The presentation has been notified by a circular from the Director-General to the officers and men of the Army Medical Department.—I am, sir, your obedient servant,

THOS. LONGMORE, Surg.-Gen. H.P.,

Netley, January 3rd, 1882.

Professor of Military Surgery.

A SPECIMEN CHART for tabulating cases of deaths from infectious diseases has been circulated by Mr. Yates of Dewsbury amongst many of the local sanitary authorities in England. Dots of different colours represent the deaths from the different infectious diseases, and short strokes cases. From the circular accompanying the chart, it might be supposed that the plan is new, whereas it has been used by several medical officers of health to urban authorities. For instance, at Newcastle, a dot is used to indicate a death, and a cross a case; whilst at Birmingham, a red dot means a death from scarlet fever, a red cross a death from measles, and a blue cross a death from typhoid. The plan is good, but, as Mr. Yates has acknowledged, is not altogether novel. The colours for the different diseases are well chosen.

The Glasgow Health Lectures have now come to a close, and the success attending them has been very gratifying. With a view of still further increasing their sphere of usefulness, they have been issued in a very neat volume, with a short preface by Professor McKendrick attached to the series. This preface tells us that the object of these lectures was "to convey information regarding some of the laws of health, and to give practical directions as to what should be done for those who may have suffered from accidental injuries of various kinds." The list of lecturers is sufficient guarantee that this object has been ably carried out; and if the hints and lessons in these lectures are acted upon by those who had the good fortune to hear them, and by the general public, we are sure their lives will be rendered more enjoyable, and we should see the disappearance of many health-destroying customs that are now only too prevalent amongst us. The committee of these lectures are to be congratulated on taking this step for the diffusion amongst the community of such an amount of useful knowledge; for in our large cities there are many who have yet to learn that, as Professor Gairdner puts it—the care of the body is both a private and a public duty.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE ALLEGED PUNISHMENT OF SICK PAUPERS.

STP.—In the issue of the *Birmingham Gazette* of the 15th ultimo will be found a report of the proceedings of the board of guardians of that parish, at which a report was brought up and read of the evidence, taken by a special committee of the board, as to certain alleged punishments that had been inflicted on the persons of sick and imbecile inmates, at the instance of one of the medical officers of the workhouse, Dr. Simpson. It was moved by the chairman of the said committee, "that the minutes of evidence be forwarded to the Local Government Board for further inquiry, and that Dr. Simpson no longer retains the confidence of the board." After a lengthened discussion, it was ultimately agreed that, pending the investigation by an impartial tribunal, no expression of opinion as to Dr. Simpson's conduct should be come to by the board.

The report in the *Gazette* does not give the evidence brought forward, and therefore I feel myself in some degree of difficulty as regards its bearing. But, as a workhouse medical officer of many years' standing, I trust that you will permit me to give a brief statement as to the special difficulties that attend the supervision and treatment of the inmates of workhouse infirmaries. First, let me state advisedly that no one who has not held such an office can be at all aware of the amount of malingering and deception that one has daily to encounter. Many of such inmates have been inmates of jails, or have for years practised deception in all its manifold forms, and have become absolute adepts in deceit. In our voluntary hospitals, the suspicion of malingering is followed either by heroic treatment, or the rogue is discharged. Not so in a workhouse; there is no possible getting rid of the cheat, unless you make life to him so disagreeable, that he is glad to betake himself to honest ways. As a corroboration of my views, let me relate some cases. The first occurred twenty years ago, when I was medical officer of the Strand Union. One day, I was summoned to go immediately to see a woman who had been brought to the infirmary on a stretcher, tied down to prevent her from falling off, she being alleged to be in convulsions. On visiting her, I came to the conclusion that the attack was a feigned one. I directed that the whole of her spine should be covered with a mustard poultice. If her case was a genuine one, that would have roused her; if, as I suspected, it was simulated, it would effectually disgust her. I superintended the application, and stood by to see the dénouement. After five minutes, her convulsions suddenly ceased. I happened at the moment to turn round, when, suddenly wrenching herself free, she sprang to her feet, and, tearing off the poultice, she sent it at my head, accompanying it with a volley of oaths. I therefore directed the master to give her into custody. He preferred to let her go, which she forthwith elected to do. I never saw her again.

When I succeeded Mr. French at the Westminster Union, I found there a man who had been under treatment five years, professedly paralysed in his lower extremities. I exhausted on that man every medicinal remedy of which I had ever read, but without avail. At last, information reached me that this presumed paralytic was in the habit of taking a "constitutional" in the small hours of the morning, when nurses and inmates were wrapped in sleep. I forthwith decided to send him to the Highgate Infirmary, with a hint as to my suspicions. He was sent back a short time afterwards well, and was passed to his settlement, where probably he is trying on the same interesting game.

Twenty-two years ago, a young woman came under my care in the Strand Union. She professed that she could not talk, and had occasional fits, all of which I diagnosed as being of an hysterical-epileptic character. Being chargeable to St. Ann's, she was transferred, fourteen years ago, to the Westminster Union, and she again passed under my care. She was so discreet as effectually to deceive master, matron, nurses, lady visitors, and medical officer, all of whom lavished on her gifts, religious books, etc. Four months ago, she became so very troublesome, that I had her removed to the insane ward. One day, on visiting her, I thought she was presuming on my kindness, and therefore directed her to be galvanised. *Credat* she speedily became docile, and what is more, talked as well as any one else. This power of speech was continued to this day. I need not say that this exposure has chilled the sympathy of all the lady visitors.

I have given three instances of deception. I could, by reference to my notes, add to them indefinitely; and yet, for using the same measures as I have done, I am told, when I suspect deception, a respectable member of the profession, albeit a workhouse doctor, is likely to have his fair name wrested from him, and possibly his living, at the instance of ignorant pseudo-philanthropists, who feel in nothing so great a pleasure as having a poke at the parish doctor.

In conclusion, let it be known that I have the largest sympathy with the honest deserving sick poor, as well as a like loathing of those who prey on our want of appreciation, our ignorance, or our mistaken sympathy with their imaginary suffer-

ings. To such impostors, mustard poultices, blisters, the galvanic battery, or the shower-bath, appear to me to be the most fitting treatment.—I am, sir, yours obediently.

50, Soho Square, January 2nd, 1882.

JOSEPH ROGERS.

MILITARY AND NAVAL MEDICAL SERVICES.

TRAINING OF NAVAL MEDICAL OFFICERS AT HASLAR.

SIR,—Will you kindly permit me to say a few words on the subject to which you have drawn attention in the last number of the *JOURNAL*? I allude to the present system of training young medical officers at Haslar. You regret the change, and contrast the advantages at present given with those lost by removing the candidates from Netley. I am in a position to state that the change was made on the recommendation of the late committee, after hearing evidence on the subject, which I think I am correct in stating was unanimous in its favour. This evidence was given by naval medical officers, who could have had no other object in view than the elevation of the status of their own cloth, and the benefit of the service generally. Individually, I strongly advocated this change, and I am still of the opinion that I was right in doing so. I have had opportunities of testing the knowledge gained by the "Netley *débutants*," and have not a very high opinion of the same, nor do I think that a young doubly qualified medical man fresh from his studies requires to spend a stated number of hours daily in the wards of Netley, to gain an insight into the mysteries of naval or military surgery. What a young man does require before he enters on the active duties of his future calling, whether it be naval or military, is instruction in the usual routine incidental to his calling, and an acquaintance with the class of patients which he will in future be called upon to treat. Will anyone acquainted with the naval branch of the public service say that this can be learned as well at Netley as at Haslar? The two services are quite distinct in every respect, except the link of belonging to the same profession. The practice at Haslar is infinitely superior to that at Netley, inasmuch as in one injuries of the most serious nature are always under treatment, while the practice at the other is confined almost entirely to chronic cases of tropical disease. The general tone which prevails in the naval service is a pride in the profession of medicine, and an endeavour to support its status individually and collectively. This feeling it is sought to inculcate amongst those who enter it. That this feeling has not prevailed to a great extent amongst military medical officers has been my experience, and that of many others whom I have met; and I am sorry to say, since Netley was opened to the navy, a very sensible decline in this *esprit de corps* is noticeable. We wish our future medical officers to be "doctors" before everything, and for this reason I, for one, must hail with pleasure the change you deprecate.—I am, etc.,

R. N.

OBITUARY.

REUBEN J. HARVEY, M.D., DUBLIN.

AMONG the many serious losses the Dublin School of Medicine has sustained in 1881, not the least regrettable is that of the above young physician, who was laid in his grave on the last day of the year. The day week preceding his death, although not feeling well, as a Censor of the King and Queen's College of Physicians in Ireland, he took part in an examination for the licence of that College. The following day, one of his most esteemed friends and colleagues recognised in the symptoms the dread indications of typhus fever. He succumbed rapidly, overwhelmed as it were by the virulence of the poison, and died, without having made any rally, on the evening of the 28th ultimo.

Reuben Harvey was the son of the present esteemed and respected ex-Professor of Midwifery in the Queen's College, Cork. He was born in Cork in 1845, and educated in that city and in Trinity College, Dublin, of which he was a science scholar and a highly distinguished student, having obtained a senior moderatorship and gold medal in pure mathematics in 1866. In the study of medicine, he soon afterwards equally distinguished himself, gaining the first medical scholarship in 1868, and his degrees of M.B. and M.Ch. in 1870, on very high answering. After this, he studied for some months in Vienna, under Stricker, and also at Würzburg. On his return to Dublin in 1871, he was appointed a Demonstrator of Anatomy in the School of Physic, Trinity College, and the following year was elected Lecturer in Physiology in the Carmichael School of Medicine, in succession to Dr. Gerald Yeo, then called to the Chair of Physiology in King's College, London. From the commencement of his connection with the Carmichael School, Dr. Harvey devoted himself to its interests and progress with an energy and a business capacity which few but his colleagues—who owe so much to him, and who mourn his loss so deeply, can appreciate. He was not only the leading spirit in every movement for the benefit of the school—including its transfer from its inconveniently situated old premises to the site it now occupies—but also he spared neither time nor trouble in seeing practically carried out every detail of whatever he undertook. Thoroughness was an essential characteristic of his. He would have no half-work. And this feeling pervaded his every action as well as thought. He was a foe to all deception and subterfuge, and a model of rectitude and singleness of purpose. He saw how defective and how dishonest in many ways the system of medical education was; and one of the tasks he set himself was to improve this, and make it *bonâ fide*. His heart was in this movement; and if he has not, unfor-

It is only about two months since Dr. Harvey resigned his appointment as assistant-physician and pathologist to the House of Industry Hospital, in order to have more time to devote himself to certain physiological work which his untimely death has so suddenly arrested. He retained, however, the office of physician to the Cork Street Fever Hospital, where, for upwards of five years, he discharged his duties with singular assiduity and success. Dr. Harvey was elected a Fellow of the King and Queen's College of Physicians in 1880, and, as already stated, was a censor of that college at the time of his death. He was a member of the councils of the Medical and of the Pathological Societies, of the council of the Dublin Branch of the Association, and of the biological club. He was also a member of the Royal Irish Academy. Had his life been spared, a distinguished career as a physiologist might have been indubitably predicated for him. As it is, his memory will live long in the memory, as well of those who knowing him well, loved him well, as of those who, knowing him less intimately, equally esteemed and respected him as a man of superior ability, and as a honourable, conscientious, and God-fearing gentleman.

JAMES OLDHAM, F.R.C.S.

[illegible]

failing; he had gradually become anæmic, with enfeebled circulation and albuminuria. During his long and tedious final illness, he had the continued and affectionate services of his friend, Dr. Byass of Cuckfield. He was one of the founders of the Brighton and Sussex Medical and Chirurgical Society, thirty-five years ago, it now numbers eighty-eight members.

MEDICAL NEWS.

[illegible]

Eighteen candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, including three who had an additional three months.

Fielde	Wm.	Thos. Ward
Harris	Wm.	Thomas, Harlow
Harris	Harvey R.	
Nelson	Edw.	C. C. St.
Lewis	John	Edward, C. C. St.

Professional Examination,
 University of London, Victoria College, Hospital
 School, Westminster, London, England.

MEDICAL VACANCIES.

THE FOLLOWING MEMBERS ARE ANNOUNCED:

ALICE E. B. BROWN, PRESIDENT, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH.
J. H. BROWN, JR., PRESIDENT, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH.
J. H. BROWN, JR., PRESIDENT, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH.

CHURCH OF THE HOLY TRINITY—LUTHERAN—1100 North Broadway, Chicago, Ill. 1000 per annum.
 Organized in 1852. Services on Sunday, 10:00 a.m. and 7:00 p.m. without charge.

HENDERSON, E. H. — WOMEN AND CHILDREN. 1906. 1 volume. 128 pp.

THEOREM 4.11. Let M be a \mathbb{Z} -module. Then M is a free \mathbb{Z} -module if and only if M is isomorphic to a direct sum of copies of \mathbb{Z} .

APPLICANT'S NAME	ADDRESS	CITY	STATE	ZIP	APPL.
Mr. J. H. Smith	123 Main St.	Springfield	Ill.	62760	1
Mr. R. L. Jones	456 Oak Ave.	Chicago	Ill.	60601	2
Mr. T. K. Brown	789 Elm St.	Peoria	Ill.	61602	3
Mr. S. M. White	101 Maple Dr.	Rockford	Ill.	61101	4
Mr. D. N. Black	202 Pine Ln.	Decatur	Ill.	62521	5
Mr. E. O. Green	303 Cedar St.	Normal	Ill.	62450	6
Mr. F. P. Hall	404 Birch Ave.	Urbana	Ill.	61502	7
Mr. G. Q. Adams	505 Walnut St.	Champaign	Ill.	61820	8
Mr. H. R. Baker	606 Spruce Dr.	Carbondale	Ill.	62901	9
Mr. I. S. Clark	707 Ash Ln.	Macomb	Ill.	61455	10
Mr. J. T. Evans	808 Hickory St.	Edwardsville	Ill.	62025	11
Mr. K. U. Foster	909 Cypress Ave.	St. Louis	Mo.	63101	12
Mr. L. V. Gibson	1010 Sycamore Dr.	St. Charles	Mo.	63071	13
Mr. M. W. Hill	1111 Dogwood St.	St. Joseph	Mo.	64501	14
Mr. N. X. Young	1212 Magnolia Ln.	St. Louis	Mo.	63102	15
Mr. O. Y. King	1313 Rosewood Ave.	St. Louis	Mo.	63103	16
Mr. P. Z. Scott	1414 Ironwood Dr.	St. Louis	Mo.	63104	17
Mr. Q. A. Green	1515 Juniper St.	St. Louis	Mo.	63105	18
Mr. R. B. White	1616 Redwood Ln.	St. Louis	Mo.	63106	19
Mr. S. C. Black	1717 Cedar St.	St. Louis	Mo.	63107	20
Mr. T. D. Brown	1818 Elm Ave.	St. Louis	Mo.	63108	21
Mr. U. E. Clark	1919 Maple Dr.	St. Louis	Mo.	63109	22
Mr. V. F. Evans	2020 Oak St.	St. Louis	Mo.	63110	23
Mr. W. G. Foster	2121 Pine Ln.	St. Louis	Mo.	63111	24
Mr. X. H. Gibson	2222 Spruce Ave.	St. Louis	Mo.	63112	25
Mr. Y. I. Hill	2323 Ash Dr.	St. Louis	Mo.	63113	26
Mr. Z. J. King	2424 Birch St.	St. Louis	Mo.	63114	27
Mr. A. K. Scott	2525 Cedar Ln.	St. Louis	Mo.	63115	28
Mr. B. L. Green	2626 Elm Ave.	St. Louis	Mo.	63116	29
Mr. C. M. White	2727 Maple St.	St. Louis	Mo.	63117	30
Mr. D. N. Black	2828 Oak Dr.	St. Louis	Mo.	63118	31
Mr. E. O. Brown	2929 Pine St.	St. Louis	Mo.	63119	32
Mr. F. P. Clark	3030 Spruce Ln.	St. Louis	Mo.	63120	33
Mr. G. Q. Evans	3131 Ash Ave.	St. Louis	Mo.	63121	34
Mr. H. R. Foster	3232 Birch Dr.	St. Louis	Mo.	63122	35
Mr. I. S. Gibson	3333 Cedar St.	St. Louis	Mo.	63123	36
Mr. J. T. Hill	3434 Elm Ln.	St. Louis	Mo.	63124	37
Mr. K. U. King	3535 Maple Ave.	St. Louis	Mo.	63125	38
Mr. L. V. Scott	3636 Oak St.	St. Louis	Mo.	63126	39
Mr. M. W. Green	3737 Pine Dr.	St. Louis	Mo.	63127	40
Mr. N. X. White	3838 Spruce Ln.	St. Louis	Mo.	63128	41
Mr. O. Y. Black	3939 Ash Ave.	St. Louis	Mo.	63129	42
Mr. P. Z. Brown	4040 Birch St.	St. Louis	Mo.	63130	43
Mr. Q. A. Clark	4141 Cedar Ln.	St. Louis	Mo.	63131	44
Mr. R. B. Evans	4242 Elm Ave.	St. Louis	Mo.	63132	45
Mr. S. C. Foster	4343 Maple St.	St. Louis	Mo.	63133	46
Mr. T. D. Gibson	4444 Oak Dr.	St. Louis	Mo.	63134	47
Mr. U. E. Hill	4545 Pine St.	St. Louis	Mo.	63135	48
Mr. V. F. King	4646 Spruce Ln.	St. Louis	Mo.	63136	49
Mr. W. G. Scott	4747 Ash Ave.	St. Louis	Mo.	63137	50
Mr. X. H. Green	4848 Birch Dr.	St. Louis	Mo.	63138	51
Mr. Y. I. White	4949 Cedar St.	St. Louis	Mo.	63139	52
Mr. Z. J. Black	5050 Elm Ln.	St. Louis	Mo.	63140	53
Mr. A. K. Brown	5151 Maple Ave.	St. Louis	Mo.	63141	54
Mr. B. L. Clark	5252 Oak St.	St. Louis	Mo.	63142	55
Mr. C. M. Evans	5353 Pine Dr.	St. Louis	Mo.	63143	56
Mr. D. N. Foster	5454 Spruce Ln.	St. Louis	Mo.	63144	57
Mr. E. O. Gibson	5555 Ash Ave.	St. Louis	Mo.	63145	58
Mr. F. P. Hill	5656 Birch St.	St. Louis	Mo.	63146	59
Mr. G. Q. King	5757 Cedar Ln.	St. Louis	Mo.	63147	60
Mr. H. R. Scott	5858 Elm				

Received 15 November 1994; accepted 15 November 1994

© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 103–110

TABLE 1. *Mean and Standard Deviation of the 1000-Meter Running Time of the Athletes*

ROYAL COLLEGE OF SURGEONS IN IRELAND.—Professor of Practical and Descriptive Anatomy. Application to John Brennan, Registrar, by January 21st, 1882.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary, £75 per annum. Applications by January 30th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Honorary Obstetric Physician. Applications by January 16th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square.—Resident Medical Officer. Salary, £105 per annum. Applications by January 16th.

SUSSEX COUNTY LUNATIC ASYLUM.—Junior Assistant Medical Officer. Salary, £100 per annum. Applications by January 18th.

UNIVERSITY OF EDINBURGH.—Examinerships in Clinical Medicine, Surgery, Physiology, Materia Medica, and Pathology. Applications to the Secretary of the University by January 16th, 1882.

UNIVERSITY OF LONDON.—Assistant Registrar. Salary, £500 per annum. Applications to A. Milman, Registrar, University of London, Burlington Gardens, W., by January 31st, 1882.

VICTORIA HOSPITAL FOR CHILDREN, Queen's Road, Chelsea, S.W.—Medical and Surgical Registrar. An honorarium of £63. Applications to the Secretary by January 10th, 1882.

MEDICAL APPOINTMENTS.

BLACK, M., M.B., appointed Out-door Accoucheur to the Glasgow Maternity Hospital.

BENNING, F. G., L.R.C.S.I., appointed House-Surgeon to the Loughborough Dispensary and Infirmary *vice* Robert Beattie, M.D., resigned.

BOWER, E. D., M.R.C.S., appointed Ophthalmic Surgeon to the General Infirmary, Gloucester, *vice* T. S. Ellis, M.R.C.S., resigned.

BROWN, A. S., M.R.C.S., appointed Medical Superintendent to St. Mary's Hospital.

BROWN, M. L., M.D., appointed Assistant Medical Officer to the Middlesex County Lunatic Asylum.

COWER, E. D., M.R.C.S., appointed Ophthalmic Surgeon to the General Infirmary, Gloucester, *vice* T. S. Ellis, M.R.C.S., resigned.

CHAVASSE, T. F., M.D., appointed Honorary Surgeon to the General Hospital, Birmingham, *vice* A. Baker, F.R.C.S., resigned.

GALLYHER, T. M., L.R.C.S.I., appointed Medical Officer to the Ballina Union.

GUEST, R. A., L.R.C.P., appointed Honorary Surgeon to the Chorlton-under Medlock Dispensary, *vice* C. Holmes, M.D., resigned.

HOWES, F. C. P., M.D., appointed Resident Medical Officer to the Lincoln General Dispensary, *vice* C. G. Dalton, M.R.C.S., resigned.

JAMES, C. A., L.R.C.P., appointed Resident Medical Officer to the Stamford Hill, Stoke Newington, and Clapton Dispensary, *vice* John Denny, L.R.C.P., deceased.

MACLEOD, M. D., M.B., appointed Medical Superintendent to the East Riding Asylum, Beverley.

MAKEHAM, P., M.R.C.S., appointed Resident Medical Officer to the Metropolitan Asylums Board, Dartford.

MUIR, W., M.B., appointed Assistant Obstetric Physician to the Glasgow Maternity Hospital.

ROW, F. E., M.R.C.S., appointed Surgeon to the St. John's and Clowance District Parish of Stoke Damerel, Devonport.

SHEPPARD, Charles E., M.D. (Lond.), appointed Resident Assistant Physician and Medical Registrar to St. Thomas's Hospital, *vice* G. Gulliver, M.A., M.B., appointed Assistant Physician to St. Thomas's Hospital.

WHITCOMBE, E. B., M.R.C.S., appointed Medical Superintendent to the Borough Asylum, Birmingham.

WHITCOMBE, P. P., M.R.C.S., appointed Assistant House-Surgeon to the London Lock Hospital, *vice* W. H. T. King, M.R.C.S., resigned.

WILSON, H. B., M.B., appointed Out-door Accoucheur to the Glasgow Maternity Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

BRUCE—CONNELL.—On December 22nd, at Hilton House, Woodside, Aberdeen, by the Rev. D. C. Boyd, of Port-oy, Alexander Bruce, M.A., M.B. (Edin.), to Annie Louisa, daughter of the late William Alexander Connell, H.E.I.C.S.

ELLIS—WEBB.—On January 3rd, at Christ Church, Mayfair, by the Rev. W. Cardall, Vicar, Heber D. Ellis, M.D., of 7, Howard Square, Eastbourne, to Frances Audrey, eldest daughter of the late Rev. Robert Holden Webb, M.A., Rector of Essendon, Herts.

MR. W. F. TEEVAN, B.A., F.R.C.S., has been elected President of the West Kent Medico-Chirurgical Society, and Honorary Member of the Medical Society of the State of New York.

DR. JOSEPH STEDMAN describes, in a recent number of the *Boston Medical and Surgical Journal*, a case of united twins, the union extending from the clavicle to the umbilicus (*Thoracopagus* of Förster). The children, both males, were delivered by forceps, and were still-born. The mother made a good recovery.

DR. MACLEOD, who for several years has ably assisted Dr. Campbell at the Carlisle Asylum (an asylum well known for its good results, and the work that has emanated from it), and who has contributed several valuable papers on subjects connected with his department of medicine, was, on January 2nd, unanimously elected Medical Superintendent of the East Riding Asylum of Yorkshire, at Beverley, in room of Mr. Whitcomb, who has been appointed to the Birmingham Asylum.

HEALTH OF FOREIGN CITIES.—The following facts and figures, derived from a table in the Registrar-General's last weekly return, afford fairly trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities. According to the most recently weekly returns received from Calcutta and Bombay, the annual death-rate in those cities averaged 36.8 and 25.5 per 1000 respectively. Cholera caused 58 deaths in Calcutta and 4 in Bombay, each showing a decline upon recent weekly numbers, and fever fatality also showed a decline. No return from Madras is published. In seventeen European cities, the death-rate averaged 28.7, and very considerably exceeded the average rate prevailing in the twenty large English towns before the recent cold weather. The death-rate in St. Petersburg, in the middle of December, was equal to 43.9, and higher than in recent weeks; the 564 deaths included 28 fatal cases of typhoid fever, and 21 of diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did not average more than 23.2, the highest being 28.1 in Christiania, where no fewer than 26 of the 65 deaths were due to an exceptionally fatal epidemic of measles. In Paris, the death-rate was equal to 28.6; 62 deaths were referred to diphtheria and croup, and 25 to typhoid fever. The rates of mortality in Brussels and Geneva did not exceed 18.9 and 21.2, although whooping-cough was somewhat fatally prevalent in Brussels. The usual return from the Dutch cities does not appear to have come to hand. The Registrar-General's table includes returns from eight German and Austrian cities, the death-rate in which averaged 28.4, and ranged from 21.7 and 23.9 in Dresden and Hamburg, to 32.5 and 38.1 in Prague and Buda-Pesth. Small-pox caused 12 deaths in Vienna, 11 in Buda-Pesth, and 7 in Prague; and diphtheria showed increased fatality in Berlin. In three of the principal Italian cities, the average death-rate was 26.7, the rate being 24.9 in Turin, 25.1 in Venice, and 28.1 in Naples; typhoid fever caused 4 deaths in Turin and 10 in Naples. In the second week of December, the death-rate in Alexandria was equal to 40.4, and the 164 deaths included 8 from typhus and typhoid fever. In four of the principal American cities, the death-rate averaged 26.2; it was 21.3 in Philadelphia, 22.0 in Brooklyn, 28.0 in Baltimore, and 28.7 in New York. Small-pox caused 14 deaths in Philadelphia and 8 in New York; diphtheria again showed excessive fatality in each of the four American cities.

KENSINGTON.—To write a summary of Dr. Dudfield's annual reports is in effect to give a history of every sanitary event of importance that has occurred throughout the kingdom during the period reported on. Nothing seems to escape Dr. Dudfield's vigilance; and, as he makes the chief sanitary topics of the day a special feature in each of his reports, the volumes (for such indeed the reports are) become invested with a value and importance out of all proportion to the ostensible object of their publication—the information of the Kensington Vestry. The various points touched upon by Dr. Dudfield have all, however, already received attention in these columns, and his remarks on general subjects do not need, therefore, more than mention and commendation. In Kensington itself there were during the year 1880 2,884 deaths, or fewer by 108 than in 1879, and 160 below the corrected decennial average. This total includes, however, all the deaths in public institutions, 99 being non-parishioners whose deaths happened in the Brompton Consumption Hospital. The death-rate was 18.0 per 1,000, or 1.1 below the decennial average. The zymotic death-rate was fairly satisfactory, 347 deaths being registered from this class of diseases, or 22 below the average. Whooping-cough was the fatal zymotic disease, 93 deaths being attributed to it. Measles were fatal in 60 cases, scarlet fever in 51, diphtheria in 27, diarrhoea in 71, and small-pox in 22; fever caused 23 deaths. An analysis of this mortality shows that the deaths from scarlet fever and diphtheria were in excess of the corrected decennial mean; that the deaths from measles and whooping-cough were average; and that the deaths from small-pox, fever, and diarrhoea were below the average. Measles were most fatal during the period from the middle of June to the middle of August, scarlet fever (of which about 466 cases were recorded), in the last quarter of the year, and whooping-cough in the first half. Diarrhoea, as usual, was most prevalent during the summer and autumn months. The deaths under five years of age numbered 1,219, or about the same number in 1879, and equal to 42.3 per cent. of total deaths, and to 26.5 per cent. of the registered births. The deaths of illegitimate children under five were 85, or no less than 47.4 per cent. of the registered illegitimate births—a result that tells a sad tale of carelessness and neglect. Phthisis caused 272 deaths, irrespective of 99 which happened in the Consumption Hospital, and chest-diseases 595 deaths. The sanitary condition of the parish was, as usual, well looked after under Dr. Dudfield's energetic management; but it is a matter of regret, however, that the parish has not yet provided itself with a mortuary.

"COLONIAL" can obtain full information as to the working of the Metropolitan Provident Dispensaries Association by communicating with Mr. Allom, Secretary, at the office of that Association, Bedford Street, Strand.

Post Office: The order should be made payable to the British Medical Association, at the West Central Post Office, Huddersfield, Yorkshire. Subscribers may send in postage stamps.

CLINICAL LECTURE ON ULCERATIVE ENDOCARDITIS, OR ARTERIAL PYÆMIA.

Delivered at Guy's Hospital.

By SAMUEL WILKS, M.D., F.R.S.,
Physician to and Lecturer on Medicine at the Hospital.

THE cases on which I wish to make a few remarks, are examples of a form of disease by no means uncommon, and now holding a well established position in the nosology; yet it is one which is still frequently overlooked, and is altogether unrecognised by some in the profession. I refer to the embolism of Kirkes, or that form of malady which I subsequently styled arterial pyæmia, and which again is now, according to the usage of foreign writers, termed ulcerative endocarditis. None of these appellations can be regarded as good, seeing that they give a too determinate meaning to the nature of a complaint which is by no means perfectly understood. It is a disease full of interest and importance, for not only is its pathology obscure, but the symptoms are often so ill-defined, that it is constantly mistaken for other complaints, and especially for the various forms of fever. During the last two months there have, I believe, been three or four cases of this disease sent to the hospital on the supposition that they were typhoid fever, and certainly, the distinguishing marks between the two maladies are most difficult to recognise. The patient is generally in a highly pyretic state, or in that condition which, in ordinary language, is styled typhoid, without presenting any characteristic symptoms, the only sign present to raise a suspicion of the true nature of the case being a cardiac *bruit*. It is this alone, in many instances, which excites a suspicion as to the nature of the case, especially when the indications of every other form of disease are wanting. The case is really one of blood-poisoning, or a form of septicæmia; the source of the infection being, as it is supposed, in the heart, or in any place near the centre of the circulation, where ulceration and vegetations exist; but whether the septic material be decomposing fibrin, or the *débris* arising from the breach on the endocardium, or whether there be any distinct infectious substance circulating through the system, is still a question.

For some years past, it has now been known that persons have died with symptoms of typhoid fever or pyæmia, and the necropsy has revealed the presence of fibrinous masses, or infarcts in the spleen and kidneys; also that, associated with these deposits, there have been vegetations on the heart; these being usually of recent formation, and situated on chronically diseased valves. But long anterior to the recognition of symptoms attendant upon these pathological conditions, the fact of the association of embolic masses or infarctions with vegetations on the valves was well known. Bright portrayed these fibrinous deposits in the kidney more than fifty years ago; and soon afterwards Rokitansky described what he called "capillary phlebitis," of organs in association with heart-disease, especially directing attention to the deposits in the spleen and kidneys, as arising from endocarditis. Kirkes, however, may be regarded as the first in this country who gave a clear account of the effects of fibrinous matter circulating in the system when washed from the valves of the heart; and held that it was productive of symptoms of blood-poisoning. He first of all gave a very lucid account of those cases where portions of fibrine of some dimensions are carried into the larger vessels, and productive of local effects, as for example, gangrene of the leg if the femoral artery be plugged, or softening of the brain if a cerebral artery be blocked; and then proceeded, but more briefly, to describe the present class, where small particles of fibrinous matter are carried into the arterioles and capillaries of organs, and so produce constitutional disturbance and fever. From this time, I have clearly recognised the existence of this disease, although I have not always diagnosed it; my earlier cases (some published) were chronic ones, of some weeks' duration, in which the paroxysms of fever were so marked and regular that these were regarded as the phenomena of ague. Of late, the examples of this disease have been more acute, resembling typhoid, rather than intermittent fever; the temperature remaining very high throughout the course of the complaint. The mistake in confounding them with fever has, no doubt, been mainly due to the late great prevalence of typhoid, which has led us to see this disease in all forms of febrile dis-

order. You may remember the rule which we lay down as to the method of diagnosis in febrile disorders. We first look for a local inflammation as the cause of the pyrexia: failing this discovery, we consider the possibility of a general or blood-disease, and look out for an exanthem. If this do not appear, we are apt to regard the case as one of typhoid; and unfortunately, we are justified in styling a case typhoid when no characteristic symptoms are present. At the same time, however, we ought to remember the possibility of blood-poisoning from a local source of self-infection, and not forget the condition known as pyæmia on the venous side, or that of ulcerative endocarditis on the arterial side of the system. Tubercle, too, should not be forgotten. In these last-named blood-diseases there are fever, rigors, and pains in the limbs, so that they closely resemble one another; although the veins in one case have taken up the septic material from the surface, and the arteries, in the other case, from the centre of the circulation. The symptoms are either very acute, like those of typhoid, or more chronic and paroxysmal, like those of ague. In the arterial case, softening embolic masses may be found in the organs, more especially in the spleen and kidneys, and vegetations discovered on the valves of the heart. Sometimes the symptoms of blood-poisoning are most profound, and warrant the expression of Virchow, "malignant endocarditis".

The term ulcerative endocarditis implies that an acute change has taken place in the endothelium, whereby the products of inflammation, including the disintegrating membrane with portions of fibrine, are carried into the circulation, and infect the whole system. It might be thought that this affection would be one of the sequences of rheumatic fever when endocarditis has occurred, but such does not seem to be the case, for it does not appear to be a common experience that septicæmia is one of the sequelæ of rheumatism. In the large majority of cases of the disease of which I am now speaking, the affection of the valves has been old, evidenced by thickening of the tissues, narrowing, or adhesions. It is upon these chronically affected valves that the recent action has taken place, and vegetations have formed. Although this has been my usual experience, I have met with instances where no chronic disease of the valves has existed, but, at the same time, there has been no evidence of a recent endocarditis of a rheumatic character. In these cases, I have questioned if the vegetations found on the valves have originated there, and been the source of the infection, thinking, probably, that the deposits on the heart were due to a previous change in the blood, and that both they and the infarcts were due to a profound alteration in the blood itself. Even should it be shown that the blood is primarily affected from the centre of the circulation, it has yet to be proved that there is, of necessity, an inflammation and ulceration of the endothelium, since, in one of the most marked cases of arterial pyæmia which I have ever witnessed, the source of infection was a small aneurysm near the mitral valve in which fibrin was disintegrating. Several years ago, in discussing this subject, I mentioned cases of scarlatina and death from burn, where fibrinous masses were found in the spleen, kidneys, and other parts, but where there was no appearance of endocarditis. It must be remembered that, if endocarditis give rise to blood-poisoning, so, on the other hand, an endocarditis may result from blood-poisoning, as witnessed in pyæmia, scarlatina, etc.

The difficulty indeed, is so considerable, in regarding an endocarditis as a source of infection, that some observers maintain the necessity of the presence of bacteria or micrococci in the vegetations, and have accordingly styled this affection "infectious endocarditis". Indeed, some German physicians have given a description of small granular bodies found in the valvular formations; and during the late congress Dr. Osler, professor at Montreal, communicated an essay in maintenance of this view. He objected to the term ulcerative endocarditis, because he had seen the disease without ulceration, and preferred the term infectious. He did not object to the term diphtheritic, because he thought it probable that analogous changes took place on the valves as are seen in other parts of the body in diphtheria; and if there were adventitious bodies present, the expression "mycosis endocardii" might be allowable. Dr. Osler exhibited drawings from a case where, in the material scraped from the tendinous cords, there were seen a number of spherical bodies which he called "micrococcus balls". If the observation of this professor, and those of others, be correct, a further question arises as to the way in which these parasitic bodies find an entrance into the body.

The disease is one of great interest clinically, for not only may the symptoms be of that general kind which may lead us to confound it with fever, but occasionally, owing to one organ being especially selected for the manifestation of the infection, the inflammation attending it may be regarded as primary, and the real nature of the complaint be overlooked. It is probable that this, in former years, was constantly occurring, as two of my late cases suggest. In the one case, owing probably to the plugging of some of the cerebral vessels, a meningitis was set up; and this, if an incomplete examination had been made, might have been

THIRD CONTRIBUTION TO THE LIFE-HISTORY OF CONTAGIUM.

By PETER MURRAY BRAIDWOOD, M.D., F.R.M.S.,

AND
FRANCIS VACHER, F.R.C.S.Ed.

THIS Third Contribution to the Life-History of Contagium, the issue of which has, from various causes, been delayed from time to time, is presented in a less complete form than was originally intended. The recorded investigations extended over a period of four years; but they were several times suspended for months together, owing to the pressure of other work or the increasing demands of private practice. As regards the subjects, they were not precisely those primarily selected by us, but such as we had an opportunity of dealing with whenever we found leisure for inquiry. Thus, an abortive attempt was made to investigate the nature and mode of propagation of the contagium of scarlatina; but, after a few experiments, yielding merely negative results, the local epidemic died out, and the inquiry had to be abandoned. Next, a study of the pathology of swine-typhoid was begun; but, after a large number of *post mortem* examinations had been made and drawings executed, an important portion of the material collected was lost on a railway journey, and the lost portion will have to be made good before the remainder can be utilised.

The reports we are in a position to submit are three; viz.:

- I. A record of experiments with vaccine lymph exposed to certain gases and vapours. This is an appendix to our previous experiments with vaccine lymph exposed to ozone and certain chemicals.
- II. Notes on an inquiry into the morphology of the contagium of measles, its mode of reproduction, and its distribution in the tissues of the infected subject.
- III. An account of an experimental research into the nature of induced septicaemia, and of a disease which presents some gross points of resemblance to it.

I.—A RECORD OF EXPERIMENTS WITH VACCINE LYMPH EXPOSED TO CERTAIN GASES AND VAPOURS.

We have already recorded, in our first and second reports, the particulars and results of our experiments with vaccine lymph subjected to the influence of ozone, quinine, salicylic acid and boracic acid, and the ordinary household disinfectants; that is to say, carbolic acid, sulphurous acid, chlorine, chloride of aluminium, liquor potassæ perman-ganatis, and Dr. Bond's disinfectants, cupralum, ferralum, and terebene. The experiments to which we have now to refer may be considered as supplemental to those previously reported; but they differ from them in this respect, that they have for their object the testing of the effects on lymph of certain gases and vapours not usually termed disinfectants, or used as therapeutical agents in the treatment of zymotic diseases.

In the first place, the undoubted power of ozone to impair, and, if maintained long in contact, to destroy, the activity of lymph, suggested to us that oxygen might exert a similar influence; and we accordingly resolved to make an extended trial of lymph modified by being submerged in oxygen for varying periods of time. In ozonising vaccine, we had exposed it in a watch-glass to a stream of ozone generated by electricity, or in a closed vessel containing oxidising phosphorus; but how to introduce vaccine into a vessel containing oxygen was a far more difficult problem, and we were at some pains to arrange an apparatus for effecting the required exposure. An ordinary glass bell-receiver, fitted with a chambered stopper, was provided, and the chamber was carefully lined with cork. Into this lining were stuck three ivory points just charged with fresh lymph, and a piece of glass on the surface of which three tubefuls of fresh lymph were blown. The receiver was then immersed in a pneumatic trough, the stopper replaced (care being taken that the water did not touch the charged points or glass), and oxygen generated into the receiver. The gas was obtained from chlorate of potash; but, there being no black oxide of manganese at hand, it did not come off very freely, and we had to be content when the vessel was barely half-full. After two days (forty-eight hours), the stopper was removed, and the experimental vaccination of two subjects attempted. A child was inoculated in three places with the lymph on the piece of glass; and another child, also in three places, with the

charged ivory points. When the children were examined on the eighth day, it was found that vaccination in the first case had entirely failed, and in the second had produced three good vesicles. The child whose vaccination had failed was on the same day vaccinated with fresh lymph collected on a glass slip; and this not only succeeded at the three spots attempted, but developed two supplementary vesicles. These results were somewhat puzzling, especially as all the lymph exposed had been taken at the same time and from one subject. Both infants were proved to be susceptible: why had the experimental vaccination succeeded in one and failed in the other? Could it be that the lymph on the vitreous surface had been wholly within the influence of oxygen, and the lymph on the porous ivory only partially reached by the oxygen? This appeared to us the only possible explanation, and we accordingly concluded henceforth to make use of glass only for exposing lymph. The thin glass discs used as covers for microscopic preparations at once occurred to us as well suited to our purpose; and, in exposing vaccine to oxygen and some other gases and vapours, we made these discs the contagium-carriers. The precise method of procedure was as follows. Slits were cut in the cork lining of the chambered stopper, and into these two or more clean new covers were inserted. Fresh lymph, gathered with capillary tubes, was then blown on the covers. As the covers occupied very little space, when the receiver was plunged in the pneumatic trough, the water was allowed almost up to the stopper, so that the proportion of air mixed with oxygen was inconsiderable. The gas was generated from chlorate of potash as before; but a little black oxide of manganese was added, and care was taken to fill the receiver. Three tubefuls of fresh lymph was the charge for each cover, and each cover was used for the experimental vaccination of one subject. One cover was exposed to oxygen for seven days; four covers were thus exposed for five days, three for two days, and two for one day. In each of the subjects vaccinated, the lymph was inserted at three places; the scarifications were made with a clean lancet kept for the purpose; and the covers were used to apply the lymph. All these experimental vaccinations failed; and, on subsequent vaccination, all but two succeeded. The oxygen being delivered from a heated flask, we wished to be quite certain that its temperature had nothing to do with its effect on the lymph. On one occasion, therefore, when exposing three covers, we inserted in the lining of the receiver-stopper a small clinical thermometer. It stood at a little below 90° Fahr.; and, although the gas was played upon it, it did not rise one degree. Lymph from the same source as that exposed was in each instance tested by being used for vaccinating, so that the activity of every tubeful up to the time when it was immersed in oxygen is beyond dispute. Thus, out of twelve experimental vaccinations with vaccine exposed to oxygen, but one was successful; and in this case, as has been stated, there is reason to believe the exposure was imperfect.

Carbonic Oxide being a gas singularly inimical to even low forms of animal life, its effects on vaccine lymph seemed to us an interesting subject for study. If this type of contagium should prove able to resist the poison, it would be evidence of its possessing a vitality more persistent than the organisms with which it is assumed to be allied. If, on the other hand, the specific properties of the vaccine, as tested by its results when inoculated, were found to be destroyed by the poison, it would be *pro tanto* evidence of its being, if not exactly a protozoon, at least something higher than protoplasm. We do not wish to press this, as we are well aware that facts may be as readily made to appear in favour of one theory as another; but, in any case, the behaviour of vaccine after being exposed to carbonic oxide is deserving of investigation, and forms a necessary part of an inquiry into the conditions of life of contagia.

The bell-receiver used in the experiments with oxygen was again made use of. Into the cork lining the stopper were stuck two glass covers, and three tubefuls of fresh lymph were blown on each *in situ*. The receiver was then plunged into a trough, and the stopper replaced. Carbonic oxide was then generated from yellow ferrocyanide of potassium and sulphuric acid. The vaccine remained in the gas twenty-four hours; and two children were then vaccinated, each at three points. They were examined on the eighth day, when it was found that all the points of insertion had failed. Both children were forthwith revaccinated, and with success. Six tubefuls of lymph were then exposed on covers, in the same manner, for twenty-four hours; and, on vaccinating two subjects from them, one succeeded at all the points of insertion, and the other at two out of three points. Another six tubefuls of lymph were exposed, on two covers, for twenty-four hours; and with this lymph two children were vaccinated each at two points. One child succeeded at one point only; and the other wholly failed, and was forthwith revaccinated successfully. A fourth sample (six tubefuls) of fresh lymph was exposed on two covers as before, but for three days. The vaccination of two children with

TABLE.

No.	Initial Subject.	Sex.	Age.	Gas or Vapor in which exposed.	Age of Lymph when Exposed.	Age of Lymph when Used.	No. of Points Vaccinated.	Result.	No. of Points Revaccinated.	Result.	REMARKS.
1	P. H.	M.	4 y.	Oxygen	Fresh	2 days	3	Failure	3	3 succeeded	
2	G. G.	M.	11 y.	Ditto	"	"	3	3 succeeded	3	3 succeeded	
3	M. N.	F.	2 y. 3 m.	Ditto	"	7 "	3	Failure	3	3 succeeded	
4	J. M.	M.	"	Ditto	"	5 "	3	"	3	Failure	
5	M. M.	F.	7 m.	Ditto	"	"	3	"	3	2 succeeded	
6	J. L.	M.	2 y.	Ditto	"	5 "	3	"	3	2 "	
7	H. M.	M.	4 y.	Ditto	"	5 "	3	"	3	3 "	
8	M. M.	F.	7 y. 6 m.	Ditto	"	2 "	3	"	3	3 "	
9	T. B.	M.	5 m.	Ditto	"	2 "	3	"	3	3 "	
10	C. C.	M.	2 y.	Ditto	"	2 "	3	"	3	2 "	
11	F. W.	F.	1 y. 4 m.	Ditto	"	1 day	3	"	3	Failure	
12	T. L.	M.	3 m.	Ditto	"	1 "	3	"	3	2 succeeded	
13	E. H.	F.	2 m.	Carbonic oxide	"	1 "	3	"	3	2 "	
14	T. T.	M.	2½ m.	Ditto	"	1 "	3	"	3	2 "	
15	E. D.	F.	11 m.	Ditto	"	20 hours	3	3 succeeded	3	3 "	
16	T. D.	M.	7 y.	Ditto	"	20 "	3	Failure	3	2 succeeded	
17	W. C.	M.	11 m.	Ditto	"	1 day	3	1 succeeded	3	1 "	
18	H. S.	M.	3 m.	Ditto	"	1 "	3	Failure	3	Failure	Revaccinated at 3 points, and 3 succeeded.
19	E. N.	F.	6 m.	Ditto	"	3 days	3	Failure	3	Failure	Revaccinated at 3 points, and 2 succeeded.
20	E. W.	F.	2 m.	Ditto	"	3 "	3	3 succeeded	3	3 "	
21	S. M.	F.	3 m.	Carbonic acid	"	3 hours	3	3 succeeded	3	3 "	
22	B. D.	F.	7 m.	Ditto	"	1 day	3	2 "	3	2 "	
23	G. M.	M.	5 y.	Ditto	"	2 days	3	Failure	3	3 succeeded	
24	G. G.	M.	11 y.	Ditto	"	2 "	3	Failure	3	3 "	
25	P. H.	M.	4 y.	Ditto	"	2 "	3	"	3	Failure	
26	L. R.	F.	2 y.	Hydrochloric acid	"	4 "	3	"	3	2 succeeded	
27	J. C.	F.	5 m.	Ditto	"	4 "	3	"	3	2 "	
28	A. B.	F.	3 m.	Ditto	"	2 "	3	"	3	3 "	
29	J. W.	M.	3 m.	Ditto	"	1 day	3	"	3	2 "	
30	A. D.	F.	2½ m.	Ditto	"	1 "	3	"	3	2 "	
31	E. T.	F.	3 m.	Ditto	"	1 "	3	"	3	Failure	Revaccinated at 2 points, and 1 succeeded.
32	J. C.	M.	3 m.	Ditto	"	1 "	3	"	3	3 succeeded	
33	E. J.	F.	4 y.	Ditto	"	2 hours	3	"	3	3 "	
34	L. D.	F.	15 y.	Camphor	"	50 "	3	1 succeeded	3	1 "	
35	J. N.	M.	5 m.	Ditto	"	50 "	3	"	3	1 "	
36	J. D.	M.	3 m.	Ditto	"	1 day	3	"	3	1 "	
37	F. D.	M.	3 m.	Ditto	"	2 days	3	"	3	1 "	
38	A. G.	M.	2½ m.	Ditto	"	2 "	3	"	3	1 "	
39	C. W.	F.	3 m.	Ditto	"	2 "	3	Failure	3	1 succeeded	
40	J. M.	M.	5 m.	Ditto	"	7 "	3	"	3	1 "	
41	S. B.	M.	2½ m.	Ditto	"	7 "	3	"	3	1 "	
42	H. N.	M.	7 m.	Ditto	"	4 "	3	3 succeeded	3	3 "	
43	H.	—	3 m.	Ditto	"	5 "	3	1 "	3	1 "	
44	J. C.	F.	7 m.	Chloroform	"	4 "	3	Failure	3	1 "	
45	H. S.	M.	1 y. 1 m.	Ditto	"	1 day	3	"	3	2 succeeded	Success of revaccination could not be ascertained.
46	F. U.	F.	4 m.	Ditto	"	1 "	3	"	3	2 succeeded	
47	T. S.	M.	3 m.	Ditto	"	6 hours	3	"	3	1 succeeded	
48	L. K.	M.	3 m.	Ditto	"	3½ "	3	"	3	1 succeeded	
49	M. D.	M.	3 m.	Ether	—	2 days	3	"	3	1 "	
50	C. R.	F.	3 m.	Ditto	—	1 day	3	"	3	3 "	
51	J. D.	M.	3 m.	Ditto	—	1 "	3	"	3	3 "	
52	E. P.	F.	2 m.	Ditto	—	1 hour	3	"	3	3 "	
53	M. S.	F.	2½ m.	Ditto	—	1 "	3	"	3	3 "	

THE ETIOLOGY OF ENDEMIC GOITRE.

By R. BRUCE LOW, M.D. Edin., S.Sc.C. Camb.,
Medical Officer of Health, Helmsley Rural Sanitary District, Yorkshire.

It is my lot to live in a locality where goitre is of common occurrence. I have lately taken notes of the cases I have seen; up to the present, the number is two hundred and sixty. This fact establishes the endemicity of the disease in the district. It was natural that I should turn to my books for information regarding the origin of this peculiar complaint. To my surprise, the more I looked into the literature of the subject, the more puzzling and perplexing did the matter become. My medical brethren, too, seemed to hold contradictory opinions. For this unsatisfactory state of the etiology of goitre, there must be a cause. A great philosopher once said that, if we wish to penetrate the mysteries of Nature, we must observe patiently, experiment cautiously, and generalise slowly. It appears to me that (1) medical men in goitrous districts have not observed patiently, if, indeed, they have troubled themselves to observe at all; on the other hand (2), writers on goitre have generalised far too quickly; and (3) experiments have not been attempted, except on a very small scale. The result is our present incomplete knowledge of the subject. No doubt there are great difficulties to overcome. The thyroid gland, even in health, presents a puzzle to the physiologist; its function is not yet clearly made out. It is possible that a study of its morbid conditions may throw some light on the question. To add to the general fund of knowledge should be the ambition, if not the positive duty,

of every practitioner who resides in a district where goitre is endemic. It is important that all his facts should be carefully observed and accurately recorded. It is only by the accumulation of these that, in the course of time, the true etiology will be built up. No single observer can hope by himself to solve the mystery. The rural practitioner especially, who has often the best opportunities for watching and noting obscure diseases, must be content to contribute the raw material, leaving the rest of the work to the skilled hand of the well-trained master. It is impossible for the general practitioner to find time for diving deeply into the sciences of geology and chemistry, without which the true origin of goitre cannot be traced to its source. The physician, the geologist, and the chemist must combine in the work. There is no lack of material; the difficulty is to find workers.

From inquiries I have made, I find that goitre is endemic in twenty-seven English counties; it is also found in various parts of Scotland and Ireland; in nearly every country in Europe it exists; it is common in many parts of Asia, Africa, and America—in hot and in cold countries, in moist and in dry climates, by the seashore and inland, by lakes and rivers, on plains, in valleys, and on high mountains. It has even been developed, so it is said, in a ship's crew in mid-ocean; it appears alike in the burning Sahara and in the frozen regions of the far North. With such an almost universal distribution, it is the more remarkable that there should still be this vagueness regarding its etiology. I have, during my recent studies, met with nearly fifty different theories of the origin of goitre.

Before contributing the facts I have collected, it may not be out of place, with a view to the better understanding of the subject, to refer briefly to some of the principal theories found in text-books and elsewhere. Some have expressed surprise at the idea of goitre being pre-

[illegible]

Between 1900 and 1905, at the University of Michigan, following Paulsen, that a sound of music in the human brain, and hence belief in the transcendental, spiritual, and emotional aspects of the process of thought, was a thing of the past.

wooded ravines, which impart a picturesque beauty to the scene. The highest point in the district is nearly 1300 feet above the sea-level; and here, in a hamlet close by, I have found cases of goitre. The villages are met with in three situations: (1) on the mountainous moorland; (2) in the wooded valleys; and (3) on the fertile plain—in all, goitre is to be found. The district may be said, geologically, to stand on the middle and upper oolitic formations. The plain consists of alluvium, upon Kimmeridge clay, in which iron pyrites is found. The hills are mostly tabular, and consist of Kellaways rock, Oxford clay, and calc grit. In one valley alone, at the extreme western boundary of my district, is the lias formation met with. The remaining geological details (for which I am indebted to Mr. C. Fox Strangways, F.G.S., of Her Majesty's Geological Survey) are given shortly in the following statement (from *Memoirs of the Geological Survey*, 96, S.E.).

The following are the geological formations which occur in the district:—*Recent and Post Glacial*: Alluvium; warp and lacustrine clay; sand and gravel.—*Glacial*: Boulder clay and gravel.—*Upper Oolites*: Kimmeridge clay.—*Middle Oolite*: Upper calcareous grit; coral rag and upper limestone; middle calcareous grit; lower limestone; passage beds; lower calcareous grit; Oxford clay; Kellaway's rock.—*Lower Oolites*.—*Lias*.

Those geologists who have studied the distribution of goitre have remarked its entire absence on the oolitic formations. Mr. Lebour (*On the Geological Distribution of Endemic Goitre in England*, by G. A. Lebour, M.A., F.G.S., Professor of Geology, University of Durham College of Science, Newcastle-on-Tyne) has, among other interesting details, drawn attention to the absence of goitre on the oolites. It is said that the Yorkshire oolites differ in composition from, although they are geologically the same as, the oolites of the South of England. Dr. St. Lager, in his work already referred to, speaks also of the absence of goitre on the oolitic formations in France. Goitre is said to be of rare occurrence on the lias; but in the valley I have just spoken of it is quite common. In justice to Dr. St. Lager's theory, I may say that iron is found in many parts of the district; and at one place there are two iron and two sulphur springs rising together within a few yards of each other. These springs are of great depth, and do not represent the drinking-water of the locality, but are used by invalids for medicinal purposes.

[To be continued.]

NEW CONVERTIBLE STETHOSCOPE.

By JOHN WARD COUSINS, M.D.Lond., F.R.C.S.,

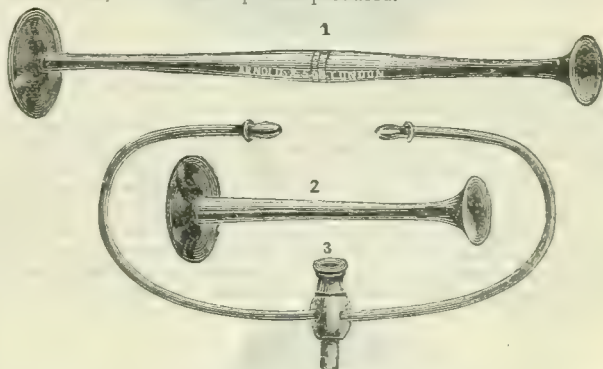
Surgeon to the Royal Portsmouth Hospital, and late Resident Surgeon to the City of London Hospital for the Diseases of the Chest.

THE new stethoscope, which I beg to introduce to the notice of the profession, is a very simple contrivance, possessing the advantage of the double and single instruments in combination. The single stethoscope is now made in many forms, and with a variety of materials; still there exists a general preference in favour of the old-fashioned wooden instrument. At the present time, it is almost universally used by practitioners; and, no doubt, it serves, in a vast majority of cases, every purpose for correct diagnosis. But the practical question arises: Why is the single instrument so generally employed, instead of the double stethoscope? The preference, however, appears to me capable of very ready explanation. The double stethoscope, in the form in which it has hitherto been presented to the profession, since its introduction by the late Dr. Leared, is a somewhat costly instrument, and certainly less portable than the ordinary wooden tube. Few medical men are inclined to carry two forms of the same instrument, especially when one has been used habitually and successfully for many years. Moreover, the introduction of the ear plugs of the binaural stethoscope into the auditory canal sometimes causes uneasiness and discomfort, and this is frequently observed when they are supported in position by an elastic band. The external meatus is of very variable capacity in different individuals, and this important fact is often overlooked. It is essential that the plugs be perfectly adapted to the size of the canal: for, when they are too large, they cannot be retained; and, when too small, they occasion unpleasant sensations and friction-sounds in the ears. These inconveniences, however, are only temporary, and can be readily overcome by frequent practice with a well selected instrument.

The double stethoscope presents many special advantages in the physical examination of the chest. Two ears are certainly better than one for discriminating sounds, just as two eyes are better than one for purposes of vision. It is often important, for the sake of accurate diagnosis, to hear sounds emanating from a region of the chest with two ears simultaneously; and the value of the binaural stethoscope is very

evident in distinguishing obscure and feeble sounds, and also in defining the precise seat of their greatest intensity. The double stethoscope is certainly the best instrument for the student. It is a good plan to commence the study of auscultation with both ears, for this renders a practical acquaintance with the details more easy. The auditory power is very variable among different individuals, especially an acuteness of hearing for recognising low and feeble sounds; and experience proves that this power of ready discrimination is far more effectively cultivated with two ears than with one. By the same means, too, the faculty can always be improved and sharpened; and, with those who have long confined themselves to the use of the single instrument, and who have hitherto had no confidence in the binaural, it will be a great help to conduct an examination by the aid of both instruments alternately. A comparison between the auditory impressions can be thus readily obtained, the old prejudice will soon be dissipated, and the great advantage of using both ears fully recognised. I have often heard my friends remark, that "they do not like the double stethoscope"; but this dislike has been generally associated with no real effort to learn its great practical value. It is admitted by all accomplished auscultators to possess many advantages; and I am bold enough to express the opinion that it will, before long, take the place now occupied by the old-fashioned tube.

The "convertible stethoscope" is a very simple arrangement for promoting the practical study of auscultation with both the single and the double instrument. It consists of a flat ear-piece; a shaft, nine inches in length, separable into two parts; and a flexible tube, with perforated wooden ear-plugs. These separate parts are all adapted to each other by the same simple joint; so that, by fitting them together in different combinations, four stethoscopes are produced.



1. An ordinary short stethoscope (Fig. 2), which is especially serviceable for the dorsal examination of patients confined to bed.

2. A long single stethoscope, adapted for subclavicular auscultation (Fig. 1). This form of instrument is often very useful in practice; for, by its length, the head is kept away from the face of the patient, and it also prevents uncomfortable stooping over the bed.

3. A double stethoscope (Fig. 3). The shaft of the short single tube completes the instrument. The ear-plugs are retained in position, without pressure, by adapting them to the size of the external auditory canal, and not by fixing them in the ears, as in the ordinary binaural, by means of an elastic band attached to the ear-tubes. This method removes at once some of the most common objections raised against the instrument. It prevents the uneasy sensation of pressure in the meatus, and also the friction-sounds which are often so perplexing to the student. The ear-plugs, moreover, are made in several sizes, to suit the varying capacity of the canal; and this is a little practical matter very necessary to remember in selecting an instrument. This will be found a very handy form of stethoscope. The chest-sounds can be examined with both ears, and then again with either ear alternately, by simply compressing the elastic tubes between the finger and thumb; in this way, the single and double auditory impressions may be conveniently compared and studied.

4. A double stethoscope, with an auxiliary cranial conductor. The conductor is formed by placing the end of the long shaft between the teeth, or on the forehead. In the latter method, the ear-piece is fixed on the shaft, for the purpose of increasing the area of the conducting surface. (Figs. 4, 5.)

The value of this additional channel for the purposes of auscultation can be very readily estimated by experiment. I have employed it for many months; and, it is my opinion, that the sonorous continuity of the cranial bones and auditory nerves may be utilised, as an auxiliary channel, during many kinds of physical examination. It gives a re-

markable clearness and distinctness to the auditory impressions; it assists in the definition of many feeble sounds; and it is particularly useful in the diagnosis of cardiac disease. The utilisation of this channel to increase the auditory impression, is theoretically correct. It is a well-known fact that vibrations, thus conveyed, not only produce an effect independently of the tympanic apparatus, but also that they appear to become intensified by an obstruction to the transmission of sound-waves through the middle ear, caused either by aural disease or by intentional plugging of the meatus. Now, when the double stethoscope is used in conjunction with the auxiliary conductor, the ears are in the most favourable condition for the reception of sonorous impressions in



Fig. 4.

this direction, as the canals are artificially plugged by the instrument itself. The activity of the tympanic apparatus, however, is not interrupted by this condition; for, when vibrations are transmitted through both routes at the moment, they react favourably upon each other; and the artificial obstruction of the canals, while increasing the direct cranial conduction, also intensifies the whole auditory impression. There may be considerable individual differences as to the susceptibility of the labyrinth for feeble vibrations, excited directly through the skull, and these variations may be detected without any apparent aural defect; still instances, in which persons of normal hearing power find a difficulty in appreciating auxiliary conduction, will be extremely rare,



and will always be removable by a little trouble and practice. The method of winning the nervous continuity of the skull and the auditory nerve, will prove a valuable aid to any who labour under unilateral tympanic disease. Sound, transmitted through the conducting apparatus of the middle ear, produces a greater effect upon the organ than when conveyed through any other medium; still, when the tympanic apparatus is diseased, the vibrations of a solid body, in contact with the cranium, are heard distinctly louder on the injured side. This effect, which is constantly observed in chronic aural affections unaccompanied with disease of the bony structures, is caused by the repeated reflection of the waves of sound in their outward passage from the tympanum towards the meatus. The auxiliary conductor will thus form a very serviceable addition to the double stethoscope, for those auscultators

who are unfortunately injured in the conducting apparatus of one ear. Under this condition, the ordinary channel of sound is obstructed, still the vibrations are not lost, but are utilised by direct transmission to the auditory nerve; and, in this way, they materially intensify the sensation received by the sound organ.

5. The convertible stethoscope is capable of another modification. It can be used as a differential stethoscope, by substituting two elastic chest-tubes for the single chest-piece. The double tube, introduced by Dr. Scott Alison some years since, is now used by many experienced auscultators in the diagnosis of cardiac disease. By its aid, sounds proceeding from two distant parts can be conveniently distinguished and examined, and a comparison obtained between any two points on the surface of the chest. Sounds are thus distinguished and separated by the ear, their position defined, and their relation to each other determined, both as regards character and time. It is a good plan to examine both points of the chest simultaneously, and then alternately; and also to obtain single and double impressions of the different sounds. For all the purposes of accurate definition and refined auscultation, the differential stethoscope is a very valuable instrument; but its application requires careful study.

In conclusion, I beg to express the hope that the convertible stethoscope may prove of value to some of my professional brethren. It is a very portable instrument, of few separate pieces, although it admits of many combinations; and I trust it will help the hardly pressed student of the present day to educate his ears, and obtain a practical knowledge of one of the most useful branches of our science. The instrument is made by Messrs. Arnold and Sons, of West Smithfield, and is supplied in a small case, so that it can be carried in the pocket very conveniently, and with more safety than the ordinary stethoscope.

IS SALICYLIC ACID A SPECIFIC FOR ACUTE RHEUMATISM?

By P. W. LATHAM, M.D., F.R.C.P.,

Downing Professor of Medicine in the University of Cambridge; Physician to Addenbrooke's Hospital.

IN the courteous replies to the above question given by Dr. Strange and Dr. Lewis Shapter in the JOURNAL for December 24th, some doubt is expressed as to the meaning that should be attached to the word "specific". In my short note of December 10th, I certainly did not refer to the acid as "an infallible remedy for the cure of a disease", but limited its curative powers by the statement, that I regarded it as much a specific for acute rheumatism as quinine is for ague. There are remedies, says Stillé, "which may with propriety be called specifics, because each one presents peculiarities depending upon its essential nature or upon its association with an element possessed of specific powers. The most important article of this class is iron." (Stillé's *Therapeutics*, 4th edition, vol. i, page 448.) He then mentions cinchona and willow barks, saying, that the specific properties of the latter are "very feeble and, indeed, according to some, do not exist at all." In this sense I used the term "specific" in my question. Dr. Strange applies the same meaning to it, and answers the question in the affirmative.

Whilst, however, by no means maintaining that salicylic acid is an "infallible remedy", I regard it as something more than an "antidote". In my opinion it acts, not by neutralising or eliminating the poison (? lactic acid) which gives rise to the symptoms of rheumatic fever, but by actually preventing the excessive formation of the poison. In a communication which I made to the Cambridge Medical Society in November 1880, I forestalled the inquiry with which Dr. Shapter closes his remarks; for I then endeavoured to show that quinine and salicylic acid differ very essentially in their action: the first lowering temperature by simply impeding the carrying of ozone from the lungs to the tissues by the red blood-corpuscles, as in Land's experiments with emulsified turpentine and guaiacum—and passing out of the system almost entirely unchanged; the other undergoing chemical change in the body, and being eliminated, in part at least, as salicylic acid. That this is only part of the change is shown by the fact that, when benzoic acid (which undergoes a similar change in the system into hippuric acid) is administered, it produces little or no effect. Salicylic acid, however, can be readily oxidised into formic and carbonic acids, which is not the case with benzoic acid; and this may help to explain the difference in their action.

The theory which I hold with regard to the pathology of acute rheumatism may be summarised into the following points.

1. A nervous centre exists, which controls the nutrition of the muscular and other tissues, and which has been termed the "inhibitory chemical centre".

2. The action of cold, on some individuals, by lowering the power of this centre, modifies the nutrition of the tissues, and leads to the excessive formation of lactic acid and other products.

3. The presence of lactic acid in abnormal amount in the blood produces functional change in the medulla oblongata and the spinal cord (? posterior columns) when brought into contact with them, and develops the local symptoms of acute rheumatism in a manner similar to the production of the symptoms of locomotor ataxy, with its arthropathies, by organic change.

4. If the portion of the medulla oblongata in the neighbourhood of the origin of the vagus is a point of minimum energy, either hereditary or acquired, then, according to the particular fibres involved, may cardiac, pulmonary, or pleuritic complications be developed during an attack of rheumatism.

5. Salicylic acid combines with the antecedents of lactic acid, and so prevents its formation.

6. If the administration of the remedy be suspended after the symptoms are relieved, and before the "inhibitory chemical centre" has recovered its tone, a relapse will certainly take place.

Such a theory explains, moreover, the necessity for giving at the commencement, at least, of the treatment, as much of the remedy as the system will bear.

I hope before long to be able to prove, more conclusively than I did a year ago, the truth of these propositions, and to indicate more accurately the chemical changes which take place in the nutrition and disintegration of muscular tissue. The object of my note, however, of December 10th, was not to raise a discussion on these points, but to suggest that the effects of the true and the artificial salicylic acids are not identical; and that where the head-symptoms have been alarming, or much gastric or intestinal irritation has been produced, or where the remedy has failed, after the administration of a sufficiently large dose, to give relief, these results were due, not to the true acid, but to that artificially prepared, and possibly more or less contaminated with carbolic acid, paraoxybenzoic acid, or other impurities.

CLINICAL MEMORANDA.

NERVE-STRETCHING IN ACUTE TETANUS.

As the real value of nerve-stretching in acute tetanus has yet to be proved, I would remark that a correct estimate cannot be arrived at from such cases as that referred to by Mr. Henry E. Clark in the JOURNAL of January 7th, 1882.

The medicinal treatment adopted by Mr. Clark was too active to permit any conclusion in favour of the operation. Calabar bean has more than once been credited with success in tetanus, and this drug was given in Mr. Clark's case immediately after the operation, in doses of 20 minims of the fluid-extract every twenty minutes, and continued in the same dose every hour through the two following days. Subsequently, morphia suppositories in half-grain doses and chloral-hydrate were administered. It should, besides, be noted that Mr. Clark's case was one which by many would be considered chronic from beginning to end; chronic in its mode of onset, in the mildness of the spasms, and in the duration of the disease. It is true that, after an interval which followed the operation, the spasms were frequent and the temperature rose to 103°. But the acuteness of tetanus is in proportion to the frequency, the violence, and the prolongation of the spasms, not to the frequency of slight spasms; whilst febrile excitement is no essential part of the disease. Dr. O'Beirne (as Mr. Poland repeats) saw 200 cases of tetanus without one being accompanied by fever.

Mr. Clark's patient, however, had only one "severe and prolonged spasm" throughout the attack, and that was just after the nerve-stretching. It was when this occurred that the Calabar bean treatment was commenced, and, after the administration of this drug, there was a cessation of all spasms for twenty hours. Further, there is the objection to Mr. Clark's case which was raised against Dr. Eben Watson's and my own, viz., that all the nerves of the part affected were not derived from the trunk stretched; and the branch which came from another source was not divided.

If I rightly understand Mr. Clark, he now puts forward his case as the first successful one in Great Britain of acute tetanus cured by nerve-stretching. But in his original paper he states: "I am inclined to take a very moderate view of the part taken by the operation in the cure of the patient. . . . Thereafter" (that is, after the commencement of Calabar bean and the lull in the symptoms) "the course of the disease was much the same as if no operation had been performed, and the recovery cannot therefore fairly be attributed to it."

HENRY MORRIS, London.

INTESTINAL STRICTURE.

THE following case well exemplifies the obstacles which the practitioner has to surmount in arriving at a correct diagnosis in cases of intestinal obstruction.

J. M., aged 38, a pale emaciated man, first came under my notice in May 1880, when he was admitted into the St. Marylebone Work-house Infirmary, suffering from great distension of the abdominal walls. He complained of very little pain, beyond the inconvenience which the considerable distension caused, and at times he had a feeling of sickness with occasional vomiting. The vomit consisted of the gastric contents very much tinged with bile. He defecated every third or fourth day, and then with great difficulty, the evacuations being thin and watery and occasionally coloured slightly with blood, after which he said he always felt better. Abnormal resonance was obtained all over the abdominal area, but no dulness anywhere, neither could any tumour be discovered by palpation. On digital examination of the rectum, the parts were found healthy and normal. Thinking, from the absence of any other symptoms, that a fecal accumulation existed somewhere, he was given aperients, and an enema of soft soap was administered with very good effect, as he gradually got better and took his discharge some two months afterwards. At this time the distension had almost completely disappeared. In February 1881 he again put in an appearance suffering from the same complaint. The same remedies were again resorted to, but with no beneficial result, although the bowels acted every third or fourth day. It was then thought that there might be some atrophic changes taking place in the muscular walls of the bowels, and tonic medicines were given him, and the following was given thrice daily for some time. R. Tinct. ferri perchlor. ℥xv; liq. strychniæ ℥iv; sp. th. chlor. ℥x; aquam ad 3i. For a short period he made a slight improvement, but it was only temporary. After he had been taking this medicine for about two months I found him one morning in a "tetanic convulsion", which in every way resembled that which would result from strychnia poisoning. From this he never rallied, dying four days after. The *post mortem* revealed a very rare and abnormal condition of the lower part of the sigmoid flexure of colon.

The contracted portion of intestinal canal was so small, that a small probe could only be just passed through it. The surrounding tissues, as well as the intestinal walls, were perfectly healthy, exhibiting no signs of old or recent inflammation, neither were they thickened by any new growth; in fact, there were no apparent signs of any disease beyond the abnormal contraction. The conclusion I arrived at was that it was congenital.

H. BOYLE RUNNALLS, Leavesden Asylum.

THERAPEUTIC MEMORANDA.

THE TREATMENT OF PSORIASIS BY NAPHTHOL-OINTMENT.

A SHORT time since Professor Kaposi of Vienna advocated the advantages of a new remedy in the treatment of skin-diseases, namely, the so-called beta-naphthol. To quote from an abstract from his paper published in the *Medical Times and Gazette* of June 4th, he states that, "in psoriasis a ten per cent. ointment produces the same effect as a chrysarobin (chrysophanic acid) ointment without the discoloration caused by this." Desirous of testing this assertion, I procured some beta-naphthol, and began using it in an extensively spread and well marked case of psoriasis occurring in a boy aged 12, who had been affected with the disease continuously for eleven months.

On September 22nd, I commenced with the use of an ointment of about the strength recommended by Dr. Kaposi, namely a 12 per cent. ointment, but finding that, by October 1st, it had by no means produced the effect that a 12 per cent. chrysophanic acid ointment would have by that time produced, I doubled the strength of the ointment over the tougher parts of the skin, using a 25 per cent. ointment to his back, and a ten per cent. ointment to the other parts. On October 7th, he had scarcely improved at all. I therefore now employed to his back a 35 per cent. ointment, and finding this tolerated, I, on October 8th, used a 50 per cent. ointment; the 10 per cent. ointment being continued as before to the other parts. On October 15th, I found that on some patches, or rather on some parts of some of the patches, the ointment had produced vesication; the other parts of the same patches, and the other patches, exhibited a brighter red colour than is natural to the disease, but were otherwise unchanged. The boy was extremely sore over the various places where the ointment had blistered him. I therefore stopped the use of naphthol-ointment, and ordered a weak acetate of lead ointment.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

MIDDLESEX HOSPITAL.

CASE OF PNEUMONIA TREATED BY COLD BATHS: EARLY
DEFERVESCENCE.

(Under the care of Dr. FINLAY.)

JOHN D., aged 17, by occupation an errand-boy, was admitted on July 22nd, 1881. His family history presented no points of importance. With regard to personal history, it was noted that he had had measles at the age of three, and been troubled with sore eyelids ever since; and that he had suffered from an abscess on the left knee when seven years old. It was stated that a fortnight before admission he complained of a slight pain in the left lumbar region, which passed up the chest to the left shoulder, but was not constant. He continued at his work up to the evening before admission. On July 22nd, about 6 A.M., he was taken with severe pain of a "catching" kind in the left side of his chest, for which he was brought to the hospital. On the way, he had a severe rigor. On admission, he was described as a strumous-looking lad with sallow complexion, complaining of headache, and of pain on deep inspiration in the left side of the chest. The temperature was 101° ; the pulse 102, full and bounding. The respirations were 28. The tongue was moist, and slightly furred. The skin was hot and pungent. The thorax was well formed, and resonance and breath-sounds were normal; the heart-sounds were also normal, as well as the abdominal organs.

At 8 P.M., his temperature was found to have reached 105° ; and, as this was the one outstanding symptom in the case calling for active treatment, he was put into a bath, at a temperature of 80° , for ten minutes. In an hour, his temperature had fallen to 103.4° ; but at 10 it had risen to 104° ; and at 11 to 105° ; when the bath, at a temperature of 75° , was again used for ten minutes. In half-an-hour, his temperature had fallen to 103° .

July 23rd. At 1 A.M., his temperature was 103.4° ; pulse 120; respirations 38. He was then given ten grains of quinine, which he immediately vomited. At 5 A.M., the temperature was 104.2° ; at 8 it had fallen to 101.4° , and two hours later it stood at 105° . On examining the chest then, a patch of impaired resonance, about the size of the palm, was found about the middle of the left lung posteriorly, over which were heard tubular breathing, bronchophony, and some fine crepitation. His urine had a specific gravity of 1027, and was acid and free from albumen; the chlorides were apparently in normal quantity. He now commenced to expectorate faintly rusty sputa. At 1 P.M., the temperature being 105.2° , he was for the third time put into the bath, and allowed to remain for ten minutes. An iced-water coil was also applied to the left side of the chest, and he was ordered three ounces of brandy daily, and a mixture containing ether and carbonate of ammonia. The bath reduced his temperature by three degrees; but by 6 P.M. it had risen again to 104.4° , falling by 9 P.M. to 102.2° . In the evening, the pain in the side was much less; but the cheeks were flushed, and the tongue dry and brownish.

July 24th. The tongue was this morning moister, and the cheeks were less flushed. The temperature was 102.6° . At 8 P.M., he was sleeping comfortably; the temperature being 102.6° , and the respirations 32.

July 25th. At 10 A.M., the temperature was 102° ; pulse 100; respirations 32. The urine was found to contain a trace of albumen, and the chlorides were considerably diminished. In the evening (6 P.M.), the temperature dropped to 98.6° , and at midnight to 97.2° .

The next morning (27th) his temperature was 99° , respirations 24, pulse 88. The tongue was clean; no moist sounds were audible over the affected patch; the breath-sounds were feeble, and slightly tubular; there was less dullness on percussion; no pain was complained of now. In the evening, the pulse and temperature remained normal, the respirations being 24.

The following day's note shows that the pneumonic patch had all but cleared, there being no crepitation, and but slightly tubular breathing heard; the percussion resonance was almost clear, and the sputa muco-purulent. On two evenings after this the temperature rose, apparently in connection with an attack of earache and conjunctivitis; otherwise, it remained normal or subnormal. The trace of albumen disappeared from the urine on the 30th. Convalescence was com-

pletely established by the 10th of August; and the patient was sent to a convalescent home in the end of the month.

REMARKS BY DR. FINLAY.—The use of the cold bath in the pyrexia of pneumonia has been, so far as I am aware, but little, if at all, practised in this country; yet, if we are to believe what we are told by Juergensen, it ought to be looked upon as our sheet-anchor. In his instructive article on this disease in Ziemssen's *Cyclopaedia of the Practice of Medicine*, he advances the opinion that the danger to life results from failure of the heart under the additional strain thrown upon the right ventricle, such additional strain being primarily due to the increased resistance in the pulmonary circulation caused by the exudation deposited in the lung. In addition to the increased labour on the part of the heart called forth to overcome this resistance, there is the influence of the pyrexia itself in increasing the pulse-rate and inducing degeneration of the muscular substance. The control of the fever, accordingly, becomes a matter of paramount importance; and this control, he states, may be safely and quickly secured by bathing.

The case above narrated seems one in point. Although none of the more definitive signs of pneumonia were present at first, there could be no doubt as to the pyrexia, and the desirability of reducing it. Hence the use of the bath. The pyrexia lasted exactly three days and a half, calculating from the rigor; and, while defervescence occurs occasionally as early as this in cases otherwise treated, or not treated at all, its occurrence so early here is sufficiently noteworthy to raise the question whether it might not have been due to the use of the bath. In 721 cases tabulated by Juergensen, the defervescence occurred on or before the fourth day in 12.6 per cent. only; and of 81 cases referred to by Dr. Waters of Liverpool, in a clinical lecture on pneumonia published in the *BRITISH MEDICAL JOURNAL* of 19th November last, no case was convalescent before the end of the sixth day of the disease. Of course, no conclusions of any value can be drawn from a single case, but even single cases may be suggestive; and, looking to the enormous benefit derived from the use of the cold bath in the hyperpyrexia of cerebral rheumatism, and in enteric fever, it seems only reasonable to expect a similar result in the high temperature of some cases of pneumonia.

WESTMINSTER HOSPITAL.

CASE OF TUMOR CEREBRI: DEATH: NECROPSY.

(Under the care of Dr. FINCHAM.)

[For the notes of this case we are indebted to Dr. WM. GRISTOCK, late Medical Registrar.]

THE patient, F. M., aged 35, a Custom-house officer, was admitted on January 11th, 1881. Inquiries as to his family history elicited nothing of importance. He had never met with any injury of the head, and there was no history of syphilis. He had enjoyed good health until two months before admission, when he gradually began to notice an inability to button his shirt-collar, and some weakness of the right hand, so that things often dropped when he tried to carry them. Sensation was unaltered, and his chief trouble had been the difficulty in holding small things. Eleven days before admission, when on his way to work, he had a "fit", but recovered so far as to be able to walk home; speech was impaired, the right hand had become weaker than the left, and the right side of face twitched. From his manner, his wife thought he had been drinking. He went to the National Epileptic Hospital next day; while there he had another fit, but was able to walk home. He kept his bed for three days after this, but was quite conscious, and able to talk. The right arm and the right side of the face twitched. On January 2nd, nine days before admission, he had another fit while in bed, lasting about an hour; and on the 4th, another fit, lasting four hours, during which he was purple in the face, gnashed his teeth, and was generally convulsed. On recovering from this fit, articulation was very defective: from that time he kept his bed until his admission to the hospital. On admission, there was reported loss of sensation and power, especially on the left side. He was ordered a turpentine enema, and subsequently, on that failing, three grains of calomel.

On January 13th the patient was semicomatose; he could whisper "yes," "no," "a little," but could not be persuaded to say anything else: did not obey the written direction, "Put out your tongue", though he seemed to observe the words; directed orally, he immediately obeyed. The pupils were equal, and contracted (they were stated to have been previously unequal). The tongue was protruded to the left, and there was paralysis of the left side of the face, the lower part being much more involved than the upper. There was no discoverable optic neuritis. The right arm and leg were very weak, and he had difficulty apparently in raising the right leg from the bed. The

nective tissue corpuscles, and *vice versa*: but great difficulty attended the subject, in consequence of the conflicting views which prevailed regarding the growth of cells. That which one observer regarded as indicating endogenous formation of cells, another interpreted as broken-down cells invaded by leucocytes. The term connective tissue cell was a vague one; it was originally applied to the spaces in the tissue, but now to the nuclei lying on the bundles. It was rarely possible to see a real connective tissue cell.—Mr. HARRISON CRIPPS said that, in adenoid tumour of the rectum, cells were found outside the acini, which showed a transition from lymphoid to epithelial as they approached the surface. He believed that leucocytes and epithelial cells were the same thing in different stages. Their character was often indicated by their position; but sometimes this mode of distinction failed.—Dr. CREIGHTON had intended to show that the products of secretion of the skin-glands were not always fluid, but sometimes solid, and might escape into the submucous tissue. This was an important point for investigation: for, if it were true, it ought to be admitted into pathology. Two of the tumours which he had described were largely made up of such matter. This was infiltration; but not in the sense in which the term cancerous infiltration was used. The doctrine of the epithelial origin of cancer was not new; it was held as long ago as 1855 by Virchow, and was opposed by Remak. He wanted to bring out the connection between glandular function and structure, and the formation of epithelium. The solid products of glands were carried out, and had a specific action; this was what took place in cancerous infiltration. Whenever epithelium was formed from connective tissue, it was a departure from the ordinary course. He was pleased to find himself in agreement with Mr. Cripps as to the origin of the cells in cancer of the rectum.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 7TH, 1881.

GEORGE BUCHANAN, M.D., President, in the Chair.

Filaria Sanguinis Hominis.—Dr. T. SPENCER COBBOLD read a paper by Dr. Wykeham Myers on *Filaria Sanguinis Hominis* in South Formosa. In it the author gave full details of observations of patients under his care, suffering from filarial disease, and of experiments concerning the effect of different antiseptics and parasitocides on the worms, the results being in the main confirmatory of those of Manson, in China. The periodic appearance and disappearance of the filarial embryos in the blood was especially dwelt upon; and the author was inclined to ascribe their disappearance to a solution and destruction of the parasites, rather than to their retirement into one of the internal organs and resting there during the day. Experiments on monkeys, made to drink water containing mosquitos which had previously ingested filariæ, gave negative results.

Filaria and other Parasites in Relation to Epidemics and Epizootics.—After referring to the labours of Manson, Lewis, Bancroft, Sonsino and others, which were of great importance in their relation to the public health, Dr. COBBOLD alluded to some researches of his own on the parasites infesting the elephant and ostrich, and stated that the facts set forth in his paper led to the conclusion that flukes were not the only entozoa capable of fatally victimising large and valuable animals. The paper by Dr. Myers was valuable as a confirmation by an independent and competent observer of the results obtained by Manson (and first communicated by Dr. Cobbold to the Quekett Microscopical Club, on February 27th, 1880), and of the observations subsequently made by Dr. Stephen Mackenzie, and communicated to the Pathological Society during this year. In consequence of these results, some of the scepticism expressed in relation to filarial questions had already disappeared, and sooner or later the important part played by these parasites in the production of disease would certainly be acknowledged. There was no longer any foundation for the continued incredulity of some observers here and abroad in reference to the question. The remarkable periodic appearance and disappearance of the parasites in the blood, and the adaptation of this cycle to the habits of the mosquito, could not be looked upon as a mere accident. In reference to Dr. Myers' hypothesis—that there was a diurnal solution of the micro-filariæ that escaped the clutches of the mosquito, Dr. Cobbold saw nothing impossible in the disintegration and absorption of the minute dead worms. On the other hand, he thought that such a process of absorption could hardly overtake in a few hours the residual millions left by the mosquitoes. He believed that the micro-filariæ, under ordinary circumstances, steadily increased in numbers when no insects interfered; and that their maximum numerical expression was in strict correlation with the reproductive vigour of the parent worm or worms, which might live for many years. Dr. Cobbold next dealt with several prevalent misconceptions and mis-statements respecting

filariæ, referring not merely to matters of inference, but to questions of absolute fact. The statement made by a writer in a recent number of one of the medical journals, that "the young filariæ develop in the mosquito and sexually mature worms," was incorrect. Throughout the whole range of helminthology, nothing of the sort had been recorded; whether we dealt with cyclops as the bearer of the young guinea-worms, with gammarus as the host of a trout's echinorhynchus larva, with melonotha as the bearer of the hog's echinorhynchus, with trichodectes as the bearer of a canine tapeworm, or with molluscs as the hosts of cercaria—the result was invariably the same. Sexual maturity could not be arrived at prior to the passage of the parasite into the body of its ultimate host. After repudiating several of the incorrect statements wrongly ascribed to him, Dr. Cobbold next took up the question of the true mode of action of the filariæ and micro-parasites generally in the production of disease. If the victim or bearer of the parasites were regarded, as he ought to be, as the legitimate home or territory of certain parasitic inhabitants, it would be found that, in the case of minute entozoa, the injury to the territory was principally due to overcrowding. In a subsidiary manner, the injury was due to the activity or locomotion of the parasitic inhabitants. A few thousands, or even millions, of trichinæ may have bored their way through the tissues without occasioning the slightest inconvenience to the human bearer. Many millions of trichinæ were necessary to the production of grave symptoms of trichinosis in man; consequently, the presence of a few millions without the production of actual disease or suffering, afforded no proof whatever that the parasites lacked the power of creating mischief. That which obtained in trichinosis obtained also in the case of allied affections, such as filariasis, oñulariasis, strongylosis, cestode, tuberculosis, and others. Nearly forty years ago, Gruby and Delafond found micro-filariæ in the blood of five per cent. of dogs examined by them; but they did not settle the question of the origin of the parasites. From 11,000 to 224,000 of them might exist without causing their host the slightest symptom of mischief. In 1867, Dr. Cobbold expressed the opinion that these worms were the larvæ of spiroptera sanguinolenta; a view subsequently confirmed by Lewis and Manson. The latter found that the canine filariæ showed a periodic increase and diminution of numbers in the blood, but, unlike the human parasite, were never completely absent from the circulation. Dr. Cobbold could not share the surprise shown by Manson at the fact of the freedom of these verminous dogs from symptoms; had the parasites, instead of a few thousands, numbered many millions, he should have expected the canine territory to display some of the injurious effects of overcrowding. When the sexually mature and very much larger filariæ were present in the heart, it was easy to see that the immediate cause of pain, followed often by sudden death, was the obstruction to the circulation occasioned by the worms. In the same way, in birds, it requires a great number of the tapeworms, normally present in the intestines, to produce an epizootic. When caused by smaller worms than cestodes, young and old birds alike succumbed to any undue expression of the fauna. In a recent communication to the Linnæan Society, Dr. Cobbold showed that the ostrich epidemic in South Africa was due to a parasite, a species of strongylus, myriads of which, occupying the proventriculus of young birds, set up an irritation which sooner or later proved fatal. Dr. Cobbold next discussed the assumption of the necessity of some pre-existent cachexia or constitutional weakness to account for diseases produced by worms. Cachexia, when produced, is the result of the loss of blood, gastro-enteric irritation, or other disturbance set up by the parasites. In the case of plants, certain morbid states might favour the invasion of parasitic fungi; but helminths attacked the weakly and the healthy with perfect impartiality. The adult filaria sanguinis hominis was closely connected with the lymphatic system, and had actually been obtained by aspirating the lymphatic glands and dilated vessels. While far from thinking that all chylurias, chyloceles, and other phases of chylosis were exclusively due to parasites, Dr. Cobbold held that all of these affections might directly arise from mechanical obstruction by filariæ to the flow of the contents of the lymphatic channels. Independently of Manson, Lewis, and Bancroft in the East, Drs. F. da Santos, Aranga, Magalhaes, Bourel-Roncière, and many others in Brazil, had acknowledged the causal relation between filariæ and many cases of lymph-scrotum, chylocele, lymph-varices, and fistulæ; and the English physicians in Bahia and Rio had not been behind their foreign colleagues in throwing light on the subject.—In the discussion which followed, the President, Dr. Vandyke Carter, Dr. Stephen Mackenzie and others took part.

THE Oldham local authorities have been severely censured by their coroner for allowing a man to escape from the hospital whilst suffering from small-pox. The man died from exposure, and it was alleged that an improper certificate of death was given.

Sir JOSEPH FAYRER, M.D., K.C.S.I., in the chair.

[illegible][illegible]

ponderate. The authority should make provision for all classes of persons, and admission to the hospitals should not entail pauperisation. Provision for mild cases of small-pox and for convalescent cases should be made outside the metropolis. If this were done, probably eight well-placed hospitals, containing 150 beds each, would suffice for the small-pox cases that must be treated in hospitals within the metropolis, *i.e.*, cases too ill to be removed to any great distance from their homes; and no small-pox hospital should contain more than 150 cases at any one time. To each hospital for fever and for small-pox cases, a district should be allocated; and only overflow cases, in emergencies, should be removed to any other hospital than that of the district properly assigned to such hospital. The adoption of this principle would obviate many objections to the existing system of hospital accommodation. The hospital authority should have the power to acquire sites for hospitals compulsorily and subject to the hospitals being conducted with reasonable care and according to prescribed regulations; the authority should be protected from legal proceedings, so as to secure the public against the loss of the benefits arising from such institutions. The Society wish to submit to the Royal Commission the necessity of legislation to secure compulsory notification of infectious diseases, and compulsory powers to enable the sanitary authority to enforce the removal to hospital of the infective sick, not possessed of lodging accommodation enabling them to be properly treated and isolated.

Sanitary Staff of Large Towns.—Dr. SEATON, of Nottingham, made a few remarks on the constitution of a sanitary staff in large towns, and objected to the duty of "chief scavenger" being undertaken by Dr. Yeld, late medical officer of health to Sunderland, and which the Town Council proposed should devolve upon his successor. Dr. Seaton considered that the medical officer of health of a large town would find his time sufficiently occupied by work in relation to epidemic diseases, and by the preparation of statistical information for the purposes of the Artisans' Dwellings Act, etc., etc.; and that if he were not held responsible for the proper performance of those duties which ought to belong to a scavenging department, he would be in a better position to criticise the work. After some discussion it was resolved to ask the council to consider a report on the subject.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

TUESDAY, NOVEMBER 29TH, 1881.

BENJAMIN RIX, M.R.C.S., in the Chair.

Principles regulating Taxis in Cases of Hernia.—Mr. CLEMENT LUCAS read a paper on this subject. He said that obstacles to the reduction of the hernia might arise from conditions external to the sac, or be dependent on the sac itself or its contents. Taking first the external causes, these were, the course and direction of the tumour, constriction at the rings, and muscular action. Contrasting next inguinal with femoral hernia, he showed that in the former the rings were large and more dilatable; hence taxis was more often successful; but in inguinal hernia muscular action was a factor which was absent in femoral. A hot bath might be of service in inguinal hernia, by overcoming the spasm of the internal oblique and transversalis muscles; but in femoral it could do no good, and would only add to the collapse of the patient. Chloroform, besides subduing the pain, relaxed the muscles, and was a greater aid in the reduction of inguinal than of femoral hernia. He protested strongly against anything like forcible taxis in cases of femoral hernia, as the bowel was thereby pressed against the margin of rigid fibrous rings, which presented almost knife-like edges. The operation for femoral hernia was almost without danger; that for inguinal more dangerous, on account of its large size; that for umbilical most dangerous, on account of the amount of bowel exposed, and because all drainage went back into the abdominal cavity. Happily, taxis was successful in the reverse order; umbilical and inguinal being more readily reduced than femoral. Obstacles to reduction situated in the sac itself were dependent on the direction of the sac, pouching of the sac, and constriction at its neck or in some part of its course, as in the hour-glass inguinal hernia. Difficulty of reduction from condition within the sac depended on: 1. The bulk of the hernia; 2. The presence of a quantity of fluid in the sac; 3. The presence of omentum; 4. Adhesions. The evil results of taxis were stated to be: 1. Bruising of the tissues outside the sac, causing them to suppurate if subsequently opened; 2. Reduction *en masse*, or rupture of the sac; 3. Ecchymosis of bowel and hæmorrhage of sac; 4. Rupture of bowel, and consequent peritonitis and death. When herniæ were down, but not strangulated, time was not so important a consideration. If the surgeon failed to reduce at once, he might apply ice, give opium, use injection, and even pressure, and wait; then try again. With strangulation,

time was of the utmost importance. The fatality of strangulation was due to two causes—the time during which the circulation was arrested in the bowel, and the severity of the taxis employed. He would limit taxis in femoral hernia to the first twelve hours after strangulation; in inguinal, to twenty-four hours; in umbilical, to two or three days. After failing in gentle taxis at first, he advised that the patient should be put at once to bed, with an ice-bag on the tumour; the pelvis should be raised high on pillows, none being allowed for shoulders or head; the legs should be flexed over pillows; the scrotum (if inguinal, in a male) raised by a small pillow between the legs. An injection of a fourth of a grain of morphia might be given once only. The surgeon next collected his friends, being prepared to operate if necessary. Chloroform being given, taxis was again gently applied; but, this failing, operative interference should be resorted to without further delay.

Removal of a Foreign Body from the Bladder by the Median Operation.—The foreign body, which was in a man under Mr. MANSER'S care in the Tunbridge Wells Infirmary, had slipped into his urethra, and it had afterwards passed into his bladder. A few attempts to remove it by a lithotrite *per urethram* having failed, Mr. Manser performed the median operation, and the man recovered in ten days without a bad symptom. Mr. Manser proceeded to advocate the more frequent use of this operation in preference to the lateral, when the foreign body to be removed was small. He expressed his surprise at seeing that the performance of the operation by Mr. Heath, at University College Hospital, a few days before, had been mentioned as somewhat unusual.

Aneurysm of the Transverse Part of the Aortic Arch.—Dr. RANKING read notes of this case. The only symptoms during life were constant expiratory dyspnoea, with paroxysms of inspiratory dyspnoea, and paralysis of the right vocal cord. After death, the trachea was found flattened against the vertebræ, and the right pneumogastric was flattened and reddened below the origin of the recurrent nerve, which was not pressed upon.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.

THURSDAY, DECEMBER 15TH, 1881.

Purpura, its Varieties and Causes.—Dr. STEPHEN MACKENZIE read a paper on this subject. He commenced by remarking that purpura was determined by—1, simple hæmorrhage, (*a*) *per rhexin*, (*b*) *per diapedesin*; 2, thrombosis (*purpura thrombotica*); 3, embolism (*purpura embolica*). He then proceeded to point out that, in the present state of our knowledge, purpura was best considered under a mixed etiological and clinical classification. In this way, we were led to the clinical associations of purpura, which were frequently of far greater importance than the mere hæmorrhages into the skin. Purpura, in this light, might be considered under the following heads: 1. Occurring in connection with specific blood-diseases, as in small-pox, measles, scarlet fever, typhus, cerebro-spinal fever, ague, pyæmia, syphilis, rheumatism (*pilosis rheumatica*); 2. Occurring in connection with organic visceral disease, as with disease of spleen, liver, kidney, lung, and cardiovascular system; 3. Occurring in connection with some primary alteration in the blood, as in (*a*), scurvy, rickets, and idiopathic anemia; (*b*) excess of some constituent, as water, chloride of sodium; (*c*) the presence of matters foreign to the blood (drug purpura), as phosphorus, mercury, mineral acids, chloral, and iodide of potassium (iodic purpura); 4. Occurring in connection with affections of the nervous system (which, for convenience, are considered apart from Class 2), as purpura following shock, grief, in connection with tubercular meningitis and angina pectoris, plugging of cerebral sinuses, etc.; 5. Idiopathic or essential purpura. Cases illustrating many of the varieties were narrated, and drawings exhibited.

Diphtheria.—Dr. WOAKES read a paper on the etiology of diphtheria; its contagium; the occurrence of sudden death in it—reconsidered. In consequence of the lateness of the hour, the discussion of this paper was deferred. The subject will be brought forward at the next meeting.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

TUESDAY, DECEMBER 20TH, 1881.

Micrococci from Fresh Urine.—Dr. WILLIAM ROBERTS showed specimens of micrococci from fresh urine, passed by a patient suffering from hæmaturia. He had succeeded in cultivating the micrococci in beef-tea at a temperature of 100° Fahr. In six to eight hours after the experiment commenced, clouds were seen to collect, which, on removal by a pipette, appeared ropy, like mucus, and on microscopical exami-

being probably related to the increasing work of the young in these days of competitive examinations. Some good directions for the preservation of a healthy condition of the visual organs are given.

Dr. Birch-Hirschfeld of Dresden writes on the subject of Bacteria, in special relation to the infectious and other closely connected diseases.

There is an elaborate and good article on Mining by Dr. Gurlt of Bonn, in which the sanitary condition of those working in mines and other places in the interior of the crust of the earth are considered. The readers of this JOURNAL will recollect an allusion made by us to the subject of "mountain-disease", which appeared novel and interesting.

The portion of the work on Lead is well done by the editor.

Dr. Lothar Meyer contributes a paper on Syphilis and Prostitution; another on Marriage and on the Feeding of Children.

Dr. Ewald's name has now a wide reputation in connection with the subject of Diphtheria, of which he treats here.

We have not sufficient space to say much more concerning the special articles in this manual. That the work will perform what its editor intends it to do there can be no doubt, if we judge from the contents and manner of this first volume. For English students the work is hardly suitable, though it would repay perusal by any one interested in such important human and animal affairs. The work is most probably meant chiefly for students of the subject in Germany. English professors and teachers may find many new views of various things, and may read the volume with profit, as the articles are written up to date, and the points of view of German sanitary officers are well represented. It is hardly possible to produce a volume of 751 pages of closely printed matter, in its first edition, without many errors of printing and slips of authors' pens passing unnoticed; still, on the whole, the work is well edited. The occasional misspelling of the names of foreign authors must probably be put up with, as must also the scanty and few references made to the work of good men in England. The woodcuts just show what they are intended to do, and no more.

We do not like the introduction of so much small print, especially in matters which should be clearly and neatly stated; as, for, example, the description of the parasites which infest meat and human beings. The work, like Dr. Pappenheim's, has an alphabetical index, which has its conveniences, and possibly also its defects. Dr. Pappenheim's work can be obtained from the library of the Royal Medical and Chirurgical Society, and is in two volumes. It is very interesting to compare these two manuals. Clear evidence of the vast progress made in hygiene during even a period of thirteen years will then be apparent.

NOTES ON BOOKS.

The Handy System of Medical Bookkeeping, etc. By ALFRED SHEEN, M.D., Cardiff. Wm. Lewis, Cardiff, 1881.—We have received from the publisher, Mr. Lewis of Cardiff, specimen copies of a handy medical visiting list, which from its size, can be readily carried in the breast pocket. On the front page will be found an almanac, an obstetric table, and at the end, an epitome of the comparative alcoholic values of spirits, wines, and beer, the doses of the more active therapeutic agents, and their equivalents, the average weight and measurements of healthy organs, and formulas for hypodermic injections; secondly, a temperature chart, etc.; thirdly, a reduced specimen page for a new form of day book; and fourthly, a reduced specimen page for a new form of ledger. At the first glance, this new form appears slightly involved, but a little study of the method suggested by Dr. Sheen will enable the general practitioner to grasp the economy of time and trouble contemplated by its author; indeed, Dr. Sheen himself admits "That the learning of this method involves a certain amount of trouble, but what that is worth anything, does not?" Mr. Lewis will on application forward similar specimen copies. On the whole, we can fairly recommend this new method to general attention.

Demonstrations in Physiological and Pathological Chemistry. By CHARLES H. RALFE, M.A., M.D. Cantab. (London: David Bogue.)—The want of a small but practical work on physiological and pathological chemistry has long been felt, especially by candidates for the university degrees, and those reading for the fellowship examinations of the Royal College of Surgeons. Dr. Ralfe has succeeded in placing before us, in nine demonstrations, a very compact series of lessons in physiological chemistry; those on digestion and the urine being exceptionally good. The last chapter is devoted to quantitative analysis (gravimetric and volumetric), very complete directions for all chemical operations being given in brief but sufficient language. This book, though small, bears favourable comparison with the larger treatises of Lehmann, Burdon Sanderson, Foster, and others; the contents being trustworthy and in a portable form, handy for reference.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 14TH, 1882.

A GRAVE SOCIAL PROBLEM.

THE difficulty is at all times great, when considering some of those grave social problems on which we ventured to touch a few weeks ago, of steering safely between the Scylla of unmeaning vagueness on the one hand, and the Charybdis of over exuberant and possibly purulent detail on the other. For, whilst the error may leave the reader in doubt as to the real nature of the abuses to which the writer refers, the second is too apt to assume a demoralising tone from the clouding over, in however slight a degree, of the pure scientific atmosphere. Our own object has been to recall the attention of the profession in general terms to evils with which they are perhaps already only too familiar, and to induce the educational section of the laity to reflect very seriously on the "little rift within the lute", which may some time gape widely enough to endanger the stability of the whole structure. Since our article was penned, we have received many communications bearing, some of them with startling directness, on the question now under discussion, and showing such an amount of interest in, and appreciation of, our remarks, as to induce us to return to the subject, with the view of taking up one or two points which space compelled us to omit on a former occasion. But first, in brief recapitulation, we may regard it as an acknowledged fact that a certain form of immorality, which has always been looked upon as one of the most pressing dangers of early youth, attains wider circulation and popularity through the machinery of our public schools; and that its detection and suppression have become a matter of very real and serious difficulty.

In all these institutions, a truly conservative reverence for the traditions of the past prevails among the boys, and affects the bad customs as well as the good, so that the soil, so to speak, becomes impregnated with the diseased spores, which readily impregnate the purest seed placed in its midst; and hence we can readily understand the almost despairing depression of head masters, when they see the failure of their vigorous and well-meaning attempts to stamp out evils which are insidiously working underground, and which have been so frequently established before their own jurisdiction has begun. On this point, again, there can be little difference of opinion, that these habits are often acquired almost in infancy; sometimes, as a correspondent points out, from unskilful or vicious nursery training, sometimes from uncleanness causing irritation, or from the physical inconvenience of an elongated prepuce; but more often they proceed from the direct instruction of companions who in all probability have no very clear conception of anything wrong, beyond a vague suspicion that what they are endeavouring to popularise is in some way a thing to be ashamed of.

And, again, concerning the legacy of suffering and of degeneration which remains behind even after the most permanent cure has been effected, we must also be fully agreed that this is pretty much in proportion to the age at which these habits are contracted; and that, if they be freely indulged in whilst growth and development are going on, a stunting and enfeebling influence is unmistakably exerted both on body and mind. But, at whatever stage the evil is begun, its continuance for any considerable period leaves some mischievous trace, ranging

from a lessening of manly and straightforward vigour and a tendency towards a more womanish type of hysterical irresolution, up to the final stages, when the memory loses its sharpness, and the dull downcast look, the shy solitary ways, the irritable heart, and the impaired digestion display a nervous system shattered beyond repair. To go a step further, there can be little doubt that real insanity is often caused in this way, and that mind-disease short of actual alienation often results from what Dr. Mortimer Granville, in a most interesting article in *Modern Thought*, calls "mental debauchery".

Concerning the remedies, more difference of opinion is natural, the opposite camps being composed of those who expect to find a panacea for this and many other social difficulties in a more widely diffused physiological teaching, and those who are most inclined to trust in a general inculcation of the principles of morality and of what we may here appropriately call muscular Christianity. We have already furnished our reasons for the preference which we have given to the latter of these views, and sincerely hope that the suspicions we have felt it our duty to express of the expediency of warning little boys specifically against dangers of which it is quite possible that they may never otherwise hear, will not be taken as indicating anything contrary to the modern spirit of scientific teaching. To bring up boys and girls without the slightest knowledge of the structure or functions of the human body, or the inexorable laws by which Nature regulates the health and comfort of the world, is to do them a cruel wrong, by depriving their minds, at their most receptive period, of one of the most interesting as well as most improving of all educational influences; but this is a very different thing from attempting to warn and instruct on themes which require the most cautious and delicate handling, and which the rough touch of those who work at second hand and with only partially scientific instruments would inevitably make suggestive rather than deterrent. For a little knowledge might here prove to be indeed a dangerous thing.

Rather would we prefer to depend on the teachings of the highest morality from the school pulpit, aided and re-enforced by the precept and example of the masters, who should be encouraged to mix freely among the boys, and, by constituting themselves their trusted friends and counsellors, fix a standard of life and work to which all would gladly aspire. When mean and immoral actions are looked upon as not only wrong in themselves, but as certain to be followed by evil consequences as any flagrant breach of the law of the land; when it is considered bad form to do anything unmanly or unworthy of the name of an English gentleman; and when it is distinctly seen that the physical consequences of the evils we have been considering interfere largely not only with school work, but also with that proficiency in games which is the boast of many of our public schools—then will a barrier be thrown up around impurity, far more effectual than that constituted by mere specific and didactic warnings.

But we must not overlook the advantages of varied and absorbing occupations, turning us away from the dry bones of classical literature to the living languages and physical science, and replacing in part the general morality, and occasionally obscene suggestiveness, of heathen mythology, by a careful study of Nature and her works, and the good physical laws and human nature throughout the world. Good food, sleep, and play, and the fatigues of the cricket field or the football ground, and the sound and dreamless sleep from which mind and body awake fresh and vigorous and eager for the labours of another day; and under these typical conditions there is neither time nor room for anything more than the natural needs which so constantly fill up these twenty-four hours, which seem all too short for what has to be done.

In closing, I would, we would remind parents to look very sharply at the amount of light and air to be had in their children's bedrooms, to see that there is plenty of light and air; that the furniture is not too close to the walls; that the bed is not too high; that the room is not too small; that the bed is not too close to the wall; and to place a strong emphasis on the importance of the parents' duty of keeping the child's room as bright and airy as possible, and of

being taught the elements of knowledge by senior wranglers or classics.

But, again, we would remind parents of the very serious responsibility they incur in neglecting to continue the moral education of their children during those holidays which come round with perhaps somewhat inconvenient rapidity. The quarterly cheque to the schoolmaster does not relieve father and mother from all active interest in the welfare of their children, but we fear that home-influences too often present a somewhat inharmonious contrast with the best kind of school-teaching. The racking rapidity of modern life, the feverish struggle for social supremacy, the cynical tone assumed almost as a matter of course both by old and young, and the want of faith in purity and virtue, which are too unmistakably characteristic of the tone of "society", must tend to wash away the foundations on which many a boy may be trying to build up something of a better life. But most dangerous of all is the opinion not unfrequently expressed by medical men, that immorality is to be excused on account of its physiological necessity, and that the disuse of organs constructed to perform a specific function must inevitably be followed by atrophy and decay. We grant the difficulty of leading a continent life when the frame is in full vigour, and the passions under the feeble control of youth; but the supposed necessity simply arises from a habit carefully acquired and confirmed, and which might quite as readily have been directed in an exactly opposite direction.

As Sir James Paget writes (*Clinical Lectures and Essays*): "Many of your patients will ask you about sexual intercourse, and expect you to prescribe fornication. I would just as soon prescribe theft or lying, or anything else that God has forbidden. Chastity does no harm to mind or body; its discipline is excellent: marriage can be safely waited for: and amongst the many nervous and hypochondriacal patients who have talked to me about fornication, I have never heard one say that he was better or happier for it." But, indeed, the nervous and hypochondriacal are to be found principally among those who have early given themselves up to habits of debauchery, who form the pigeons to be so readily plucked by quack doctors; whose depression and misery occasionally lead to suicide; and whose fancied or real incompetence for the duties of matrimony is, beyond all doubt, the cause of much of the unhappiness and infidelity of wedded life. We strongly recommend, therefore, that older schoolboys and young men should be told that continence is perfectly compatible with the soundest health; that indulgence in vice at their age must be injurious, because restraint is difficult and excess easy; and that in hard work and moderate living will be found the solution of the problem, how to live a chaste life in the midst of temptation.

As an addition to the scanty literature of this subject, we welcome the interesting little treatise on "Morality" by Dr. Hume, Head-Master of Foyle College, Londonderry, whose experience in actual educational training give his opinions that weight which always belongs to special knowledge. The first portion of his book deals with the assertion that "immorality is natural"; and he devotes somewhat laboured metaphysical arguments to refute this proposition, which, from the strictly physical and scientific standpoint, we doubt is absolutely correct. We will, I think, permit a voluntarily admitting that, although function is the natural basis of organs, in this particular instance, as already pointed out, considerations both of morality and expediency, and even of health, enter in the advice that it is better to hold back the formation of a certain habit until the bodily frame is thoroughly consolidated, and the practice can be indulged in a legitimate manner. Dr. Hume closes with many passages upon whether "continence endangers health", and many other details in favour of the position already quoted from Sir James Paget; and he finishes a well-written and carefully argued treatise by the enumeration of several good arguments against immorality, which are well worthy of the attention of all those who are in any way responsible for the upbringing of boys.

THE OFFICE OF CORONER.

I.

THE time is, perhaps, not far distant when a renewed effort will be made by the Legislature to alter the law relating to coroner's inquests, and to redeem from popular and professional contempt that which is too often a farce—"crown's quest law." None, not even the most conservative of coroners, is, we imagine, prepared to retain the position and duties of coroner as they at present exist; on all hands the necessity of some change is admitted. How, then, the inquisitions into the causes of uncertified deaths, deaths where there is a suspicion of non-natural causes, and the like, are to be conducted, is a matter which it behoves our profession to take into serious consideration. When next a coroner's bill is introduced into Parliament, the medical profession must be prepared to state what are their demands, and what modifications of the existing state of affairs will afford them satisfaction.

Whenever the question of an alteration of the existing law does come to the fore, there will no doubt be a contest between the legal and medical professions as to the hands into which the new coronerships, or whatever the name of the office may be—shall fall; and unfortunately the appointments made of medical men to the coronerships of large districts by the efforts of their *confrères*, have not been in all cases such successes as were anticipated. The interests, too, of the legal profession in the matter are so considerable, and its power in and out of parliament so great, that it will be no easy matter to wrest any power from the hands of what solicitors consider to be their legal and vested rights.

And indeed there is much to be said on the lawyer's side of the question. The post of coroner is a semi-judicial one; legal is almost as requisite as medical knowledge on the part of the coroner. It is doubtful which is the more deplorable spectacle in an inquiry of importance—a legal coroner destitute of medical knowledge; or a medical coroner all at sea for want of the necessary legal knowledge to conduct a case with dignity. Hitherto it has been too hastily taken for granted by the legal profession that a coroner ought to be a solicitor; and by the medical profession, that its members alone are qualified for the performance of the functions of coroner. These two opposing views will in the future, as in the past, cause much acrimonious controversy.

We hope that at this juncture our insular self-sufficiency will not prevent us from looking abroad, and observing what is done in other countries—those which, like the United States, have adopted the office of coroner, following pretty well the lines of the mother country, and those which, like France and Germany, have systems of inquisitions of their own, not perhaps, in all respects, adapted to our national habits. In doing so we must acknowledge our indebtedness to an address delivered by Mr. Clark Bell, of New York, before the Medical Society of the State of New York, on Proposed Reforms in the Coroner's Office. Mr. Bell speaks with authority, as a first president of the Medico-Legal Society of New York. In France, the officer corresponding most nearly to our coroner is the procureur or attorney of the Republic, who is also a sort of local public prosecutor. He is of course, a lawyer. On receiving information, he proceeds to the place where a dead body is found; makes the necessary investigation; summons and examines witnesses; reduces their evidence to writing, which is subscribed by them; and then draws up a report. He is, however, responsible for the case as a legal inquiry, and for all the legal questions involved. He has power to make use of the detective police, to employ experts, to seize articles, and to restrain suspected persons from leaving the premises or neighbourhood. Indeed, he is a legal officer endowed with larger powers than our coroner, and more directly responsible to the higher executive. But supreme as to the medical examination, and all medical questions involved, is a medical officer, chosen for his superior medical and surgical knowledge, who acts as medical assessor to the procureur of the republic. He is also associated with the subsequent prosecution of the criminal, when the legal officer decides that a crime has been committed. For this purpose, he draws up a report,

which has to be signed by the commissary of police, or other police official; and this is submitted to the inquisitorial magistrate. If a violent death have taken place, or a death from unknown causes, or under suspicious circumstances, the procureur is required to be assisted by one, or, in some cases, two physicians, who have to make their report as to the cause of death, and to this they have to depose on oath before the procureur, and give their opinion upon the case. The procureur, in the event of a crime, calls upon the inquisitorial magistrate to order an inquiry, and even, if necessary, to proceed to the spot, accompanied by the procureur, in order to draw up the necessary official reports; and the inquisitorial magistrate holds an investigation. In all cases reported as *flagrante delicto*, the inquisitorial magistrate may himself directly perform all the acts of a procureur; but, except in cases of *flagrante delicto*, he can take no proceedings without informing the procureur thereof. Should the inquisitorial magistrate consider the evidence against an accused person sufficiently established, an indictment is prepared for the Cour d'Appel, and the trial takes place at the assize court before a jury.

The French system of inquests is effective. Whilst the directing and presiding officer is a lawyer, medical testimony is obligatory in every case; and the interests of the public and of the medical profession are sufficiently cared for. Medical testimony is at once put into formal shape, and that offered at the inquest forms part of the exhibits at the trial at assize of an accused person. There is, moreover, concert, and not clashing, between the representatives of the medical and legal professions. The novels of M. Emile Gaboriau, and especially *Lecoq the Detective*, give interesting descriptions of the workings of this system. The large, and almost irresponsible, powers of an inquisitorial character entrusted by the French law to the hands of the examining or inquisitorial magistrates would, however, never be tolerated in this country; and are utterly repugnant to our British free institutions and notions of fair play. In *Lecoq the Detective*, M. Segmuller, the magistrate, after bullying the prisoner in a private examination, conducted by himself in the presence of his clerk and a detective, and endeavouring in every possible way to convict the unhappy accused out of his own mouth, says: "I will not torture you any longer; when I return to the charge, I shall have proofs enough to crush you." This frightful examination, in the words of the author, had lasted no less than seven hours. No doubt, there is here some exaggeration; but, having ourselves witnessed a trial at assize in France for murder, we can bear witness to brutal attempts of a French judge to extort criminatory admissions from an accused person.

In another article, we shall return to this subject; and show the evils of the French and English systems of inquisition on dead bodies may be avoided, and the interests of justice be served, in a way little likely to excite opposition.

WITH a view to the erection of a convalescent home, Messrs. Dunn and Seman have purchased for St. Bartholomew's Hospital fifteen acres of land at Swanley.

HOSPITAL Sunday is said to be becoming increasingly popular in New York. On Christmas Day the collection amounted to 44,000 dollars, as compared with 26,000 dollars in 1879, when the movement was originated.

AT the last sitting of the Communal Council of Saint Josse-ten-Noode, in Belgium, a resolution was carried approving the establishment of a crematory apparatus in the local cemetery, and recommending the subject to the attention of the superior authorities.

AN outbreak of enteric fever amongst the troops at Bennett's Drift is reported by the *Natal Mercury*. It is supposed to be due to a bad water-supply; and there are about one hundred and twenty-one cases in hospital.

CLINICAL SOCIETY.

THE following gentlemen are proposed for election as officers and Council of the Clinical Society of London for the year 1882:—*President*: Joseph Lister, D.C.L., LL.D., F.R.S. *Vice-Presidents*: William Henry Broadbent, M.D.; Andrew Clark, M.D.; *Frederick William Pavy, M.D., F.R.S.; *John Croft; George Lawson; Thomas Smith. *Treasurer*: Christopher Heath. *Council*: Thomas Barlow, M.D.; John Cavafy, M.D.; James Frederick Goodhart, M.D.; William Richard Gowers, M.D.; *William Miller Ord, M.D.; *George Henry Savage, M.D.; *Frederick Taylor, M.D.; Edmund Symes Thompson, M.D.; Alfred Wiltshire, M.D.; J. Burney Yeo, M.D.; *Rickman John Godlee, M.S.; Henry Greenway Howse, M.S.; F. Howard Marsh; Edward Nettleship; *Herbert William Page; *Robert William Parker; William F. Teevan; *William J. Walsham; Edwin T. Watkins, M.D.; William Spencer Watson. *Honorary Secretaries*: *Sidney Coupland, M.D.; J. Warrington Haward. The gentlemen whose names are marked with an asterisk (*) were not on the Council or did not hold the same office during the preceding year.

HERBALISTS VERSUS SURGEONS.

MR. WIGHTMAN, the coroner for Sheffield, lately inquired into the case of a little child, Eliza Moloy, who died of measles while under the care of a herbalist. The child was evidently ill. The mother took it to a druggist, who advised her to send for a medical man. But, instead of doing so, she took the advice of Mr. Garbutt, medical botanist, of Attercliffe. He saw the child, gave his instructions, and desired that the parents should let him know if it got worse. But the same day the little patient died. Mr. Garbutt gave a certificate to the effect that the child died of measles. This certificate was, of course, declined by the registrar; and thus the case came before the coroner. Such cases are far from uncommon; and there is nothing in this particular instance which calls for special comment. But it is not always that coroners show as much energy and good sense in dealing with these cases as Mr. Wightman appears to have done. He said that he did all he could to put down such people of the class to which Mr. Garbutt belonged, but whilst people would go to them with their eyes open, and well knowing what they were doing, all his work was in vain. He acted with a certain amount of diffidence in such matters, for once, when he thought he was rendering great service to the people of Attercliffe by exposing one of these men, he found that he got into disgrace, and the man, who was not a surgeon, was publicly presented with a testimonial. At the same time, nothing would prevent him from doing what he considered his duty when occasions like the present demanded it.

PAROCHIAL MEDICAL ATTENDANCE.

THE public papers have given currency, in a paragraph headed "Gross Inhumanity", to a complaint against the Cowes guardians that an aged relieving-officer, who had fallen into great poverty, recently fell and broke his leg, he being very heavy and infirm. The statement is, that he sent for several doctors resident at Cowes, telling them of his accident, and praying them to come to his help. One after another, however, it was said, refused to come, because he was a bankrupt, and they saw no means of getting their fees, and he was left lying with the broken leg about forty hours before any medical man came to his assistance. At length, he sent for the relieving officer, and asked for an order on the parish doctor, replying, on being reminded that it would pauperise him, that it did not matter. It is said that the announcement of these facts was greeted with cries of "Shame! shame!" The matter was deferred for future consideration.

SURGICAL TRIUMPHS.

PROFESSOR NUSSBAUM has just published a very interesting address delivered on the anniversary of the hundredth birthday of Philipp Franz von Walther, who was born in 1782 and died in 1849. After an interesting account of his life and work, Nussbaum makes a rapid survey of progress since Walther's day. Anæsthetics, antiseptics, and

bloodless operations, are all advanced as surgical triumphs. Of ovariectomy he says "About 40,000 years of life have already been gained for women by successful ovariectomies"; and he believes that lives will be saved and much suffering prevented by Hegar's operation of removing the ovaries to anticipate the climacteric age in women, the subjects of bleeding uterine fibroids. The cure of reflex epilepsy by nerve-stretching he regards as a great advance in therapeutics. Excision of a kidney, or of the spleen, of parts of a cancerous bladder or prostate, of the rectum, and of the pylorus, he also regards with confident hope of improving results; and he believes it "not quite impossible that diseased portions of lung may be successfully excised." Our German colleagues are certainly not behind us in courage and adventure.

INTERNATIONAL MEDICAL CONGRESS.

ACTING under the powers delegated to them at the final meeting of the Congress, the executive committee of the late Congress have addressed an invitation to Professors Hannover and Panum, vice-presidents of the Congress, to arrange for holding the next International Congress in 1884 in Copenhagen. This invitation has been promptly and cordially accepted, and the next International Congress will accordingly be held, in the year 1884, in Copenhagen.

BODY-SNATCHING.

A CORRESPONDENT of the highest credibility sends us the following statement, as to which he alleges that the facts are within his personal knowledge. Body-snatching is not, perhaps, so utterly unknown in England now-a-days as some people would suppose; and it would seem that it is occasionally even possible to carry it out under legal sanction. A case is likely to come before the law-courts shortly, in which the widow of a gentleman of position is sued for the cost of cremating his body at Milan, at a time when she supposed he was lying interred in a metropolitan cemetery. The gentleman had expressed a decided preference for cremation as a means of disposing of his mortal remains; but his family would not, on his death, consent to act on what they regarded as a whim, and he was buried in the usual way. Some friends, however, not of his own household, determined that his wishes should be respected; and so, without the knowledge of his relations, had his body exhumed and conveyed to Italy, where it was cremated. The deceased's family heard nothing of this extraordinary proceeding, until they received a very heavy bill for the costs of the removal to Milan and cremation. Naturally enough, they refuse to pay for what they regard as an outrage on their feelings; and the trial is likely to lead to some curious revelations. It seems almost incredible that a body could be openly removed from a family burying-ground in a metropolitan cemetery, without the sanction or even knowledge of the relations of the deceased and proprietors of the ground; but truth is often stranger than fiction.

AMBULANCE STATIONS.

A SMALL ambulance station has been established at the General Post Office, and it is intended to attach to the iron railings in the Post Office yard (next Cheapside) a weather-proof case, containing a stretcher, splints, tourniquets, roller and triangular bandages, lint, and other useful appliances, all of which will be kept in readiness for immediate use in case of emergency.

SMALL-POX AND VACCINATION.

AT the last meeting of the Metropolitan Asylums Board, Surgeon-General Bostock, C.B., chairman of the Fulham Hospital Committee, stated that the value of vaccination was shown, at that institution, by the fact that the staff of officers and nurses had numbered 295, and only a small number of these had had small-pox before entering on service at the hospital. They were all revaccinated; and, with the exception of four, who had slight attacks of the disease on first entering upon their duties, and before the vaccination had taken effect, the whole staff had been free from disease. The important fact had also been noted,

made in the scope of the return. Not only were Portsmouth, Norwich, Wolverhampton, Leicester, Nottingham, and Sunderland, added to the list, raising the number of towns dealt with to 17; but for the first time important details relating to the deaths, including the number of fatal cases of the principal zymotic diseases, were published in the returns for the provincial towns. Oldham, at the beginning of 1872, and Brighton and Plymouth in the first return of 1876, were subsequently added to the list, raising the total number of towns dealt with in the return to 20; this number remained unchanged until the close of last year. In the first return for 1882 a further addition of eight towns has been made to the list. The list, as now constituted, includes 27 provincial towns as well as London, and as the Registrar-General explains, "all those municipal boroughs in which the enumerated population, in April last, exceeded 70,000 persons." Croydon and West Ham are both urban sanitary districts which had populations exceeding this limit at the recent census, but both these towns are included in Greater London, forming part of what is called the outer ring. Up to the close of last year, the list of 20 large towns in the weekly return omitted several towns having larger populations than Plymouth and Wolverhampton, which were the smallest towns in the list. This anomaly has now been removed. The towns now first added to the list are Bolton, Blackburn, Preston, Cardiff, Birkenhead, Huddersfield, Derby, and Halifax. The Lancashire manufacturing towns have not, hitherto, shown the sanitary progress which has been generally so well marked in the English urban population. It is to be hoped that the addition of Bolton, Blackburn, and Preston to the Registrar-General's list will stimulate sanitary progress in those towns.

REMOVAL OF THE ENTIRE UTERUS.

ON January 3rd, Sir William Mac Cormac removed the entire uterus, on account of epithelial cancer of the cervix, in a woman, aged 34, who had been admitted into St. Thomas's Hospital under Dr. Ord's care with serious intestinal obstruction. An incision was first made through the abdominal parietes from the umbilicus to the pubes. It was then found that the cavity of the pelvis was completely filled by a tense thick-walled cyst, which flattened the rectum against the sacrum, and was the cause of previous severe obstruction. The uterus and its appendages were at first completely concealed by the tumour; and until it was evacuated, no room could be obtained to perform the necessary manipulations. The cyst, which afterwards proved to be ovarian, contained very offensive pus, and it was impossible to prevent partial escape of its contents into the peritoneal cavity. On the cyst being partially emptied, it was separated from the almost universal adhesions it had contracted, and removed along with the uterus. On the completion of the operation, the large double-barrelled T-shaped drainage-tube recommended by Bardenheuer was inserted, and the two ends projecting from the vagina were utilised for frequent irrigation. No attempt was made to suture the pelvic outlet. The abdominal wound was closed in the usual manner. On the fifth day, there was evidence of some suppuration opposite the lower part of the wound, which was therefore reopened. Some pus escaped, and the cavity was washed out. The temperature, which had risen to 102.6°, fell soon afterwards; and the patient is now (ten days after the operation) making rapid progress towards recovery. Eucalyptol was the antiseptic agent employed for irrigating, as well as for the spray and external antiseptic dressings.

LIABILITY OF WATER-COMPANIES.

ON the subject of water-companies, Dr. Alfred Carpenter writes a letter to the *Times*, in which he contrasts the liability of a water-company with that of a railway company, and of a milkman or other trader. If a railway company, he says, injured a passenger, that passenger had a right of action against the company, and could recover damages; if any other trader distributed impure articles (a milkman, for instance, who distributes watered milk), he was liable for penalties; but a water-company might and did distribute water mixed with the elements of sewage without compunction, and the poor poisoned people had no

means for obtaining redress. A railway company who booked a passenger became liable for the non-fulfilment of its engagement, but a water company claimed and obtained payment for water in advance; if the company failed to perform their part of the contract, there was no ready way for obtaining redress on the part of the poor people deprived of their water-supply; while the power of the magistrates' courts was put in force against the unfortunate occupier if the water-rate was not paid, even although that occupier was not the party liable for the rate. There was much injustice, he thought, in this kind of arrangement, and contended that it was high time for the Legislature to call upon the water companies to perform these duties, and not to shirk their responsibilities; and yet they asked for payment from the public as if they were really performed. The water-supply to London was, he observed, unsafe under certain conditions. If it were placed in positions which raise the temperature to a point between 60° and 70° Fahr., and kept so for a few days, there was a development of material which rendered it unsafe as a drinking water. The Nemesis of the water-companies would come when those conditions applied to the general water-service of the metropolitan district, which, he feared, was not very far off.

CUCUMBER OR CARBOLIC ACID.

AMERICA is suffering in a very marked degree from the pollution of drinking-water, which is apt to be the Nemesis of the accumulation of great city populations, unless primary regard be paid to scientific sanitation, and especially to the supply of pure drinking-water, as well as the preservation of purity in the soil and air. The drinking-water of the great cities of America appears to be in some instances little better than sewage-water; and in numerous cases the pollution of potable water in great cities is such as to cause, at the present moment, considerable disgust on the part of residents, and to call for government intervention, which is unfortunately slow, and not always satisfactory in its action. From comparative results which have been published by Dr. A. R. Leeds in the *Chemical News*, it would appear that the water at Newark, Jersey City, and Hoboken, had become suddenly noticeable for the highly marked flavour of carbollic acid, indicating that the pollution of that particular water-supply was at that moment of an especially chemical nature. When the board was made aware of the nuisance, it was ingeniously urged that water was all the better for being polluted with carbollic acid, inasmuch as it served to disinfect the other kinds of filth which got into the drinking-water. This plea, however ingenious, was not held to be good in law, and so for the moment, the inhabitants of Newark, Jersey City, and Hoboken have to drink their potable water without the preliminary disinfection, which made it more unpleasant to the taste, if less noxious to health. Boston is suffering from what is described as a striking and interesting scientific peculiarity. Its drinking-water shows albuminoid ammonia to the extent of 0.0605, a statement which analytical chemists and medical officers of health will read with grim surprise. It is stated, however, that the peculiar interest is, that this is due, first, to the pollution by a few manufacturing towns, and, secondly, to the growth of algæ. There is especially an extremely interesting and rare fresh-water sponge, the *Spongilla fluviatilis*, which accounts for the peculiar "cucumber taste". It is thought that the Boston people would be more reconciled to the "cucumber taste" if they took a little more scientific interest in the *Spongilla fluviatilis*, which is accordingly elaborately described and figured, and recommended as an object of interest under the microscope. Another source of pollution of the Boston water is Pegan Brook, which flows through a town of ten thousand inhabitants, almost entirely engaged in the dressing of leather and manufacture of shoes, the outflow from which factories is supposed to complicate the "cucumber flavour". Philadelphia and New York also it appears receive their water from polluted sources. The feeders, which empty themselves into Croton Lake, the principal reservoir of the New York water, pass through a settled country, with numerous tanneries, factories, etc., along their banks. Wilmington and Delaware also rank among the towns supplied with polluted water. Under these circumstances it is

patient was doing well. Four days afterwards, M. Championnière undertook the removal of a subcutaneous lipoma near the scapula; the patient was chloroformed, and had a rigor like the one above-mentioned. All the patients operated upon under chloroform at that time suffered from rigors. When the chloroform was changed, this symptom no longer appeared. In lying-in women, with certain kinds of chloroform it is impossible to produce hemianæsthesia. It becomes, then, a question, What are the substances which change the chloroform? On the 5th of July last, M. Lucas-Championnière performed the operation of radical cure of a very large right inguinal hernia in a woman. Chloroform was administered; the respiration stopped. The patient was inverted, and artificial respiration applied; respiration returned at the end of four minutes. The chemist to the hospital declared that the chloroform was pure. Later on, in the same hospital, a youth, eighteen years of age, could not be anæsthetised; respiration stopped and necessitated inversion. Three days afterwards, with another kind of chloroform, the same patient could not be anæsthetised; but this time he became cold. On the next day, he was anæsthetised with another kind of chloroform. The first chloroform was examined by a distinguished Parisian chemist; the boiling-point was found to be modified; this chloroform was, therefore, impure, although the ordinary re-agents testified to its purity. Permanganate of potash passes from red to green, if chloroform contain organic substances. With these re-agents, M. Lucas-Championnière has found that throughout Paris there was no pure chloroform, although some specimens were almost pure.

RECREATION GROUNDS.

THERE is every reason to hope that the site of the well known Horse-monger Lane Gaol will be secured to the inhabitants of the neighbourhood as a recreation ground, the grand jury at the County Sessions having made a presentment to hand the ground over to the local authority or to the Metropolitan Board of Works for the purpose named, and further expressed the opinion that such a recreation ground was urgently needed for the densely packed and poor population.

MARRIED WOMEN IN FACTORIES.

AN article by Mr. W. Stanley Jevons, bearing this name, has appeared in the January number of the *Contemporary Review*. The medical aspect of the question is but too well known to us. Mr. Jevons proposes legislation. He quotes a Privy Council report made by the late Dr. H. J. Hunter, wherein it was demonstrated how infant mortality had increased in a marshy agricultural district immediately after the land had been drained and cultivated, so as to render quite healthy a neighbourhood previously malarious. The explanation of this apparent paradox was, that the mothers, working in the fields during the local improvements, had left their infants to the care of old women. Damp air with a mother's constant nursing is less deadly to infants, than the most salubrious atmosphere accompanied by systematic "farming", with soothing syrups, foul milk-bottles, and other inevitable disadvantages. The mortality of Salford and Nottingham depends, not alone on unhealthy slums, but to a great extent on the employment of women away from their homes—a system which, as at present conducted, involves the artificial rearing of their infants. In the districts named by Dr. Hunter, druggists, in the zeal of competition, sold "Godfrey's Cordial" at cost price, as the best means of inveigling improvident mothers. In Manchester, almost as many children are killed off, through artificial nursing, at the present date, as there were ten or twelve years ago. Mr. Jevons sees no remedy but in the complete exclusion of mothers of children under the age of three years from factories and workshops. Whatever employers might lose from the lessened supply of labour during the first ten years would be amply repaid by the supply of vigorous young mill-hands which would then begin to be available. As for objections to legislation in this direction, Mr. Jevons points out that all sorts of objections were made, time after time, to the Factory Laws, as they gradually rose, step by step, from their first small beginnings in 1802; now all recognise the wisdom of the laws already passed for the protection of factory hands and their families.

Certain reactionary philosophers will, as usual, object to Mr. Jevons's proposed extension of such legislation; but even these gentlemen, so stubborn against conviction, cannot deny that in this case the law would have to deal directly with the infant. The "liberties" of a baby would not be infringed upon, as the freedom of careless house-keepers and of social outcasts is certainly touched, for the good of the community, in sanitary inspection and contagious disease regulations. On the contrary, the Government would insist on the infant having its right, and that right is its mother's breast. Infants cannot raise a public agitation; and their private complaints are soon stilled by syrups, when they are put out to nurse whilst their mothers are at work. In short, they are the very class that must be helped by laws, and that at the same time need not and cannot be consulted as to their desire for such legislation.

SCOTLAND.

SMALL-POX AT DUNBAR.

WITH regard to the case of small-pox reported in our issue of December 31st last (p. 1067) as having occurred at Dunbar, Dr. Leith Napier writes to us to say that, although the sufferer worked at a rag-store in connection with a paper-manufactory in that town, the results of a careful inquiry which he has made into the circumstances of the case have convinced him that its origin cannot definitely be attributed to infection from the rags. An important point in this connection is that no other woman has taken variola, although many are and were employed on identical parcels of goods. The house in which the patient lives is a self-contained one of four rooms. The number of inmates was eight in all, five being young children. The healthy members of the household were all vaccinated, and all did well, except the mother, who had been inoculated in childhood. The patient has now recovered, and, as no fresh case has appeared, the disease may fairly be assumed to have been stamped out.

UNIVERSITY OF EDINBURGH: ANNUAL RETURNS.

A STATEMENT, published at the close of the year, shows that the number of matriculated students in the University of Edinburgh for the year 1881, was 3,237, as compared with 3,172 in 1880. Of the entire number, 1,638 (or over 50 per cent.) were students of medicine. The 1,638 medical students are contributed in the following proportions: 638 were Scotch, 585 were from England, 30 from Ireland, 120 from India, 202 from the Colonies, and 63 from other countries. As to graduation in 1881, 35 graduates received the degree of M.D., 133 the degrees of M.B. and C.M., and 4 the M.B. alone; while 14 graduated B.Sc., some of them in public health. During the year two "Anderson Bursaries" were founded from a sum of £2,286, bequeathed for that purpose by the late Mrs. Ronald, of Liverpool. The University General Council shows an increase of 87, and now numbers 4,525 members, as compared with 4,438 in 1880. The southern portion of the new buildings is nearly completed, and is already to a considerable extent occupied. To the building fund the sum of £200, bequeathed by the late Mr. Ainslie, of Stirling, has been paid, as well as a sum of £150 from the executors of the late Dr. Stark of Auchtermuchty.

HEALTH OF GLASGOW.

FROM the report of the medical officer of health for the week ending December 24th, 1881, we find that there were 477 deaths registered, representing a death-rate of 24 per 1,000 living. In the corresponding fortnight of last year, there were 41 fewer deaths; this year being in excess in all departments of disease, but especially the zymotic, owing to the fatality of measles. Pulmonary diseases caused 151 deaths, representing a death-rate of 7.6, and constituting 31½ per cent. of the total deaths. There were 6 deaths from fever—viz., 5 from enteric, and 1 undefined. The number of deaths from infectious diseases of children was 70—viz., 33 from measles, 22 from whooping-cough, and 15 from scarlet fever. The leap from 6 to 22 fatal cases of whooping-

cough is merely an incident in the increased fatality of pulmonary diseases, owing to the cold and fog; while the rise from 17 to 33 fatal cases of measles confirms the anticipation previously expressed, owing to the rapid extension of the disease. The weather has also probably favoured the mortality. There are at present in the hospitals, Belvidere, 126 cases of scarlet fever, 89 of enteric fever, 37 of measles, and 16 of typhus—in all 269, as compared with 261 in the previous fortnight, and 320 at the corresponding period of last year.

LAST WEEK'S MORTALITY.

IN the eight principal Scotch towns, last week, the death-rate was 22.9 per 1,000 of the population; this is 3.0 below the rate at the corresponding period in 1881. The lowest mortality, 14.0 per 1,000, was at Leith, and the highest, 27.5, at Paisley. Zymotic diseases caused 3.6 deaths per 1,000, and chest diseases of an acute nature 135 deaths. The mean temperature, 41.1, was 5.7 degrees higher than in the same week in 1881.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending December 31st, 1881, it appears that the death-rate in the eight principal towns was 24.7 per 1,000 of estimated population. This rate is 2.2 above that of the corresponding week of last year, and 0.2 above that of the previous week of the present year. The lowest mortality was recorded in Edinburgh—viz., 19.5 per 1,000; and the highest in Perth viz., 34.8 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 3.6 per 1,000, or 0.5 below the rate for last week. This rate was considerably exceeded in Glasgow, where measles and whooping-cough prevailed. Acute diseases of the chest caused 144 deaths, or 2 more than the number registered last week. The mean temperature was 44.6°, being 9.7° above that of the week immediately preceding, and 12.0° above that of the corresponding week of last year.

IRELAND.

THE Treasurer of the Belfast Royal Hospital has received a sum of five hundred guineas from Sir Edward Coly, J.P., of Merville, making his donation in all one thousand guineas to the funds of the charity.

THE Local Government Board have sanctioned a retiring allowance of £100 *per annum* to Dr. Toole, late a medical officer of the Bandon Union, on the understanding that it is not to be made a precedent in granting superannuation in future.

MEETING OF THE BELFAST DISPENSARY COMMITTEE.

AT a meeting of the Belfast Dispensary Committee held last week, it was reported that the spread of small-pox was alarmingly on the increase in the town. The medical officer of No 4 dispensary district stated that he had no fewer than twenty-six cases on hand at present, but that this was only a very small representation of the number of private sufferers from the malady in that district. There were last week one hundred cases of small-pox under treatment in the union hospital, thirteen new cases having been admitted during that period, and the committee have directed the master, in the case of any sudden emergency, to have the medical cases in the hospital removed to the infirmary, so as to avoid any communication with those suffering from small-pox.

MEMORIAL TO THE LATE MR. GREEN HALL, F.R.S.

WE do not remember any occasion that has elicited so much widespread and genuine regret in Dublin as that caused by the melancholy death of Mr. James J. Harvey, an elderly native of whom we published last week. His falling was practically shown by the large attendance at a meeting of his lay and professional friends held last Monday at the King's Inns, College of Physicians in Ireland, and amongst the speakers the names of those who were present should be mentioned. If the names of the President, the Vice-President of

the College, Dr. J. W. Moore, was moved to the chair. Dr. Robert McDonnell, F.R.S., moved, and Mr. R. W. Boyle, J.P., seconded, the following resolution, which was unanimously agreed to: "That, in recognition of the eminent scientific ability of the late Dr. Reuben J. Harvey, and of his services to the advancement of the study of physiology and to the improvement of medical education, a fund be now raised to establish a memorial to him." The appointment of a committee to carry out this object was moved by Dr. Banks, Regius Professor of Physic in the University of Dublin, and seconded by Dr. Cruise. The committee consists of the following gentlemen, with power to add to their number: Dr. Apjohn; Dr. Atthill; Dr. Banks; Dr. Barton; Dr. Bennett; Mr. R. W. Boyle, J.P.; Dr. Corley; Dr. Cruise; Dr. C. E. Fitzgerald; Mr. G. F. Fitzgerald, F.T.C.D.; Dr. Gordon; Rev. Dr. Haughton; Dr. Kidd; Dr. James Little; Mr. Nicholas Lynch; Dr. Lyons, M.P.; Dr. Robert McDonnell; Dr. MacDowell; Dr. J. W. Moore; Dr. Ormsby; Rev. Canon Travers Smith, B.D.; Professor Gerald F. Yeo; with, as Honorary Secretaries, Professor E. P. Wright and Dr. C. J. Nixon. Other resolutions were proposed and seconded by Rev. Canon Travers Smith, B.D., Professor Thornley Stoker, Drs. Apjohn, Jacob, Wharton, and Atkins. A subscription-list was opened, and a sum of £100 was subscribed in the room. The Treasurers appointed are George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin, and R. W. Boyle, J.P., 35, College Green, Dublin, to whom contributions to the fund may be sent. The committee will hold a meeting next Monday, to consider what form the memorial should take.

TRANSACTIONS OF THE CONGRESS OF 1881.

THE transactions of the International Medical Congress of 1881 are now issued complete in four thick royal octavo volumes. They comprise 2,548 pages of closely printed matter, together with 180 illustrations. The preface informs us that the communications are 450 in number, and each communication is printed in the language selected by its author. The reports of the speeches made by members taking part in the discussions, of which there are 858, appear in English.

The first volume, which alone contains 648 printed pages, is taken up with an account of the general meetings, the general addresses, the list of members and committees, and the rules, together with the reports of the work done in the museum, and in the sections of anatomy, physiology, and materia medica.

In the first 100 pages of this volume are contained the speeches of the opening meeting, and the memorable addresses of Virchow, Ferriol, Billings, Volkmann, and Huxley; and a table showing the number of members of each nationality, from which we gather that the United Kingdom supplied 225 members; the English colonies, 62; America, 220; France and provinces, 201; Germany, 203; Italy, 73; Austria, 33; Hungary, 26; Russia, 33; Sweden, 12; Norway, 20; Denmark, 13; Portugal, 2; Holland, 61; Luxembourg, 1; Belgium, 58; Switzerland, 36; Spain, 9; Portugal, 2; Turkey, 4; Egypt, 4; Roumania, 3; Bosnia, 1; Greece, 1; Madeira, 2; Persia, 1; China, 5; Mexico, 1; Java, 1; Peru, 1; Argentine Republic, 6; Uruguay, 1; Colombia, 1; Canary Isles, 1; making a total from all places of 1,882.

From the list of notable representatives of foreign medical societies and associations, we learn, amongst others, the American Medical Association represented by 42 members; the Medical Society of the County of New York by 11; the French Society of Medical Science, Paris, by 7; the London Synod of Medicine by 6; and the Royal Academy of Medicine, Rome, by 5.

The second volume, 616 pages, includes reports of the sections of medicine, surgery, and military medicine. The third volume, which contains 600 pages, is devoted to the reports of the more general sections of ophthalmology, diseases of the throat, skin, ear, and teeth, and mental diseases.

The fourth and concluding volume of 604 pages adds the reports of the more special sections, ophthalmology, diseases of children, obstetrics, medicine and surgery, and military medicine.

A table of contents will be found at the commencement of each volume, and at the end of the last volume is a general index of the subjects of communications, and a complete list of the names of contributors and of those who spoke.

The publishers, Messrs. Underwood, of these volumes have been engaged for publication by Sir William Newnes, Bart., Honorary Secretary General, assisted by Mr. C. H. Malins, and secretaries of the sections, have, they state, having in view complete

sions into reasonable bulk, found it necessary to exclude some few communications as not being strictly suitable, and to shorten others. This has been done with due consideration for their relative importance and the extent of the business transacted in each section.

The mechanical execution of the volumes is excellent, and reflects great credit on the printers, who have, we believe, placed the resources of their establishment freely at the services of the committee. The simultaneous issue and rapid passing through the press of such volumes implies considerable strain on the good-will and resources of any printing establishment, and the promptitude with which these 4 important volumes has been issued reflects credit upon Messrs. Ballantyne, Hanson, and Co., the printers.

As they stand, the four volumes which are now issued to subscribers form a splendid monument of the meeting.

Fronting the title-page of the first volume is a beautifully engraved fac-simile of the commemorative medal, struck in honour of the occasion, representing on the one side a profile of Her Majesty the Queen, and on the obverse a special design in character with the objects of the Congress, designed by Mr. Tenniel.

UNIVERSITY OF LONDON.

WE regret to note strong indications of an apparent intention on the part of some active members of the arts and law section of the graduates of the University of London, to set aside the precedent that has hitherto ruled the proceedings of the graduates in the nomination of candidates for the senate of the university. There has been a well understood and well observed understanding, that the arts and laws graduates on the one hand, and the medicine and science graduates on the other, should alternately nominate a candidate for the senate. On the present occasion, the vacancy is one which should be filled by a graduate representing the medical and science sections. The friends of Dr. Newth have brought him forward, and it will be generally admitted that, in his turn, Dr. Newth is a highly eligible candidate to represent the arts and law section; but this is not his turn, and it is not the turn of that section of the graduates. If the nomination of Dr. Newth is to be regarded as an announcement of the polling intentions of this section of the graduates on the occasion of the next vacancy in the senate, there is not a word to be said against anything which has hitherto been done in the matter; and this, we believe, is understood to be the state of the case by the medical graduates generally, and by a considerable number of the arts and law candidates. Nothing, however, could be more unfortunate than an effort to run Dr. Newth as a fighting candidate on this occasion. It will, we feel sure, be generally felt that, in the best interests of the university, it will be deplorable if the very effective and satisfactory understanding hitherto observed should in any way be departed from, and if the elements of disunion and discord should be introduced by an unwise rupture of the existing agreement. Should this unfortunately occur, the nomination of candidates for the senate will stand upon a very different footing from the dignified and excellent basis on which it now exists; and future elections would degenerate into contests between the faculties—a result which could not but be deplorable. The medical graduates should very seriously consider their present position, in running a junior as well as a senior candidate on the medical side, and should consult with the supporters of Dr. Newth, to ascertain how far his candidature is intended on this occasion to be hostile to that of the medical candidates.

ROYAL COLLEGE OF SURGEONS.

A QUARTERLY meeting of the council of the Royal College of Surgeons was held on Thursday the 12th. The minutes of the Ordinary Council held on the 8th ultimo, were confirmed. Signatures to the by-laws of members elected to the fellowship were received. Reports were received from the several annual committees, and from the committee on further examinations for membership and fellowship. From the museum committee was submitted to the council a series of regulations, defining the conditions of the admittance of women to the museum, which were adopted. Upon the recommendation of this committee, it was also resolved that the second part of the catalogue of the vertebrate animals contained in the museum be printed. This part will contain a list of all the mammalia, recent and extinct, in the college museum.

The committee on further examinations reported that they had taken into consideration the following resolution of council, dated the 9th December 1880, viz.: "That it be referred to the committee on the arrangements for further examinations for the diplomas of member and fellow of the college to take into consideration the curricula of professional education for these diplomas, especially in reference to the irregularities existing in them, as compared with the curricula of other

institutions, and to report thereon to the council;" and that, having examined the curricula of professional education of other surgical institutions in the United Kingdom, they do not recommend to the Council that any alteration should be made in the curricula of professional education for the diplomas of member and fellow as laid down in the existing regulations.

The committee further reported that in pursuance of the resolution of the Council of the 9th June last, they had taken into consideration the following resolution of the General Medical Council of the 30th April, 1881, and contained in Mr. Miller's letter of the 11th May last, viz., "That it be recommended to the several licensing authorities under the Medical Act to consider whether they can separately or conjointly take steps to promote the establishment of a preliminary scientific examination, and to require of all candidates for their respective licenses that after passing the preliminary examination in general education, and either before commencing the purely medical curriculum or at the latest before the end of the first year thereof, they shall pass such a preliminary scientific examination as is proposed". They recommended to the Council that the following reply should be sent to the resolution, viz., that in the opinion of the council it is desirable that candidates for the diploma of member and fellow of the college should be required to pass a preliminary scientific examination, in addition to the preliminary examination in general education, provided that such examination be passed by them before the commencement of the purely medical curriculum, so as to avoid any curtailment of the present too limited period of four years now required for professional study; and that it is not in the province of the college to take any steps, either separately or conjointly, in the establishment of the proposed preliminary scientific examination. The report was adopted.

It was intimated that five essays had been received for the Jacksonian Prize. Mr. Spencer Wells was appointed Hunterian Orator for 1883, when the next Hunterian Oration will be delivered. Mr. F. G. Hallett was appointed assistant-secretary to the college.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held on Wednesday, the 18th day of January next, 1882, in the Council Room, Exeter Hall, Strand, London, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary*.

161A, Strand, London, December 13th, 1881.

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, January 18th, April 12th, July 12th, October 18th. Gentlemen desirous of becoming members must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, May 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881. FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

DUBLIN BRANCH.—The annual general meeting of this Branch will, by the kind permission of the President and Fellows, be held on Thursday, January 26th, at 4 o'clock P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and Council for the ensuing year will be elected by ballot, and any other necessary business transacted. Owing to the lamented deaths of the President and President-elect, the Council has nominated Dr. Kidd, Vice-President, for the presidency of the Branch, and he has kindly consented to deliver an address on the occasion. The annual dinner of the Branch will be in the College Hall, at 7 o'clock P.M., the incoming President in the chair. Dinner tickets for members who purchase their tickets on or before Tuesday, the 24th instant, 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1.—GEORGE F. DUFFEY, M.D., Honorary Secretary and Treasurer.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting of the District will be held on Thursday, January 19th, at 8.30 P.M., at the house of Dr. Cree, 2, Pemberton Villas, St. John's Park, Upper Holloway. Dr. Woakes will re-introduce the discussion on the Etiology of Diphtheria; its Contagium; the Occurrence of Sudden Death in it—reconsidered. Dr. George Ogilvie will read a paper on Electricity as a Therapeutic Agent.—GEO. W. POTTER, M.D., Honorary Secretary, 12, Grosvenor Road, N.—January 2nd, 1882.

BATH AND BRISTOL BRANCH.—The third meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday, January 19th, at 4.15 P.M.; D. Davies, Esq., President.—R. S. FOWLER, E. MARKHAM SKERRITT, M.D., Honorary Secretaries.—Bath, December 1881.

[illegible]

that the companies only make this an excuse for their meanness. For I hold that the surgeon who loves drink can get it in many other ways, and be drunk as often as he wishes. He can take it with him, he can order it as medical comforts, he can get it at foreign ports, or the stewards will only be too happy to supply it. All ship-surgeons must know how the sailors and firemen save up and lay by their biscuits until they run into a foreign port, and then have the opportunity of exchanging for rum. What surgeon, who, during a long voyage, has looked into the fore-castle locker, and has not found it more than half full of biscuits? So I think, while the sailor can get his rum, the drunken surgeon can get his also. Some companies pay their surgeons when on shore: this is called short pay. This short pay may be either full or half pay. The majority of companies who give full pay require that the surgeon, while his ship is in port, shall sign his name each morning in a book kept on board his ship, stating his time of arrival and departure. Other companies, who give half pay to the surgeon while on shore, let him do as he likes. This matter, of being on duty when in dock, is one that has its evils. It is hard for the surgeon to go down to his ship and sit in his cabin for hours with nothing to do; and it is at this time that the greatest temptation comes for him to forget his status and profession. Captains, mates, engineers, stewards, all are more or less on the Jack-a-shore tack, and it is well for the surgeon if he can resist. He would be better away from his ship at this time; for, if accidents do occur, the patient never remains on board, but is sent off to hospital at once. Most companies give the surgeon a gentle reminder, when the ship is clearing for a voyage, that the ship is on no account to be quarantined. Some say this plainly; others, with a mock Christianity, tell you a story of a surgeon who quarantined his ship, and of the awful doom that befel him. Of course, if the surgeon fail to quarantine his ship if infectious cases are on board, he runs the risk of being arrested, imprisoned, and struck off the medical register, and the company have no pity for him; for I venture to say that, had he done his duty and quarantined his ship, he would have been dismissed from the company's employ, or so severely reprimanded that he would see it was his duty to resign. I know a case where a surgeon attended fifteen cases of measles, and landed them all safely. Shortly afterwards, he took measles. His cabin was so small and close, that he lay on a sofa in the saloon. He recovered, came back with his ship, called at the company's office, but he never got thanked for his services, nor in fact congratulated on his recovery. The saying of Jack when up aloft, "One hand for myself, and the other for my master," expresses well the feeling between paid and payer throughout nearly the whole service. All companies, so far as I am aware, have printed rules for the conduct and guidance of captains, officers, and surgeons; these rules may or may not be carried out. There is a want in all these collections of rules. If they defined more accurately and plainly, if they took into consideration all the little things that regulate the action of the captain to the surgeon, and *vice versa*, they would be worth a lot more than they are at present. The rules, for the most part, refer to duty, the wearing of uniform, etc. As regards uniform, some companies insist on their officers wearing it; while others go about much as they like. I know a company where, if the mate or surgeon went on the quarter-deck without uniform, he would have a message conveyed to him by a quarter-master from the captain, stating that he must observe the regulations. I think that all companies should make it imperative that all officers and surgeons should wear a distinctive uniform. While speaking of uniform, I must mention that all captains and officers have the greatest dislike to wear their uniform ashore; they say it is the livery of the company. I do not know why all have this dislike to it, for it is a tidy and cheap dress for the man who stays in the same line, and for some years at sea.

Most companies allow their surgeons to prescribe medical comforts to the officers and crew, also to the third-class and steerage passengers. Some companies reprove their surgeons when the medical comfort bill is above 7s. 6d. or 15s., while others allow up to £20. I know a good line, where all the medical comforts ordered by the surgeon had to be countersigned by the captain. This is a nasty state of affairs. I was surgeon to this line, but I took good care never to order a medical comfort during my two voyages, each voyage being of four and a half months' duration. Some companies also allow their surgeons to have their meals at the first saloon table; other companies will not allow them this. This order is trying to a gentleman, and gives rise to an amount of whispering among the saloon-passengers; for they cannot make out why the doctor can come and chat with them on deck, and then be forbidden the saloon-table. How many surgeons sail under this rule? A good many, I know; for this rule exists in one of the best lines sailing out of Liverpool.

All companies have their ships surveyed by a Board of Trade surveyor. Everyone who has visited a steamer will have noticed over each

cabin, "Certified to accommodate" so many seamen—two, three, or six, as the case may be. All the officers' cabins, and the surgeons' as well, are marked so. This means, for example, that, if the surgeon occupied a room with "certified to accommodate three seamen" stamped on the woodwork over the door, two more souls could be put into his room along with him. He might grumble, but this can be done to him or to any other of the officers.

Another point: when captain, officers, crew, and surgeons take on hands to fill up vacancies on board-ship, they sign articles, and it is to be observed that these articles say nothing about quarters. The officers may go and look at the ship and accommodation set apart for them. If they do not like them, they need not go. These articles that they sign have, however, a bill of fare attached, and, if the captain wished it during the voyage, he could give an order that all hands were to have this diet only. This bill of fare mentions bacon, biscuit, water, sugar, tea, lime-juice, etc.

These remarks, sir, on the companies and their ships will, I hope, go to show that there is no good, when speaking of reform, to confine our attention to the best lines, leaving out the middle-class and third and fourth-rate ones.

2. The captains or masters. Various are our experiences of these men. Seldom, however, has it been my good fortune to meet them gentlemen. Three-fourths of them had come out of the fore-castle, and had had their time at being roughly handled while ordinary seamen; and so, when placed in authority, abused it. There are gentlemen in some lines, but these are generally half-pay naval officers, midshipmen, or our modern apprentices; but the captain we meet with oftenest has come from before the mast. Some captains do not interfere with the surgeons; others continually offer insults to them, making rude remarks to them before the officers, crew, or passengers, and sneering at any suggestion the surgeon may make regarding the health of those on board. I know one captain, who, on being told by the surgeon that the fore-castle was in a dirty state, said to him before the mate: "Well, go and clean it out." A disagreeable fashion that captains have when introducing the ship's surgeon, is, to say: "This is my doctor", without even pretending that the surgeon has an individual name. Everything on board ship is "my" with these captains—"my ship", "my surgeon", "my boy"; so that at sea they are very important men; but when they are in dock, or when the director or owner comes on board, he finds his true level, and "Yes, sir", or "No, sir", is all we hear. To an intellectual surgeon, this is trying, for it must lower the captain in his estimation. The captains in some lines have supreme control on board-ship. In emigrant ships, the surgeon is placed before the master, and in good lines each department has a "head", and he is accountable to the owners for anything that may go wrong. I may state that I have known captains to be so "supreme", that they have refused the surgeon liberty to go on shore, this, perhaps, being the surgeon's last and only chance of seeing some foreign place of interest.

3. The officers. These include the mates, engineers, carpenters and boatswain. These are divided into senior and junior. Senior officers are the first and second mates, first engineer and purser. The remainder comprises the other mates who mess by themselves; the remaining engineers, who mess by themselves; the boatswain and carpenter having their boys, tea and mess together. The senior officers generally dine at the first saloon table. When the surgeon comes in, with whom or behind whom, I can give no definite information; and I must say that the well known ship advertisement, "We carry an experienced surgeon, stewards, and crew," will not give us much in finding him a place. As a rule, the officers, senior or junior have little in common with the surgeon, except when passengers are few, though he and the first mate, purser, or first engineer, are great friends. It seems to be a rule, that the surgeon cannot be a general friend, that is, that he and the captain will associate, or else he will go with the officers. Senior and junior officers are much better paid than the surgeon, even the carpenter getting higher wages than the surgeon. The first mate is the hard working man, and like the other officers, spends most of his watch below in sleep.

4. The Surgeon. "As you make your bed so you lie on it." So says the old proverb. This seems to be the text taken by almost all your correspondents, but I am far from thinking so. Many a man goes on board, and has to stand snubs from even his inferiors, until he has time to show them what he really is. The surgeon may be senior or junior on board, for some ships carry two, and in many cases do not display a very amiable spirit towards one another. To become appointed to a ship, he only requires to be registered as a surgeon. If he have a director or shareholder as his friend, he is almost sure to get an appointment at once. If he be less fortunate, he will go round the different offices and leave his testimonials. Perhaps he may be in luck,

of the ship will sign articles on the same conditions as the other members of the crew, even though his pay should be on a par with that of the chief cook. My cabin was similar to those allotted to first-class passengers; and, as regards size, was certified to accommodate three seamen. As medical officer of the ship all things pertaining to sanitary matters were completely under my direct supervision. The steerages were inspected by me every morning, and any complaints (which were few) I had to make as regards the condition of them, were speedily rectified by simply informing the chief steward. If there was a want of air in them, all I had to do was to acquaint the officer on the bridge of the fact, and weather permitting, a windsail was immediately rigged up, and a free current of air sent through the steerages. Any special diet to passengers I chose to order was always complied with, and never refused if it could be got. Sick passengers were removed to the hospital at my discretion, and once each day I reported to the captain the health of the ship and number of patients in the hospital, and nature of their disease.

The Government scale of medicine is certainly deficient, but in the company in which I served this need not be considered as a grievance, as I had full liberty to order whatever additional medicines I required. This is not the case in every company; for I remember a friend of mine who was surgeon on board one of the other ocean steamers, telling me that "he was not allowed to order a dozen pills more, over that of the Government scale."

The emigrants travelling by the Allan steamers are inspected previously to embarkation, by the surgeon of the ship, so that any case of which he is suspicious is put to the one side, till the inspection takes place by the Government officer previously to sailing. In this way it is almost impossible for a case of infectious disease to pass unnoticed; and I may state, that during two years I was at sea, in which time I made twenty-eight trips across the Atlantic, I never had a case of infectious disease occurring during any voyage. I have sailed with several captains, and I do not remember ever having received at their hands anything but extreme kindness and courtesy; and in any trouble or difficulty they were always ready and willing to give me the best advice and assistance.

I will always look back (with pleasure) to my seafaring experience as a time in which I made many pleasant and lasting friendships, and I would advise every surgeon, after getting his degree, to endeavour to enter the service of a good ocean steamboat company for a short time, and I am certain he will corroborate my statement when I say all the rough corners about him will be polished off.—I am, sir, yours faithfully,
WILLIAM J. SHAW, M.R.C.S.

HOSPITAL AND DISPENSARY MANAGEMENT.

REIGATE COTTAGE HOSPITAL.

THE fifteenth annual report of this admirable institution gives evidence of much useful work thoroughly well done. The Reigate Hospital, owing to the energy of Dr. Walters, and to the admirable management of Mrs. Walters, has long been recognised as a model institution. The regularity and method with which the administration is carried on greatly impress a visitor, and it is not too much to say that the whole work is as systematically and carefully done as at any of the best clinical hospitals. For fifteen years Dr. Walters has filled the post of medical officer (*i.e.*, of house-surgeon). This has necessarily entailed a great amount of work upon one man, and to obviate it for the future the committee have, at Dr. Walters's suggestion, appointed four gentlemen as an honorary medical staff to act in rotation as medical officer for one month each. This change is a useful and necessary one, and is calculated, if possible, to increase the popularity this charity has already earned. During the year 185 in-patients have been under treatment, of which, including 25 accidents, 101 were surgical (nearly half of which were cases of operation), and 69 medical cases. The mortality was 3.9 per cent., and 71 per cent. of the completed cases were discharged cured or convalescent. The average duration of each case was 27.7 days, and the average cost of each in-patient, including all the expenses, was £4 7s. 6d., or £1 1s. 9d. per week.

LEWISHAM SELF-SUPPORTING DISPENSARY.

THE Charity Organisation Reporter of Dec. 22nd, gives the following notice of the Lewisham Self-supporting Dispensary. "We have before us the first annual report of this institution, which was established under the auspices of the Metropolitan Provident Association. During the year 260 cards, representing 696 members, have been issued; of these members 520 remained on the books on September 30th. The receipts have been £98 10s. 6d., 25 per cent. of which has sufficed to cover the fixed and miscellaneous expenses, leaving 75 per cent. for the

remuneration of the medical staff. At the same time, as the honorary secretary points out, one must not be too sanguine over the first year, the expense of the whole of the printed matter and various other items, which will in future be charged to the general fund, having been borne by the preliminary fund, which amounted to £36 9s., including £25 given by the trustees of the Lewisham Parochial Charities. Owing, however, to the removal of the chief office to Lee Bridge, where the use of a room has been placed at the disposal of the committee, the honorary secretary trusts that next year 90 per cent. of the receipts will be available for the medical expenses."

MILITARY AND NAVAL MEDICAL SERVICES.

THE ARMY AND NAVY MEDICAL SERVICES.

SIR,—A correspondent of the *United Service Gazette* reviews the relative prospects of candidates for the Army and Naval Medical Services from a novel standpoint. He traces the careers, as shown in the official records, of those who joined during a period of five years—from 1871 to 1875. He states: "The period selected was taken at haphazard, but it is very suitable for the purpose of a true comparison, as all the young men were drawn from the same sources, passed the same entrance examination, and underwent the same course at Netley before being drafted to various appointments."

	Army.	Nav.
Numbers entered from January 1871 to December 1875	126	120
Of these, there—		
Resigned voluntarily	10	18
Resigned to avoid court-martial	0	1
Were tried by court-martial	0	6
Were dismissed for misconduct	1	11
Retired on account of ill-health	0	4
Died while serving on full-pay	6	8
Were promoted to higher rank	1	1
Number removed from the Lists for various reasons	17	42
or, per cent.	13.5	35
Number remaining in each Service on January 1st, 1881	109	78
or, per cent.	86.5	65

Having taken the trouble to test the accuracy of the results here tabulated, I have found them substantially correct, but there can be no doubt that the retirements from the army on account of ill-health are included amongst the voluntary resignations, so that the proportion of these latter should be 10 to 22, or 7.9 to 18.3 per cent. of the number who joined. It is also somewhat curious to observe how frequently in the navy those who passed the best examinations were also amongst the first to quit the career of their choice. Evidently ability and professional knowledge are at a discount in the Naval Medical Department. "Surtout, point de zèle." Perhaps the new School of Hygiene at Haslar may thus faithfully fulfil its object of leaving at rest the dormant intellects intrusted to its care. For the clear and telling exposition, in your last number, of the loss sustained by young medical officers in being withdrawn from the great advantages of the excellent school at Netley, the members of the profession owe you a debt of gratitude.

Another source of dissatisfaction in the Naval Medical Service is the uncourteous, unsympathetic, and unprofessional manner with which medical officers are received by the heads of the Department.—I am, etc.,
MEDICUS NAVALIS.

NAVAL MEDICAL SERVICE.

SIR,—In answer to "Teredo's" inquiries in your issue of the 31st ult.—1. Leave is only allowed at their lordships' discretion; in the course of a year, a surgeon can obtain forty-two days; but in cases of emergency, or very urgent "private affairs", the authorities are most considerate. 2. Surgeons on board ship belong to the ward-room mess; on shore, when doing hospital duty, to the medical mess. A surgeon on appointment ranks with lieutenant R.N.; his social position depends entirely upon himself; in fact, as he chooses to make it. 3. I am not aware of any special roster for regulating service in unpleasant stations, or in small ships. From my experience of nearly eleven years, all appointments are made with the greatest possible care, and with due regard to ability and services. Surgeons on entry after completing a special course of instruction at Haslar, are sent to sea-going or harbour ships. It would be impossible to lay down a hard-and-fast rule as regards service on shore and in harbour ships; but, roughly speaking, it would average nearly one-half of the period of service as surgeon (twelve years). 4. A surgeon when in charge has to comply with the printed instructions for medical officers; he has to visit the sick at least twice each day, and make a morning report to his captain of their state and condition; to keep a journal in which is recorded all important cases, a brief history of the movements of the ship, including topographical remarks, observations on physical geography, climatology, natural history, etc., and all other matters relating to the health of the crew; he has also to send to the Medical Director-General a quarterly nosological return, which is compiled from his daily note-book. 5. When under a senior medical officer, the junior renders his senior every assistance, and in his absence, or in the event of his invaliding, he is held responsible for the various medical returns; altogether, the duties are light, pleasant, and as independent as they can be with due regard to the discipline which is necessary on board ship.

Hoping I am not trespassing too much on your space, I remain, yours obediently,
SURGEON R.N.

THE Registrar-General's report shows that during last week the annual rate of mortality in twenty large English towns averaged 25.2 per 1000. In London 2,799 births and 1,858 deaths were registered, and the annual death-rate declined from 28.3 per 1000 in the preceding week to 24.9. The deaths included 20 from small-pox, 53 from measles, 44 from scarlet fever, 13 from diphtheria, 103 from whooping-cough, 21 from enteric fever, and 12 from diarrhoea.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

SMALL-POX AT NOTTINGHAM.

THE spread of what might easily have proved a serious epidemic of small-pox at Nottingham has, it may be hoped, been effectually stopped by the prompt and energetic measures taken by the health-officer, Dr. Seaton, to stamp out the disease. It appears, from reports with which Dr. Seaton has furnished us, that a woman suffering from a complaint which was undoubtedly unrecognised small-pox, was admitted into Nottingham workhouse, on November 5th. She left the workhouse on November 10th, and went to a public house at Newark. On the 18th of that month, her infant of nine months was found to be suffering from small-pox, and the mother and child were therefore removed to the Newark infectious hospital. Subsequently, two other cases (one fatal) were sent to this hospital, both having originated at the same public house. On November 24th, fourteen days after the woman left Nottingham, a case of small-pox was admitted to the Nottingham infectious hospital from the workhouse; and, thirteen days later, four other cases were removed. On visiting the workhouse, on December 7th, Dr. Seaton was informed that at the date when the first case (namely, that admitted on November 24th) occurred, there were fourteen persons in the ward, and of those, four were persons afterwards attacked by small-pox. Another case subsequently admitted was also one of the fourteen exposed to infection on November 24th; and a sixth was a woman who had been in the ward on that day to see what was the matter with the child then attacked. On December 12th, a child was admitted to the hospital from a house in Radford. This child, which had been ill for five days, although medical assistance had not been sought till the 12th, was also one of the fourteen exposed to inspection on November 24th. It had been taken out of the workhouse a week afterwards, and its illness commenced on December 7th. Since then other cases, bringing up the total to twenty-three, have occurred in the borough; and Dr. Seaton has had to deal with, at least, seven centres of infection. It will, of course, be necessary to watch each of these, as, though the cases have been promptly removed, and other measures taken to confine the disease within the narrowest possible limits, it can hardly be hoped that further trouble will not arise. Dr. Seaton has, however, exerted himself strenuously to stamp out the infection. He has not only secured the vaccination of the invaded households and their neighbours, but has convened meetings of the workpeople, and has urged upon them the importance of taking precautionary measures. With the cordial co-operation of the employers of labour in the district, one of whom set the example of being revaccinated, much has been done towards the protection of the invaded locality. It is greatly to be hoped that these energetic measures may be found sufficient to check the threatened epidemic: though it will, of course, be impossible to speak definitely on this point for several days yet.

THE SCARLET FEVER EPIDEMIC AT HULL.

SCARLET FEVER continues very prevalent at Hull. No fewer than fifty-three deaths from this disease have already been noted, and a large number of additional cases have been reported. Most of the Sanitary and School Boards, and the School Board have been requested to shut up their schools, and to suspend all public entertainments. A delegation of the Sanitary Commissioners to the school authorities having been unsuccessful in obtaining the suspension of schools, a special meeting is to be held to decide whether or not the request for the suspension of schools shall be acceded to.

MEDICAL ATTENDANCE ON THE POOR.

A VERY painful case has recently been inquired into by a coroner's jury, and has resulted in a verdict. A poor woman of the name of Womersley, near her home, was found dead, and a post-mortem examination was made. The cause of death was found to be a rupture of the heart, and the jury returned a verdict of death by natural causes. The case was brought before the coroner by the health-officer, Dr. Seaton, who had been informed of the death by the police. The health-officer had been called to attend the woman on the previous day, and had found her in a state of extreme weakness. He had advised her to go to bed, and had prescribed medicine. The next day she was found dead. The jury found that the health-officer had acted properly, and that the death was due to natural causes.

brought him a fee of 2s. 6d. He returned to get the money only to find that his wife was dead.

At the inquiry, some not unnatural remarks were made by the jury as to the apparent harshness of the medical gentleman in refusing to attend the unfortunate woman without prepayment, which the coroner questioned, stating that, according to the law, it was not compulsory on a medical man to attend any case if he was not minded so to do—a principle which, correct though it unquestionably be, might have been better carried out in its occasional breach than in its strict observance—in this case notably, as the poor husband had already paid what he could for Mr. Whiffen's attendance, which was an earnest that he was honestly inclined.

On thing came out at the inquiry, and that is the difficulty experienced at Tottenham in getting the attendance of the parish doctor. Does it arise from indisposition to grant orders on the part of the relieving officer, or from unreadiness to attend on the part of the medical gentleman?

REPORTS OF MEDICAL OFFICERS OF HEALTH.

JARROW.—Dr. Bradley has made an excellent beginning, and presents a report of considerable merit. The report, which is compact in form and methodical in arrangement, shows a state of things by no means creditable to the Town Council. In many cases, Dr. Bradley has found faulty drainage arrangements, insufficient and unsuitable midden accommodation, and an abominable system of contract refuse removal. Towards the close of the year an inspection was held by an official from Whitehall upon the proposal to borrow money for converting the old ashpits and privies into box or earth closets. The report does not show whether the application was successful, but it is evident that the town will be much benefited by the change, since the scavenging can be systematically and regularly performed. Jarrow possesses no hospital accommodation for the isolation of infectious diseases. Notwithstanding Dr. Bradley's praiseworthy efforts to secure such provision, the borough is still deficient in this important respect, and indeed seems likely to remain so until some fatal epidemic decimates its population. The health-officer aptly illustrates the pressing need for a hospital when, in alluding to the prevalence of scarlet fever in one family, he states that "in an adjoining room a woman was daily expecting her confinement. Every precaution was made to prevent the scarlatinal virus from entering the room, and it is satisfactory to learn that the lying-in woman made a rapid recovery, and that neither she nor the infant took the fever." Dr. Bradley adds: "Knowing the danger of exposing the puerperal woman to the scarlatinal virus, as was apparent and almost unavoidable in this case, my feelings are better imagined than described. Had the sanitary authority shared my anxiety of mind in this and in a somewhat similar case, they would not hesitate to provide a hospital for infectious disease." In 1880, the population of Jarrow was estimated at 25,000 souls, and the birth- and death-rates were 40.52 and 19.76 per 1,000 respectively. Of the total deaths, 100 were due to diseases of the respiratory organs—an increase of 16 upon those of 1879. Phthisis was fatal in 40 cases, and heart-disease in 21. One hundred and thirty-seven deaths were attributed to zymotic diseases. Measles were generally prevalent throughout the year, and were epidemic towards its close. During the year the sewers are reported as having been thoroughly ventilated, and the common lodging-houses systematically inspected.

BELFAS RURAL DISTRICT.—The reports in this district by Messrs. Gaylor and Allen are on the whole remarkably good specimens of reports on rural districts. In the Alfreton district, which is under the charge of Mr. Gaylor, the population is estimated at 18,710 persons, spread over an area of 2,724 acres, and living in 112 parishes. The total number of births last year was 577, and the total number of deaths 274, or 15.6 per 1,000, and 14.50 per 1,000 respectively. The infant mortality rate is high, the deaths under five years of age numbering 120, or 47.00 per cent. of the whole, a proportion which Mr. Gaylor admits is much higher than it should be. Of the total deaths in this district, 14 were due to zymotic diseases, scarlet fever being responsible for 10, and measles for 3, and whooping-cough for 1. Fourteen deaths were reported as due to diarrhoeal causes, a mortality which Mr. Gaylor attributes to improper feeding and nursing. Mr. Allen, in his report on the Belfas rural district, estimates the present population at 17,000. Amongst these he reports a birth rate of 34.1, and a death-rate of 16.1 per 1,000 respectively. The zymotic rate was equal to 2.4 per 1,000, a decrease upon that reported for 1870. Of the 30 deaths from these causes, 5 were reported as from measles, 10 each from scarlet fever and diphtheria, and 15 from whooping-cough. Scarlet fever and measles were "thin" and scarce in many portions of the district, a fact which affords Mr. Allen ground for urging upon

his authority the necessity of establishing a hospital for the reception of cases of infectious diseases. Phthisis causes 17 deaths, heart disease 24, and diseases of the chest 46. Mr. Allen has little to report in the matter of sanitary improvement; but he thinks there is much to encourage himself and the officials in their uphill work. In a portion of the district by-laws are in force, and there is some promise of an extended water-supply.

BOLTON.—Mr. Sargeant's report consists largely of a series of elaborate statistical tables; but he has not neglected to give in the body of his report sufficiently ample information as to the sanitary condition of the borough. The present report is for the fifteen months ended December 31st, 1880, with the view of making future reports uniform in point of date with those of medical officers of health generally. During the period reported on, there were 4,644 births and 2,835 deaths in the borough, giving a natural increase to the population of 1,809. The population at the middle of 1880 was estimated to be 106,700, or 109 less than the natural increase, and considerably below that which would be arrived at according to the rule laid down by the Registrar-General. This is accounted for by the late depression in trade, which caused the population to fluctuate largely. The mortality was at the rate of 20.58 per 1,000, being the lowest rate of mortality ever reported for Bolton. It was 0.62 per 1,000 lower than 1879, and nearly 5 per 1,000 below the average for the preceding ten years—equivalent, in fact, to an annual saving of more than 500 lives. Of the total deaths, 692 were due to zymotic diseases—equal to 24.4 per cent. of the entire mortality, and 4.5 per 1,000 of the population. As compared with 1879, the zymotic death-rate was more than doubled, and showed an average higher than that recorded for the preceding ten years. This mortality is readily accounted for by the fatal prevalence of measles, scarlet fever, and diarrhoea; the latter malady alone causing 245 deaths, whilst measles terminated fatally in 216 cases, and scarlet fever in 112. Small-pox was also more or less prevalent in Bolton, though only one death was registered from this cause. Great value is attached by the health-officer to the system in force requiring the compulsory notification of infectious diseases, which, he states, "has given every satisfaction, and has proved of immense value in limiting the spread of contagion." During the year no less than 1,646 cases were reported. The sanitary work of the borough was carefully carried out, and many minor improvements are noted. The slaughter-houses appear to have been satisfactorily conducted; but many of them are objectionable on account of their overcrowded situation; and the Town Council would do well to seriously consider Mr. Sargeant's recommendation for the provision of a public *abattoir*.

BOARDING OUT OF PAUPER CHILDREN.

SIR,—Could you or some member kindly put me right in the following case? I am parish surgeon, and am told that I am not entitled to the fee of 2s. 6d. for visiting and filling up the form for each out-boarding pauper child for the first time, that is, for the first quarter, but only for the subsequent visits, and am paid accordingly. Ought I not to be paid for my first visit and for filling up the form?—I am, sir, yours faithfully,

PARISH MEDICAL OFFICER.

* * * We are very sorry for our correspondent; but, unfortunately, the wording of the order is against him, for there it is implied that it is the duty of the medical officer to make the visit and fill up the form. This is another illustration of the ill results that spring from the absence of unity in the medical body politic. Neither the church nor the law would allow any order to be issued, or Bill to be introduced, saddling them with fresh obligations without additional payment. Our correspondent and his brethren have only themselves to thank for the melancholy plight in which they frequently find themselves. Why do they not recall the lesson taught in their youth, that "Union is strength?"

T. H. T.—The Public Health Act and the Rivers Pollution Prevention Act may, in common with all other Acts of Parliament, be obtained of the Queen's Printers, Messrs. Eyre and Spottiswoode, East Harding Street, Fleet Street; or through any bookseller. There are several annotated editions of the Acts in question, such as Lumley's, Glen's, Chambers's, and Fitzgerald's. The cheapest is a handy little book which is, we believe, published by Messrs. Knight and Co. for three shillings and sixpence.

SIR,—I wish to ask if I should be justified in applying for the appointment of medical officer of a district under the following circumstances. My predecessor, being an L.S.A. only, never held the appointment, although he practised here forty years. Neither the present medical officer or myself are resident in the district, and he holds it as an annual appointment. It is not advertised. Although I am not resident, I consider the district mine, as I reside three miles nearer, and my practice extends over the whole district.

Should I be acting according to "etiquette" if I made application, although it is not advertised?—I am, etc.,

H. A. H.

* * * We consider that our correspondent would, under the circumstances named in his letter, be quite justified in intimating to the board of guardians his readiness to take the office, if the board decide on offering it to him. Under existing orders of the Central Department, boards of guardians are bound to submit every non-resident medical officer's appointment to annual re-election. Their neglect to advertise the vacancy accruing at a certain date could not bar a qualified outsider from applying for it.

OBITUARY.

JOHN FLINT SOUTH, F.R.C.S.

THE senior members of our profession, especially those educated at the formerly united hospitals of Guy's and St. Thomas's, will be sorry to hear that this well known, and with many, most popular man, expired at his residence in Blackheath Park, on Sunday last the 8th instant, in his 85th year.

Mr. South was a son of a well known and highly respectable apothecary in an extensive and lucrative practice in Lant Street, Borough, who gave him, in common with all his children, a first rate classical education. The eccentric Sir James South, the well known astronomer royal who forsook medicine, as the subject of this notice said, for "stargazing," and built the well-known observatory in his grounds at Kensington, was an elder brother. On the completion of his preliminary education he was apprenticed to Mr. Henry Cline, junr., surgeon to St. Thomas's Hospital, on February 18th, 1814, who received with him the large premium of £500 to board and lodge out of the house, resident pupils at that time paying £1000; but in "those good old days when George the Third was king," this meant in most cases, as in his, an appointment on the staff of the ancient hospital at the proper time. On the completion of his professional education, he underwent the usual examination and was admitted a member of the Royal College of Surgeons on August 6th, 1819; and when the charter was granted to that institution, he was of course elected one of the honorary fellows December 11th, 1843. After a long visit to Germany, he settled down to practice, and whilst waiting for patients amused himself in literary pursuits, translating Otto's *Compendium of Human and Comparative Anatomy*, with notes and references—a text-book well known to students. He also wrote a *Short Description of the Bones*. His principal work was, however, a translation of Chelius's *System of Surgery*, with copious and most valuable notes. For many years, he held the office of surgeon to St. Thomas's Hospital, where he also lectured on surgery. Mr. South was elected a member of the Council of the Royal College of Surgeons in 1841, with his senior colleague Mr. J. M. Arnott, who still survives. In 1844 he delivered the Hunterian Oration, the following year he was appointed Arris and Gale professor of human anatomy and surgery. In 1849, he was elected, with Mr. C. H. Hawkins, a member of the court of examiners, and as such, kept a record of every candidate he examined, where educated and the result, a work of great labour, with little or no good. In 1851, he obtained the highest collegiate honour, that of president, and again in 1860. Mr. South was twice married. By his first wife he leaves a son and daughter, and by the lady who survives him two daughters. He was a member of many learned societies abroad, and in constant correspondence with scientific men in Germany, France, and Stockholm, many of whom, at the recent International Medical Congress, visited their venerable friend at his beautiful residence in Blackheath Park. The simple act of introducing our vegetable marrow obtained for him the large Linnæan medal, and the fellowship of the society.

To Mr. South is due the credit of causing the remains of John Hunter, discovered by the late Mr. F. P. Buckland in the vaults of St. Martin's-in-the-Fields, to be removed to the most appropriate resting place in Westminster Abbey. The inscription on the tablet marking the spot was from his pen.

For some years past Mr. South had been engaged writing a history of the Royal College of Surgeons, which extended to such a length that it became a history of the profession. He had previously completed a history of St. Thomas's Hospital.

LIVERPOOL MEDICAL INSTITUTION.—The list of Officers and Council for the ensuing year adopted at the annual meeting, January 10th, 1882, is as follows. *President*: *T. Shadford Walker. *Vice-Presidents*: Robert Gee, Benjamin Townson, *Edgar A. Browne, *Henry G. Rawdon. *Hon. Treasurer*: W. Macfie Campbell. *Hon. Gen. Secretary*: Rushton Parker. *Hon. Sec. to Ordinary Meetings*: *Frank T. Paul. *Hon. Librarian*: J. M. Howie. *Council*: J. E. Burton, D. Dunlop Costine, J. N. Cregeen, J. Sibley Hicks, Arthur E. Hopper, *Alexander Dunbar, *James Lambert, *E. Mason Sheldon, *J. Kellett Smith, *Samuel Spratley, *John H. Wilson, *Arthur Wigglesworth. *Microscopical Committee*: W. Alexander, P. M. Braidwood, Henry Briggs, T. R. Glynn, Karl Grossmann, J. Sibley Hicks, John Newton, Rushton Parker, *William R. Parker, Frank T. Paul, *W. Whitford, William Williams. The asterisk (*) relates to newly elected members.

and Robert S. Bowker, of the Middlesex Hospital; Robert A. Bindley and George H. H. ... of King's College; Edmund W. Entage and Hugh G. Shaw, of University College; Avery C. Waters, of the London Hospital; Arthur J. N. Smith, of the Westminster Hospital; and Francis H. Preston, of St. Bartholomew's Hospital.

Six candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 5th, 1882.

Stephens, Lockhart Edward Walker, Emsworth, Hants.
Roberts, Thomas, 87, Tredegar Road, Bow, E.

MEDICAL VACANCIES.

The following vacancies are announced:—

BEDFORD GENERAL INFIRMARY.—Resident Surgeon. Salary, £100 per annum. Applications by 26th January.

CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor—House-Surgeon. Salary, £100 per annum. Applications by 11th February.

CHARING CROSS HOSPITAL, West Strand, W.C.—Assistant-Physician. Applications by 28th instant.

CITY OF DUBLIN HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications to Surgeon Wheeler, 27, Lower Fitz William Street.

CITY OF LONDON LYING-IN HOSPITAL. City Road—Consulting Physician. Applications by 17th January.

CORK UNION.—Medical Officer for Ballygarvan Dispensary District. Salary, £120 per annum, with £15 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 17th instant.

CRAIGLOCKHART HYDROPATHIC, near Edinburgh.—Resident Physician. Applications to the Managing Director, Craiglockhart Hydropathic Company, Limited, 40, Frederick Street, Edinburgh, by 6th February.

CUMBERLAND AND WESTMORLAND ASYLUM, Garlands, Carlisle.—Assistant Medical Superintendent. Salary, £100 per annum. Applications to Dr. Cammell.

DROGHEDA UNION.—Medical Officer for Duleek Dispensary District. Salary, £110 per annum, with £20 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 23rd instant.

EVANGELICAL PROTESTANT DEACONESSES INSTITUTION AND TRAINING HOSPITAL, Tottenham.—House-Surgeon. Salary £150 per annum. Applications to M. Laseon, Esq., M.D., The Green, Tottenham, by the 23rd instant.

GREAT WESTERN RAILWAY.—Medical Officer. Salary, £600. Applications by 26th January.

HUDDERSFIELD INFIRMARY.—Senior House-Surgeon. Salary, £80 per annum. Applications to F. Eastwood by January 21st.

HUDDERSFIELD INFIRMARY.—Junior House-Surgeon. Salary, £40 per annum. Applications to F. Eastwood by January 21st.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square, W.—Visiting Physician. Applications by January 28th.

LEAMINGTON AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £200 per annum. Applications to the Secretary, Mr. C. Wildman, 6, Woodbine Street, Leamington.

LONDON LOCK HOSPITAL, Male and Out-Patient Department, 91, Dean Street, Soho, W.—House-Surgeon. Salary, £50 per annum. Applications by January 21st.

MEDICAL MISSIONARY DISPENSARY, Liverpool.—Medical Officer. Salary between £200 and £300 per annum. Applications to Dr. H. Taylor, 1, Percy Street, Liverpool, by January 15th.

NORTH ORMESBY COTTAGE HOSPITAL, Middlesbrough. House-Surgeon. Salary, £70 per annum. Applications to the Honorary Secretary.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, 101, Marylebone Road, W. Resident Medical Officer. Salary £60 per annum. Applications by the 18th instant.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—Professor of Practical and Descriptive Anatomy. Application to John Brennan, Registrar, by January 21st.

ROYAL CORNWALL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by 26th January.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary, £75 per annum. Applications by January 30th.

ST. ASAPH UNION.—Medical Officer. Salary, £83 per annum. Applications by 25th instant.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Honorary Obstetric Physician. Applications by January 16th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square.—Resident Medical Officer. Salary, £105 per annum. Applications by January 16th.

ST. OLAV'S UNION.—Resident Assistant Medical Officer and Dispenser. Salary, £100 per annum. Applications by 20th January.

SUSSEX COUNTY LUNATIC ASYLUM.—Junior Assistant Medical Officer. Salary, £100 per annum. Applications by January 18th.

UNIVERSITY OF EDINBURGH.—Examinerships in Clinical Medicine, Surgery, Physiology, Materia Medica, and Pathology. Applications to the Secretary of the University by January 16th.

UNIVERSITY OF LONDON.—Assistant Registrar. Salary, £500 per annum. Applications to A. Milman, Registrar, University of London, Burlington Gardens, W., by January 31st.

WEST HERTS INFIRMARY, Hemel Hempstead.—House-Surgeon and Dispenser. Salary, £100 per annum. Applications by 1st February.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Wolverhampton. Honorary Physician. Applications by January 30th.

MEDICAL APPOINTMENTS.

FLEMING, Christopher, L.K.Q.C.P., appointed Medical Officer to the Workop Union, and Medical Vaccination Officer for the Workop District of the same Union.

LEAHY, Albert W. D., F.R.C.S.Eng., appointed Surgical Registrar to the Charing Cross Hospital, *vice* H. R. Whitehead, F.R.C.S.Eng.

PORTER, W. S., M.B., appointed House-Surgeon to the Sheffield General Infirmary.

SHORT, W. H., L.R.C.P.Ed., appointed Assistant House-Surgeon to the Reading Amalgamated Friendly Societies Medical Association, *vice* C. S. Heap, L.K.Q.C.P.I., resigned.

STONE, A. W., M.R.C.S., appointed Junior House-Surgeon to the Royal Albert Edward Infirmary and Dispensary, Wigan, *vice* J. A. Webster, M.R.C.S., promoted.

WATTERS, George T. B., M.D., appointed Medical Officer and Public Vaccinator for the Stonehouse District of the Stroud Union, and Medical Officer and Public Vaccinator, and Medical Officer of Health, for the Haresfield District of the Wheatenurst Union, *vice* D. W. Esheby, M.D., resigned.

WEBSTER, John A., M.R.C.S., appointed Senior House-Surgeon to the Royal Albert Edward Infirmary and Dispensary, Wigan, *vice* Joshua Lytle, M.D., resigned.

WRIGHT, C. St. John, M.B., appointed Assistant Medical Officer to the Islington Workhouse, and Infirmary, *vice* A. G. Mickleby, M.B., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

KEOGH.—On December 11th, at Cedar Park, Prospect, Bermuda, the wife of Surgeon A. Keogh, M.D., C.M., Army Medical Department, of a son.

DR. DENIS J. McVEAGH has been placed on the Commission of the Peace for Coventry.

DURING December the quality of the Thames water furnished by the companies drawing their supply from that source was inferior to that delivered in recent months, and the water sent out by the West Middlesex and Southwark Companies was "much polluted by organic matter". The Grand Junction water contained "moving organisms". The Lea water supplied by the New River and East London Companies was inferior to any which had come from the same source since March.

THE POPULATION OF PARIS.—The census taken on the 18th ultimo in the department of the Seine shows an increase of population on that of 1876, when the last census was taken, of 237,100. The total population of Paris is now 2,225,900, against 1,988,800 and 1876, in 1,851,792 in 1872. The increase is distributed over all the arrondissements except two, but has been greatest in the outlying industrial quarters, where there was and is a large surface of ground still available for new buildings. The 11th arrondissement shows an increase of as much as 26,870, the 13th of 20,000, the 14th of 16,280, the 15th of 21,570, the 17th of 26,500, the 18th of 24,050, and the 19th of 18,400.

MANCHESTER MEDICAL SOCIETY.—At the annual meeting of the above society, held at the Owens College, January 11th, the following office-bearers were elected for 1882. *President:* Edward Lund. *Vice-Presidents:* John Broadbent; *Arthur Gamgee, M.D.; James Hardie, M.D.; George Stevenson, M.D. *Treasurer:* *David Little, M.D. *Secretary:* Charles James Cullingworth, M.D. *Other Members of Committee:* *John Augustus Ball, M.B.; Julius Dreschfeld, M.D.; Charles Edward Glascott, M.D.; *Francis Hepworth; Thomas Jones, M.B.; *Daniel John Leech, M.D.; John Dixon Mann, M.D.; Siegmund Moritz, M.D.; *George William Mould; *James Ross, M.D.; *Henry Merrill Williamson; William Yeats, M.D. (The above, with the past presidents of the Society and two representatives of the council of the Owens College, form the committee.) *Library Committee:* *Judson Sykes Bury, M.D.; *Siegmund Moritz, M.D.; *Frederick Armitage Southam, M.B.; *Thomas Windsor; *William Yeats, M.D. *Auditors:* *Frederick Morrish Pierce, M.D.; *George Arthur Wright, M.B. *Librarian:* William Dykes.—Those marked (*) did not hold the same office the previous year.

PRESENTATION TO DR. W. G. SMITH.—A well-attended meeting of students, past and present, and staff of the Adelaide Hospital, Dr. Head in the chair, took place on the evening of December 23rd, to present Dr. W. G. Smith with a clock and illuminated address, on his leaving the hospital to undertake the duties of professor in the school of physic, with which office that of physician to Sir Patrick Dun's Hospital is invariably combined. The presentation was from students, past and present, of the hospital, and was set on foot directly the ap-

[illegible]

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 2 P.M.
WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-West London, 2.30 P.M.
FRIDAY..... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 3 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHAIRING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 2; Dental, M. W. F., 9.30.
 GYMN.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 1.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.
 KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear Th., 2; Skin, Th., 2; Throat, Th., 2; Dental, Tu. F., 10.
 LONDON.—Medical, daily, exc. Sat., 1.30; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 4; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.
 MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 2; Skin, F., 2; Dental, daily, 5.
 ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11; Orthopaedic, F., 12.30; Dental, Tu. F., 9.
 ST. GEORGE'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. S., 1; o.p., Tu., 2; 1.30; W. S., 1.30; Ear, Tu., 2; Skin, Tu., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 0; Th., 1.
 ST. MARY'S.—Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Eye, M. Th., 1.30; Ear, M. Th., 2; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, M. W. F., 9.
 ST. THOMAS'S.—Medical and Surgical, daily, exc. Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.15; Eye, M. Th., 2; o.n., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Tu., 12.15; Throat, Tu., 12.30; Dental, Tu. F., 10.
 UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 6; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Th., 1.30; Ear, S., 1; Skin, W., 14; S., 9.15; Throat, Tu., 1; Dental, W., 1.
 WILKINS.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 2; Eye M. Th., 1.30; Ear, Tu. F., 1.30; Skin, Tu., 12.30; Dental, W. S., 9.

MEETINGS OF SOCIETIES DURING THE
NEXT WEEK.

Abstracts of the papers presented at the 1995 Annual Meeting of the American Society of Human Genetics, 1-5 October 1995, San Francisco, California, are published in this Special Issue. The Abstracts are arranged in alphabetical order by the first author's name. The Abstracts are published in the English language. The Abstracts are published in the English language. The Abstracts are published in the English language.

LETTERS, NOTES, AND ANSWERS TO
CORRESPONDENTS.

At the same time, the following letter was received from the Director of the National Bureau of Investigation, Washington, D. C., dated May 1, 1936:

Washington, D. C., May 1, 1936.

Dear Sir:

Reference is made to your letter of April 28, 1936, in which you requested that the Bureau be kept advised of the progress of the investigation of the case of the United States of America vs. William J. Harrison, and to the fact that the Bureau is interested in the case.

It is requested that you keep the Bureau advised of the progress of the investigation of the case of the United States of America vs. William J. Harrison, and to the fact that the Bureau is interested in the case.

Very truly yours,

Director

Enclosed for the Bureau are two copies of the letterhead memorandum dated May 1, 1936, and captioned as above.

Very truly yours,

Special Agent in Charge

Enclosure

1

FEES FOR ATTENDANCE ON FAMILIES OF MEDICAL MEN.

SIR,—The question of fees from wives and widows of medical men threatens to become a "burning question." To attend gratuitously on the families of our *confrères* has ever been the custom in Scotland; but Scotchmen gave only their time and not their physic, as they were not qualified in pharmacy. There is a good story told of the great Dr. Gregory, who, having heard that another professor had taken a fee from a student, got this professor face to face, and when the student offered the fee, exclaimed, "How dare you insult me! Was ever an Edinburgh doctor so base as to accept a fee from a member of his own profession?" The other professor returned his fees—quietly.

Practising as a student of gratuitous attendance came from Scotland with the Scotchmen. Scotch doctors during this last half-century, and is still an exotic in England. But, however this may be, the custom exists among Scotchmen; and it might be well, therefore, if those who uphold this friendly feeling were marked out, and others who preferred to consider members of their profession as strangers were equally distinguished. "Dog don't eat dog," said the corn-cutter, who refused to accept a fee from Sir Astley Cooper, "as each was a member of the profession."—Your obedient servant,
A SCOTCH M.D.

EXPERIMENTS ON ANIMALS.

SIR,—A letter in a recent issue asks how I can reconcile our appeal against "the infliction of agonising torture and death on the unoffending and the dumb," with the fact that many animals subsist by preying upon others. In reply, let me call upon your correspondent to say whether he is of opinion that any justification can be found for human beings who perpetrate such tyranny as "the infliction of agonising torture and death on the unoffending and the dumb"? That the bellying-patched wolf preys upon the sheep, and the hungry tiger on the deer, is no argument that man should torture animals to death. Death, and death by horrible and lingering tortures, are very different. Moreover, man is not a wolf or a tiger, but should have pity. Ought man to follow the practice of the wild beasts of the forest? Even they, however, do not kill for amusement, but from necessity.

"In his breast no pity dwells;
Savage necessity compels!"

wrote Burns of the eagle; and of the human race:

"Man glories in his heart humane,
And creatures for his pleasure slain."

We do not take your correspondent's view of Nature; she is a beautiful, a kind mother. In the myriads of wild animal life—and to which man is almost but a unit—there is, to all appearance, a preponderance of health, happiness, and enjoyment. The earth is wronged by man's oppression. Man does not learn injustice, tyranny, and cruelty from his mother.—Believe me, sir, your obedient servant,
Society for the Abolition of Vivisection.
GEORGE R. JESSE.

INSURANCE COMPANIES AND MEDICAL FEES.

SIR,—I would be obliged by your kindly stating who should pay the fee for filling up the certificate of death for an insurance company—the company insuring, or the representatives of the person insured. These forms appear to be furnished by the companies, and some of them are extremely troublesome to fill up. A while ago, I was asked, several months after death, to state how long a person deceased had been confined to bed; which, I need not say, might sometimes, after that period, require a considerable effort of memory to state precisely. However, if these certificates are necessary to the safe conduct of the insurers' business, is it not as proper that they should be paid for by the insuring companies, as the original examination certificates? It seems absurd to expect the representatives of an insured person to pay for a certificate which might upset the insurance, while the information might be well worth the companies' obtaining at the cost of an ordinary fee, which I see you state, in the JOURNAL, vol. ii, 1881, p. 885, should be a guinea.

Your answer to the correspondent there, however, leaves it to be paid by a solicitor, which, I suppose, means the insured; but, as the question appears not to have been asked as to the party liable, I would like to know, as I have had sundry disputes with offices.—Yours faithfully,
A MEMBER.

*. The fee ought to be paid by the company.

SALICYLATE OF SODA AS A LOCAL APPLICATION IN ACUTE RHEUMATISM.

SIR,—I have read with interest, in the BRITISH MEDICAL JOURNAL for January 7th, Dr. Orton's valuable note as to the efficacy of the local application of a solution of salicylate of soda to painfully swollen joints in acute rheumatism. As this treatment has, in Dr. Orton's hands, been followed by speedy and great relief, might I suggest that, before trying a similar treatment, it would be very desirable, in order to ensure success, to know exactly the strength of the solution of salicylate of soda employed, and the frequency with which it is necessary to change the lint.—Your obedient servant,
ARTHUR G. BLOMFELD, M.B.,
House Surgeon, Devon and Exeter Hospital.

Devon and Exeter Hospital, Exeter.

SIR,—Is the possessor of a medical degree, not deriving his income from practice, but from land, entitled to gratuitous attendance during his illnesses? His name does not appear in the *Medical Register* or *Directory*.—Faithfully yours,
A SUBSCRIBER.

CAN A MAN HAVE SYPHILIS TWICE?

SIR,—Mr. Jonathan Hutchinson asks this question in your issue of January 7th, and replies categorically that a patient can occasionally be found who has had syphilis twice, just as cases occur where there may be small-pox twice in a lifetime, or measles, scarlatina, or whooping-cough. This was also the experience of the late Mr. Gascoyne, and is that of Mr. Henry Lee, I believe. We must, therefore, admit that syphilis may be twice contracted during a lifetime. Having, however, gone so far as to allege that the dictum "Non bis in eodem" admits of some rare exceptions, we must not allow it to be supposed that this is anything more than a most extraordinary event. For my own part, I have been on the look out, for the last twenty years, for a case of a second attack of syphilis, and must candidly say I have only once seen such a thing. I have had patients over and over again who have said that this was a new chancre which they had contracted, when nothing more was present than some tertiary ulceration or induration of the prepuce. I would strongly urge that the belief that syphilis can be contracted only once, which has for so many years held sway among the best writers on the disease, is as true as any physiological truth can be. The word never is not admissible in pathology; but, in this case, it is a very near approximation to the truth.—I remain, sir, your obedient servant,
CHARLES R. DRYSDALE, M.D.,
F.R.S., President to the Residue Society of London Lock Hospital.

7, Woburn Place, W.C., January 7th, 1882.

THE CHEMISTRY OF DEATH.

SIR,—It is well known that the processes of decomposition and decay commence immediately after dissolution. Then, according to Sir Henry Thompson, the body displays more activity than even before life had quitted it. The mortuary changes vary in kind and degree, being influenced by the character of the soil, the nature of the climate, the activity of those lower organisms which prey on the dead, and, though last not least, the mode of sepulture adopted. The products of decomposition embrace a variety of gases, such as carbonic acid, carburetted and sulphuretted hydrogen, ammonia, nitrous and nitric acids, besides other compounds and vapours. The non-volatile substances become absorbed by the roots of plants, or are washed away by water passing through the pores of the soil. The osseous framework is the longest to linger, owing to being the least destructible. Hence it offers the greatest obstruction to disintegration.

That the public health is seriously menaced when cemeteries are situated close to dense centres of population, cannot be too strongly affirmed. The constant disturbance of the soil for the admission of human remains naturally dissipates abroad noxious vapours; for it is impossible to determine by our perverse system of burial how long the *matrices morbi* may continue to live underground. Hence the lapse of time which ought to be allowed before a grave is twice used varies with the character of the soil and the method of burial. One strong recommendation of Woking Cemetery is, that a fresh grave is given to every tenant.

Most of the evils resulting from the ordinary system of interment in solid coffins and alluvial soils would be averted, provided the earth-to-earth burial were generally adopted. Indeed, Mr. Seymour Haden affirms that, if the dead were only properly buried, we should have no cause for complaint of any kind. By this means, "not a single dead body would remain to infect the soil." By properly committing "poor mortality" to its natural element—the earth—effective burial is realised. The process of putrefaction thereby becomes arrested, and natural resolution takes its place. This latter process is perfectly inoffensive, and is attended with no danger to the living. Mr. Haden contrasts the two modes of sepulture. He shows that, by the use of indestructible coffins, the condition of putrefaction is rendered permanent; while, acting on the earth-to-earth process, "resolution at once takes the place of putrefaction". Surely, it is a crass and unreasoning sentiment which induces persons to favour a mode of interment that tends to keep up an ever-augmenting condition of disintegration. The earth has a claim upon the dead, but is defrauded of this right by a vicious cemeterial system. The dangers to the living, however, consequent upon the like barbarous custom, are so menacing, as urgently to call for governmental interference.—I am, etc.,
SANITAS.

A MEMBER.—Curare is not used to any extent in England as an anæsthetic; indeed, we believe, not at all. In the evidence on experiments on animals, taken before the Royal Commission in 1876, there was a general agreement that curare only paralysed muscular power, and did not annul pain; and, in the Cruelty to Animals Act, it is expressly provided that curare shall not be regarded as an anæsthetic. When physiologists in this country speak of using an anæsthetic, they do not mean curare.

VOLUNTEER AMBULANCES.

SIR,—Having had an exceptional experience of ambulance work during the past four years, and being, as a soldier, anxious that our volunteer force should be as complete a factor as possible in the national defence, I hasten to endorse the admirable and practical letter from Dr. Platt, which appeared on December 24th in your columns. I intend to bring the question before the Central Committee of the St. John Ambulance Association, and I hope that their extended organisation and powerful central executive may be of use in achieving the desirable results aimed at by Dr. Platt.

In the course of my visits to our ambulance centres, while I have always found that commanding officers of volunteers were ready to encourage ambulance instruction among their men, they displayed the reluctance, mentioned by Dr. Platt, to have their combatant ranks weakened. I have also found many who felt it an anomaly to have men bearing arms, and wearing the Geneva Cross. Dr. Platt's scheme will remove these objections. I trust you will allow me to return to the question in a subsequent issue.—Your obedient servant,
F. DUNCAN, R.A., Director of Ambulance Department, Order of St. John.

Woolwich, December 28th, 1881.

MEDICAL ETIQUETTE.

SIR,—E. is medical officer of health for the district X. B. is E.'s qualified assistant. B. attends a case of anemia and roseola for seven days, which E. sees once during that period. S., another practitioner, is then called, and attends the case without the knowledge or consent of E. or B.; and S. reports the case to the local sanitary authority X. as one of measles. E. and B. are astonished to find anyone attending their case, and amazed at the opinion expressed. B. writes to S. to show the latter that he (S.) has been misled. E. calls at the house, inquires into the case, and finds that it is not measles, or any other infectious disease, and consequently does not order the usual disinfectants to be supplied to the premises. E., as medical officer of health, has never inquired into the nature of any case reported as infectious by any medical practitioner to the local sanitary authority, but orders the usual disinfectants to be supplied, as a matter of courtesy. This case, however, being his own, was inquired into, and disinfectants were found to be unnecessary. S., who is a member of the board X., tried in vain to get a vote of censure passed by the board on the medical officer of health and nuisance-inspector. Was E. justified in not ordering the disinfectants to a non-infectious case, or should he have ordered them, in deference to S.'s opinion, though that opinion was wrong? No case of measles has been seen in the district X. for sixteen months. This alleged case occurred November 19th, 1881, and no other case has yet appeared, though no precautions have been taken.

The enclosed correspondence will indicate why this letter has been written. Please record your opinion of the style and matter of S.'s correspondence with me, and in regard to his conduct at the meeting of the local board of district X.—Yours obediently,
S. D. B.

*. The conduct of S., in this matter by bringing E.'s decision before the local board as to the non-supply of disinfectants was, in our opinion, discourteous, and contrary to professional rules. As B. and E., both qualified members of the profession, asserted that the case was not one of measles, S. was not justified, on his own opinion alone, in taking such a step. Disinfection is rarely practised for measles, as the disease does not appear to spread by fomites, in the same way as typhus, scarlatina, and small-pox; or by discharges from the body, as in scarlatina and typhoid. There was, therefore, the less reason for S. laying a complaint against E. in a disputed diagnosis, and thus making himself the judge as to E.'s diagnosis, and his duty as medical officer of health.

REPORTS TO THE SCIENTIFIC GRANTS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

THIRD CONTRIBUTION TO THE LIFE-HISTORY OF CONTAGIUM.

By PETER MURRAY BRAIDWOOD, M.D., F.R.M.S.,
AND
FRANCIS VACHER, F.R.C.S.ED.

II.—NOTES ON AN INQUIRY INTO THE MORPHOLOGY OF MEASLES CONTAGIUM, ITS MODE OF REPRODUCTION, AND ITS DISTRI- BUTION IN THE TISSUES OF THE INFECTED SUBJECT.

"THE first indisputable records of true epidemics of measles are furnished, according to Fuchs, by Fouss (1563), Lange (1565), Ballonius (1574-5), and Schenk (1600); accurate knowledge of them, however, has been more especially furnished by Sydenham and Morton (1670-74), though even they have not distinguished it with sufficient accuracy from scarlet fever."* Under the name of Lhasbah, it was recognised and described by Rhazes; and, under the names of morbilli or blaccie, by many early writers; but only since the middle of the last century has it been regarded as an unquestionably specific and independent disease. It used to be confounded with scarlatina and some other diseases, or viewed simply as a catarrh modified by atmospheric influences, and only affecting subjects having highly developed catarrhal constitutions. Measles is unanimously considered to be contagious; but the nature of the contagium has not as yet been determined. It does not appear to be generated spontaneously, and the period of incubation is held to be about a week, or from that to fourteen days; according to Bristowe, it may be extended to twenty-one days. One of the latest writers on the subject (Thomas) pronounces the contagium volatile, and says we must expect it will become adherent to material objects; and Meyer gives negative evidence that it is not excessively tenacious, as the mere airing of clothes sufficed to disinfect them.

From some not very constant results obtained by inoculation, it has been stated that the contagium is present in the blood of the affected, the contents of the sudamina, the tears, nasal secretion, sputa, and saliva. Hallier found in the blood and sputa of measles patients large numbers of free cocci, most having a tail-like end. They were movable and colourless, and smaller than the cocci of typhus, and he succeeded in cultivating them in various substances and fluids. Vogel says those observations cannot be proved. Salisbury inoculated subjects with a fungus-spore found upon decaying straw, and produced a disease closely resembling measles; and he asserts that several persons in the neighbourhood of those upon whom measles had thus been generated manifested the same disease, after a period of incubation of from one to two weeks. Pepper, however, inoculated twenty-two persons, who had not yet had measles, with this fungus, and without any results. Coze and Feltz found active bacteria in the blood and nasal mucus of measles patients; and they noticed that the blood which was richest in bacteria came from the spots where the exanthem was most pronounced.

In 1758, Home, at the suggestion of Munro, inoculated measles by means of the blood. Rags soaked in blood, taken from cuts through measles spots, were laid upon cuts in the upper arm of a healthy person, and kept in contact for three days. The affection resulting was very mild. Wachsel is reported to have successfully inoculated a patient with the fluid of a milium vesicle of measles. Speranza was himself successfully inoculated with measles blood, in 1822. Bonfarini inoculated measles successfully in 1854, and reports similar experiences on the part of five of his countrymen. Perhaps the most important experiments in this connection are those published by Katona, in 1842—viz.: 1122 inoculations, 93 per cent. of which were successful, producing a mild disease during the prevalence of an epidemic of full severity. The inoculations were made mainly with a mixture of blood and the contents of milium vesicles—sometimes with tears, in the same manner as vaccination. No inoculated person died. The eruption appeared on the ninth or tenth day after inoculation; on the fourteenth

day, the fever usually disappeared; and on the seventeenth, the patient was well. In 1848 and 1852, Mayer also inoculated measles successfully. Fresh nasal mucus, and some which had been preserved in a glass tube, were placed upon the mucous membranes of two children. The first child manifested catarrh on the eighth day, the second on the ninth. The eruption in both cases made its appearance on the thirteenth day, and the disease ran a regular course.

In opposition to these experiments, numerous others have been recorded by equally competent observers, in which inoculations wholly failed. Again: Jörg, Wendt, and others, maintain that measles produced by inoculation does not run a lighter course. Inoculation with portions of epidermis from children in the stage of desquamation has been frequently tried and failed.

The contagium may be conveyed for short distances by means of the air, or on any subject to which it can attach itself. How long this contagium may retain its vitality is not known. Doubtless, in most cases, measles is corrupted by association with the infected. People of all ages, not protected by a previous attack, appear to be equally susceptible, except infants under a year old, in whom the susceptibility is diminished. The opinion once held, that infection occurred especially or solely during desquamation, is now entirely given up, as there are many recorded cases where contact with a subject during the first period of the disease has sufficed to communicate it.

Mayr and Hebra, who distinguish divers forms of the disease (*morbilli leves, vesiculosi, confluentes*, etc.), considered the virus of the measles papule was an inflamed sebaceous follicle, and that this caused superficial capillary injection of parts contiguous. Later investigations afford no support to this view. G. Simon examined a measles papule, with a small portion of the subjacent cutis. The epidermis and cutis were not separated and unaltered, except that the latter was swelled out at the site of the papule, and contained between its fibres small roundish molecules, unaffected by acetic acid. There was no swelling of the sebaceous glands. The papules, which may be entirely or nearly pale, appeared to be due to the increased fluid in the cutis. The site of hyperæmia appeared to be the deeper strata of the rete Malpighii. After the termination of the rash, its site is usually occupied for some days by a yellowish stain. This is quite independent of the points in patches of ecchymosis occasionally seen, and which are, of course, due to actual extravasation. There is usually congestion of the mucous membrane of the nose, throat and larynx, and of the conjunctiva; but there is no special resemblance between this and the skin-eruption. Sometimes, dense red points and spots are seen upon the uvula and palatal arch, and sometimes there are congested patches on the buccal mucous membrane. The congestion may extend from the larynx to the trachea and bronchi. Weber, Eisenmann, and Fuchs, besides many earlier authorities, mention a measly eruption of the small intestine, and sometimes of the stomach. Steiner noticed a blotchy redness of the intestinal membrane of children who died of the disease during florescence. Fuchs, Hensch, and Chomel relate cases in which the genital mucous membrane was the seat of an eruption. Stiebel cites four cases in which he found the pulmonary pleurae covered before and behind with red spots, isolated or in groups. They were plainly not due to extravasations.

It has been noticed that the spleen and lymphatic glands are often swollen; and that the blood is thin and dark, and deficient in fibrine. It is alleged that the red corpuscles are diminished, and the white increased.

ORIGINAL OBSERVATIONS.—The prevalence of a local epidemic of measles, several cases of which were admitted into hospital, and the opportunity of making *post mortem* examinations of the bodies of two children who died of the disease, afforded us some facilities for the study of the intimate pathology of the disease. We examined microscopically the breath, the lungs, skin, and other tissues of patients suffering from measles, or preparations from the bodies of those who had died from it.

As it seemed to us we had sufficient evidence for concluding that the most active mode of transmission of measles is through the breath, we commenced our inquiry by carefully examining the breath of children in the acute stage of the disease. To this end, we coated over with glycerine the inside of several clean glass tubes having a diameter of from half to three-quarters of an inch. As soon as the eruption was diagnosed, the patient was required to breathe through one or more of such tubes, and again each day till the eruption faded he was required to repeat the experiment. The glycerine was then subjected to careful examination with an one-eighth objective, and every specimen showed numerous sparkling colourless bodies, something like those found in vaccine, but larger. Some were spherical; others were elongated, with sharpened ends. They were seen in greatest abundance in the breath from patients during the first and second days of the eruption. As a

* *Cyclopædia of the Practice of Medicine*: Ziemssen. Vol. ii, p. 75.

(Berlin, 1874 and 1879): Ueber Wundfieber und accidentelle Wundkrankheiten (Berlin, 1882); Septopyohæmie (*Chir. Klin. Wien*, Berlin, 1879, 54 to 58).
 Billmann. Zur Lehre von den Infektionskrankheiten (*Ärzt. Int.-Bl.*, 1879, Band xxv, p. 129).
 Calkins, J. L. On the Theory of Contagium Vivum (*Transactions of American Medical Association*, 1879, vol. i, p. 129).
 Canby. Injection of Purulent Fluids into Arteria (St. George's Hospital Reports, 1879, p. 129).
 Calkins, J. L. The Anatomical Changes caused by Septicæmia and Pyæmia (Boston Medical and Surgical Journal, 1879, p. 145 to 154).
 Chalmers, U. G. Das Wesen der Infektionskrankheiten und über Vaccination (*Monat. Med. Zeit. Leipzig*, Berlin, 1879, pp. 993-995); also his other writings.
 Colin. Sur la Septicémie (*Bulletin de l'Acad. de Méd. de Paris*, 1878, p. 1324, Tome viii, 1879 to 1880, p. 129).
 Cohn, F. Untersuchungen über Bakterien (*Beiträge zur Biologie der Pflanzen*, 1878, Band i and ii).
 Crooke. On Bacteria in Pyæmic Blood (*Guy's Hospital Reports*, July 1878).
 Davaine. Recherches sur quelques questions relatives à la Septicémie (*Bulletin de l'Acad. de Méd. de Paris*, 1879, September 17th and December 24th).
 Darby, T. Zymosis and Septicæmia (BRITISH MEDICAL JOURNAL, 1879, vol. i, p. 129).
 Dujardin. Recherches sur les abcès multiples, etc., 1845.
 Duboussin. Sur la Septicémie (*Bulletin de l'Acad. de Médecine de Paris*, 1879, pp. 9 and 47).
 Dreyer. Ueber die zunehmende Virulenz des septischen Giftes (*Archiv für experiment. Patholog. und Pharmacol.*, 1874, Band ii, p. 149).
 Duclaux. Charbon, Septicémie, et Infection purulente (*Revue Scientifique*, 1879, p. 635).
 D'Espine (*Archives Générales de Médecine*, 1879).
 Eberth. Zur Kenntniss der bakteriischen Mycoses (Leipzig, 1879).
 Ewart. On the Life-History of Bacterium Germs and Micrococcus (*Proceedings of the Royal Society*, vol. xxvii, No. 188, p. 475); and of Bacillus Anthracis (*Quarterly Journal of the Microscopical Society*, 1878, p. 164).
 Grohe. Experimente über Injectionen von Pilzsporen, etc. (*Berliner Klinische Wochenschrift*, 1879, No. 1).
 Guérin. Etude sur l'Intoxication Purulente, comprenant cinq discours prononcés à l'Académie de Médecine, etc. (Paris, 1879).
 Gutmann, W. Experimentelle Beitrag zur Lehre von der putriden Intoxication und Septicæmie (Dorpat, 1879).
 Helmholtz. Ueber das Wesen der Fäulniss und Gährung. (Müller's Archiv, 1843, p. 453).
 Hensen. Bemerkungen zu dem Aufsatze, ueber Abstammung und Entwicklung des Bacterium termo (*Archiv für Mikroskop. Anat.*, 1867, Band iii).
 Heubner, O. Ueber den Verlauf des Fiebers bei Pyæmischen Krankheiten (*Archiv der Heilkunde*, 1868).
 Hiller, A. Ueber Diagnostische Mittel und Methoden zur Erkennung von Bakterien (Virchow's Archiv für Pathol. Anat. und Physiol., Band lxii).
 Hiller, A. Ueber Extrahirbares Putrides und Septicæmisches Gift. (*Centralblatt für Chirurg.*, 1876, Nos. 14 and 15).
 Hoppe-Seyler. Medicinisch-Chemische, Untersuchungen (Tübingen, Heft iv).
 Humlert, G. Etude sur la Septicémie Intestinale (Paris, 1873).
 Hüter C. Sepsämie und Pyæmie (Pitha and Billroth's Chirurgie, Band i, Abth. ii, Heft i).
 Jeannel, M. L'Infection Purulente on Pyohémie, Paris, 1880 (containing an extensive list of authors).
 Jélines. De la Diversité des Effets Produits par les Matières Septiques, suivant leur Degré d'Altération (*Bulletin de l'Acad. de Méd.*, Paris, 1878, p. 1139).
 Klebs. Beiträge zur Kenntniss der Micrococci (*Archiv für Experiment. Patholog. und Pharmacol.*, 1873, Band i; and *Med.-Chirurg. Centralblatt*, 1879, pp. 470, 482, and 494).
 Klein, E. Experimental Contribution to the Etiology of Infectious Diseases, etc. (*Proceedings of Royal Society*, 1878, pp. 101 to 107).
 Koch. Untersuchungen über die Ätiologie der Wundinfektionskrankheiten (Leipzig, 1878).
 Koch. Verfahren zur Untersuchung zum Conserviren und Photographiren der Bakterien (*Beiträge zur Biologie der Pflanzen*, Band ii, Heft 3).
 Laennec, Th. Études sur la Pyogénie.
 Leube. On Spontaneous Septicæmia (*Deut. Archiv für Klin. Med.*, Band xxii, p. 235, vide *London Medical Record*, June 1879).
 Lewis, T. R. The Microphytes which have been found in the Blood, etc. (*Quarterly Journal of the Microscopical Society*, 1879).
 Lister, J. A Contribution to the Germ-theory of Putrefaction, etc. (*Transactions of the Royal Society of Edinburgh*, 1875, vol. xvii, pp. 356 to 404; and other writings).
 La Septicémie et les Germes (*Monit. Scient.*, Paris, 1879, pp. 162 to 608).
 Löffler. Ueber Septicæmie nach Davaine (*Med. Chirurg. Centralbl.*, 1879, pp. 253, 265, 279, etc.).
 Loomis. The Relation of Bacteria to Pyæmia (*New York Medical Gazette*, 1880, p. 24).
 Moore, E. M. Prophylaxis of Septicæmia (*Transactions of the American Medical Association*, 1878, p. 247).
 Mourillon, H. Essai sur la Pathogénie de la Fièvre Traumatique et de l'Infection Purulente (Paris, 1880).
 Ogston, Alex. Ueber Abscesse (Langenbeck's Archiv, 1880, Band xxv, Heft 3).
 Onimus (*London Medical Record*, April 1873).
 Packard. On the Pyogenic or Suppurative Diathesis (*North American Medical Chirurg. Review*, January 1860).
 Panum. Das Putride Gift, die Bakterien, die Putride Infektion oder Intoxication und Septicæmie (Virchow's Archiv, Band 60).
 Paschutin, V. Einige Versuche über Fäulniss und Fäulnisorganismen (Virchow's Archiv, Band lix).
 Pasteur and Joubert. On Anthrax and Septicæmia (*Transactions of Academy of Medicine*, Paris, July 10th, 1877).
 Pasteur. Nouvel Exemple de Fermentation, etc. (*Comptes Rendus*, 1863, Tom lvi, p. 416; and other writings).
 Peabody, J. L. Pyæmia without External Wound, etc. (*New York Medical Record*, 1879, p. 306).
 Perret, S. De la Septicémie (Paris, 1880).
 Pukly, A. von (Buda-Pesth). Versuche über Septische und Micrococcische Infection (Virchow's Archiv, Band lix, p. 331).
 Ravitsch. Zur Lehre von der Putriden Infection, etc. (Berlin, 1872).

Ridenour, A. W. Septicæmia and Pyæmia (*Toledo Medical and Surgical Journal*, 1878, vol. iii, p. 329).
 Rindfleisch. Untersuchungen über Niedere Organismen (Virchow's Archiv, Band liv, S. 108 and 396).
 Report on Pyæmia, Septicæmia, and Purulent Infection (*Medical Times and Gazette*, 1879, vol. i, p. 592; and in the other English medical journals of this date).
 Robin in *Comptes Rendus*, November 30th, 1874 (vide *London Medical Record*, 1874, p. 805).
 Rower. On Pyæmia (*Archiv der Heilkunde*, 1860, pp. 3 and 4).
 Schaller, M. Ueber Therapeutische Versuche bei mit Tuberculösen, Scrophulösen, Septischen Massen Inficirten Thieren (*Archiv für exper. Pathol. und Pharmacol.*, Leipzig, 1879, pp. 84 to 102).
 Smith, J. G. On the Prevention of Blood-poisoning, etc. (*Lancet*, 1879, vol. ii, p. 256).
 Tiegall, E. Ueber Coccobacteria Septica in gesunden Wirbelthierkörpern (Virchow's Archiv, Band lx).
 Tédinat, E. Etude Critique sur la Septicémie, etc. (Lyons, 1879).
 Toussaint, H. Identité de la Septicémie Expérimentale Aiguë et du Choléra des Poules (*Gaz. Méd. de Paris*, 1880, vol. ii, p. 451).
 Van Tieghem. Sur le Bacillus Amylobacter, etc. (*Bulletin de la Soc. Bot. de France*, 1877, Tome xxiv).
 Verneuil. Des Symptômes Cutanés dans la Pyohémie (*Gaz. Hebdom. de Méd. et de Chirurg.*, 1880, No. 46, p. 727).
 Voght. Nachweis von Monaden im Metastatischen Eiterheerd, etc. (*Centralbl. für die Med. Wiss.*, 1872, No. 44).
 Vulpian. Contribution à l'Etude de la Septicémie (*London Medical Record*, March 1873).
 Warming. Observations sur quelques Bactéries.
 Wilks. Pyæmia (*Guy's Hospital Reports*, 1879, p. 135).
 Wolff, M. Ueber Blutuntersuchungen bei Infektiösen Wundkrankheiten (*Archiv für Physiolog.*, Leipzig, 1879, p. 569).

[To be continued.]

SELECTIONS FROM CLINICAL LECTURES,

Delivered at the London Hospital.

BY JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the Hospital; Consulting-Surgeon to Moorfields Ophthalmic Hospital; and Professor of Surgery and Pathology in the Royal College of Surgeons.

PEMPHIGUS IN INFANTS.

GENTLEMEN,—The infant before us has been sent over by Mr. Illott of the Whitechapel Infirmary, and we are much indebted to him for the opportunity of seeing a case of so much interest. Although infantile pemphigus is often talked about, I do not, for my own part, see a really well characterised case more than once a year; and it is very seldom, indeed, that I have the chance of demonstrating one to you. Our patient is, as you see, a well developed baby nine days old, and its hands, feet, and face are covered with bullæ. More usually, indeed, I think, in all the examples of the disease which I have previously seen, the eruption is confined to the extremities, and the face is free. It is, however, quite in conformity with what we know of certain other eruptions usually restricted to the hands and feet—that, if they do occur elsewhere, the face is the place. The eruption, in this instance, differs in another feature from what is common; the bullæ, although plentiful, and some of them of considerable size, are entirely destitute of the lividity at the base, and turbidity, or even sanious character of contents, which are almost invariable characters in infantile pemphigus. On the face, the bullæ and vesicles are remarkably delicate, and many of them are not round, but arranged in lines or panicles like herpes. The infant shows no indications of inherited syphilis excepting doubtful snuffles; but has a clear red skin, and healthy aspect. As usual, there is not a single vesicle on the trunk. I know nothing of the infant's mother, and can give you no facts for or against syphilis, excepting those which are under our eyes. The result of what little experience I have had of this peculiar malady has been to lead me to believe that it is almost invariably syphilitic. It occurs, however, under very peculiar and exceptional conditions. In the first place, it almost always shows itself soon after birth, within the first week; whilst, as you well know, the other syphilitic eruptions are seldom seen until the child is a month or six weeks old. This fact of early appearance perhaps explains some other peculiarities: for instance, its subjects rarely show other signs of inherited taint; they are not emaciated; they do not snuffle; there is no inflammation of the mouth, nor any soreness at the anus, or eruption on the nates. All these symptoms occur at a latter period, and the pemphigus infant rarely lives long enough to exhibit them. It is seldom that infantile pemphigus does not end fatally, and that, too, very

the plain. After careful consideration, I have selected six samples from the plain, the valley, and the hill, as typical representatives of the water-supply of the district. These samples have been analysed for me by my friend the well-known Yorkshire analyst, Mr. James Baynes of Hull, who has taken great interest in the inquiry, and has even repeated the analyses to verify the results. Below will be found, in a tabular form, the details of Mr. Baynes's analyses. In addition, I have several reports by different analysts on various waters; but, as each chemist has a system of his own, it is impossible to tabulate, for comparison, these combined results. I may, however, mention that, in one parish where goitre existed, the water-supply contained only 4.75 grains of total solids per gallon. This water was brought in pipes from a distant moor, and had deposited part of its mineral constituents *en route*. The water contained a small quantity of iron. The first specimen, marked A in the table, is taken from a parish situated at the extreme end of the plain, where the hills converge, shutting it in on three sides. The water-supply is derived from a spring which issues from the solid rock (lower calcareous grit) in a narrow wooded valley one mile distant. The water runs from the spring for a quarter of a mile in an open pebbly channel; it then flows into a small reservoir, from which it is piped to the houses. The supply is constant. I have notes of one hundred and twelve cases of goitre occurring in persons who drink this water. The specimen marked B is taken from a well twenty feet deep in the alluvium (clay, flints, etc.) of the plain. The village is wide and open. Each house has its own shallow well. I took this sample from the well of a house in which a goitrous woman lived. She was the mother of five goitrous grown-up daughters. The specimen marked C is taken from a well twelve feet deep in a goitiferous village, situated on the crest of a high ridge which commands a splendid view of the country. This village is exposed to winds blowing from all points of the compass. The rock from which the water is obtained is the lower calcareous grit. The specimen marked D is taken from a village situated in a romantic valley, in which stand the ruins of one of the finest abbeys in Yorkshire. I may remind my readers that the monks of old took especial care to secure salubrious sites as well as lovely localities for their monasteries; yet, in this beautiful and healthy spot, goitre prevails. The sample was drawn from a spring in the centre of the village, and, therefore, in general use. The rock from which the water issues is the Oxford clay. The specimen marked E is taken from a lonely hamlet, on a bleak high ridge which overlooks the plain, and is swept by every wind. This water comes from the open moor, and runs in a channel about a mile long. The ground where the small stream begins is composed of "estuarine sandstones and limestones". The specimen marked F is taken from a spring issuing direct from a hillside where the rock is the calcareous grit. There is no village here; but persons living in a cottage close at hand, and using this water, are affected with goitre, as also are others dwelling in the scattered farms round about, and drinking water from the same source. The hill here mentioned forms the termination of the valley before referred to as being in the lias formation.

Analyses of Goitrogenous Waters by Mr. James Baynes, F.I.C., F.C.S., etc., Public Analyst for the City of York, the Borough of Hull, etc.

	A	B	C	D	E	F
	<i>Grains per Gallon.</i>					
Total solid residue	16.00	38.75	40.0	26.0	7.0	15.00
Chlorine	.70	2.30	3.5	1.3	1.2	2.00
Equal to salt	1.12		5.76	2.14	1.87	3.20
Sulphate	.76	1.60	.56	.56	.26	.56
Oxide of iron and alumina	.36	.46	.16	.70	.36	.26
Carbonate of lime	1.10	1.00	1.00	1.00	1.00	9.76
Sulphate of lime	Trace	6.40	5.80	4.00	Trace	1.90
Magnesia	Trace		.70	.70	.40	.50
	<i>Parts per Million.</i>					
Free ammonia	None	.012	.012	.012	.04	None
Albuminoid ammonia	None					
	<i>Degrees.</i>					
Total hardness	17.0	24.00	24.30	10.00	7.00	11.50
Permanent hardness			10.20	7.00	2.50	5.00
Temporary hardness	9.50	24.00	24.30	10.00	3.50	9.50
Geological source of the water	Calc. grit	Alluv.	Calc. grit	Ox. clay	Estuarine sandstones and limestones	Calc. grit
Situation of source	Valley	Plain	Hill	Valley	Mountainous	Hill-side
The water taken for examination from	Tap fed from a reservoir which is supplied by spring	Well	Well	Spring	Brooklet	Spring

From a glance at the preceding table, it will be seen that the waters vary considerably in point of hardness, the minimum being 6 degrees, and the maximum 37 degrees. It is evident that, as goitre is found equally prevalent under both conditions, the hardness cannot be the cause of the disease. The sulphate of lime, too, varies very much, from the merest trace to 6.40 grains per gallon. This, also, cannot be the noxious ingredient. I need not refer in detail to each constituent, as the table gives a very good idea of the comparative qualities of the different waters. There is, however, a larger proportion of oxide of iron and alumina in all the waters than is usually found. This fact tends to support Dr. St. Lager's views of the etiology of goitre; but it is difficult to understand how iron can be the deleterious element, since we are accustomed to give it so largely and so constantly in daily practice, with the best results. I have often given it when treating goitre, with perceptible benefit, especially those goitres associated with profound anæmia, as is often the case.

As a supplement to the facts already given, I propose briefly to add an analysis of the 260 cases of goitre which I have collected. I do not suppose that I have seen all the goitres which exist in my district. The large proportion are those met with in my own patients; but some of the cases are from notes kindly supplied by several of my neighbouring medical brethren. Out of the 260 cases, nine came into the district with the thyroid body already enlarged (three from Derbyshire, two from Wilts, one from Cumberland, one from London, and two from the West Riding of Yorkshire). Sixteen were males, and two hundred and forty-four females. One hundred and forty were dark, and one hundred and twenty were fair. In one hundred and forty-two cases, other relatives suffered from the same swelling; but, in one hundred and eighteen, this family predisposition did not exist, or, at least, it could not, from special circumstances, be traced. Ten cases were children under five years of age. Fifty-nine had a marked hæmorrhagic diathesis. I have already pointed out, in a short paper in the BRITISH MEDICAL JOURNAL (Goitre and the Hæmorrhagic Tendency, June 29th, 1878), that, in this district, there are a large number of flooders in childhood. At the time when I published the paper in question, I was not aware that the connection between goitre and *post partum* hæmorrhage had been noticed. Since then, however, Mr. Lawson Tait has kindly sent me a copy of his paper on Enlargement of the Thyroid Body in Pregnancy (*Edinburgh Medical Journal*, May 1875), in which he states that "there was a marked tendency to uterine hæmorrhage" in the majority of the twenty cases of goitre which he had noted. Frequent loss of blood is also a common complication of other diseases in this locality. I have noticed this particularly in enteric fever, where death has occurred in several instances from uncontrollable bleeding from the bowels. I had recently a convalescent from enteric fever, who spat and vomited blood, and passed it from his bowels and kidneys; the mother of this patient had a goitre, and was a flooder; and although his sister in her one confinement had not flooded, yet her recovery was much retarded by frequent bleedings from the gums, and also *per rectum* and *per vaginam*. With the greatest care, severe *post partum* hæmorrhage does occasionally occur in this district. For example: I have kept the uterus of a goitrous woman firmly contracted for three hours after delivery; but, on retiring to an adjacent room to rest my cramped hands, I have been hastily summoned, after a few minutes' interval, to find my patient fainting, and the bed full of blood. The flooding tendency, as well as goitre, is endemic in this district.

To return to our cases. In thirty-nine, there was a distinct family history of phthisis, several of the goitrous persons being affected with consumption at the time when I observed their goitres. Some authors have stated that phthisis is not found among goitrous people; but this opinion is not now generally held. In sixteen cases, there were distinct manifestations of the scrofulous habit, and in one family I found four young persons both goitrous and rickety. This last fact is contrary to what is held by some writers. Maffei (*Der Cret. in den Norisch. Alpen*) has written: "Where goitre and cretinism are endemic, scrofula is remarkably seldom found, and rickets almost never." In one of the scrofulous cases, the thyroid suppurated. Nineteen persons had heart-disease along with goitre. In thirty, there existed neuroses. Two became insane; thirteen were very hysterical. In six cases, some member of the same family was insane. Four were more or less imbecile. I have seen only one "véritable cretin", a goitrous idiot, in this district. Although I believe that cretinism results from the concentration of the goitrogenous poison, yet I have seen no marked manifestation of its presence in this locality; and, with the exception of the one case just mentioned, I have not been able to verify the awful description of cretins given by French authors. "La face est hideuse, leur physiognomie a une expression de stupidité indescriptible. Ils ont les pommettes et les mâchoires saillantes, le lèvres épaisses, flasques et retenant mal la salive, la bouche énorme, le nez écrasé, les narines élargies, les

and, on the application of greater pressure, was easily converted into a distinctly musical note.

This is an ordinary clinical picture of anæmia in an advanced stage, such as affords probability of the presence of the cephalic murmur. On auscultation of the cranium, the murmur could be determined in three positions. When the stethoscope was applied to the closed eyelid, a low murmur was easily distinguishable. In rhythm it was somewhat later than the apex-beat, and slightly followed the carotid pulse. It was accompanied by the dull continuous rumble caused by the muscular contraction of the orbicularis palpebrarum in its closed state, by the irregularly intermittent noise produced by the sympathetic movement of the eyelid when the opposite lid winked, and by the respiratory murmur propagated through the cranial bones. These three acoustic phenomena are pointed out by Tripiér as likely to mislead the unwary observer. The continuous muscular sound cannot be got rid of, but the irregular noise of winking can be stopped by placing a finger upon the opposite eyelid, and the respiratory murmur necessarily comes to an end when the breath is held. When the stethoscope was applied over that part of the occiput corresponding to the torcular Herophili, a systolic murmur was also heard, but less distinctly than that in the orbital region; and, lastly, on auscultation over the mastoid prominence a very faint murmur of systolic rhythm could be made out. No murmur could be detected over any other part of the head. The murmur was not perceptibly influenced by change of posture, but slight pressure on the carotid arteries diminished its intensity, and forcible compression of these vessels entirely abolished it.

Such is the usual condition, according to my experience, when the anæmia is tolerably well marked. In all cases the murmur is most distinct in the orbital region; in the other situations it is comparatively faint. My students at the dispensary can always hear the former with ease, but the latter can only be detected by those of them who have undergone considerable training in auscultation.

In cases of anæmia, it is not uncommon to find a continuous murmur over the part corresponding to the torcular Herophili; sometimes this murmur, like the venous hum in the neck, presents a systolic accentuation. Since reading Tripiér's earlier paper, I have not been able to determine the presence of this continuous hum over the occiput, and have only observed the faint systolic murmur as in the case above recorded. It is only in very severe cases that the occipital murmur is continuous.

If the murmur originated in the terminal parts of the internal carotid system, it should be found to wane in intensity with distance from that system. It is not so, however; as above remarked, the occipital is usually more distinct than the mastoid murmur.

The position of the greatest intensity of the murmur is of great importance. It is most clearly heard over the orbit, the mastoid eminence, and the occipital protuberance. This fact furnishes a key to the question. These three situations are closely related with the cavernous sinus, the torcular Herophili, and the lateral sinus; and I am of opinion that the murmur is produced by fluid veins within these sinuses: in other words, the murmur is of venous origin. It will at once be said that the murmur ought to be continuous, like the *bruit de diable*, if it arise from vibrations of the fluid contents of these venous channels. But, as in the case narrated, the venous hum is frequently found to have systolic augmentations of intensity. These are caused by the pressure of the large arteries upon the venous trunks, during the distension of the arterial walls, consequent upon the cardiac systole. This pressure creates additional waves in the contents of the veins, and the acoustic expression of these waves is increased intensity of sound. The internal carotid artery is in very intimate relationship with the contents of the cavernous sinus, being practically surrounded by the venous blood. When the anæmic condition is present, therefore, with its predisposition to the generation of intravenous ripples, the pulsations of the artery excite fluid veins in the blood contained within the sinus. In this, I think, we have a sufficient cause for the production of the orbital murmur. And similarly we may account for the occipital and mastoid murmurs. The internal jugular vein, at its origin and in its upper part, is so closely connected with the internal carotid artery, that the shock of the arterial pulsation is always communicated to it. Hence, in the anæmic state, fluid waves are transmitted upwards to the blood within the cranial sinuses, and cause a murmur in situations where the vibrations come to a focus.

It may pertinently be asked, Why is the murmur louder over the occiput than in the mastoid region? And why is it more distinctly heard over the eyeball than in either of these positions? The answer is not difficult to find. The structures lying between the cavernous sinus and the closed eyelid are of somewhat similar density, or to put the fact in different language, there is a continuity of soft tissues from the cavernous sinus, where the sound is generated, to the surface of the globe of the eye, where it is perceived. On the other hand, a murmur arising within

the torcular Herophili must cause vibrations in the osseous structure of the occiput, in order to give acoustic manifestations. Physical laws tell us that sound is better transmitted through media of similar density, than where it is propagated through media whose density differs considerably. This is the reason why the orbital or cavernous murmur is more distinct than the occipital. And in the same way the murmur arising at the bend of the lateral sinus has to pass through the temporal bone; but this is broken up by the mastoid cells containing air, so that there is a physical reason for the greater weakness of the vibrations in this position. From the occurrence of a continuous hum over the torcular Herophili, we should expect to find a similar murmur over the orbit and mastoid region. That there are continuous vibrations, I most firmly believe; but, except in cases of profound anæmia, these are too feeble to reach the ear, and only the systolic augmentation of the sound is heard. Further observations will probably prove that there is a continuous hum in very severe cases.

As regards the place occupied by the cephalic murmur, in the order of development of the physical signs of anæmia, it may be remarked that it is the latest to appear. As far as my experience goes, the following is the sequence of phenomena: venous hum over the cervical veins; accentuation of the second sound in the pulmonary area; systolic murmur over the left auricle, with impurity of the first sound at the apex; systolic murmur in the mitral and tricuspid areas; and, lastly, cephalic murmur.

INTESTINAL OBSTRUCTION EXISTING FOR NINE MONTHS, CURED BY COLOPUNCTURE.*

By JOHN MCGOWN, M.D., Millport.

I HAVE brought this case under your notice because it presented some peculiar features which I have not seen noticed in any of the recently published cases of intestinal obstruction; also on account of the remarkable change that took place in the condition of the patient immediately after the operation, and because the patient, being resident in my own house, was under my constant observation during the whole period of the disease. The patient in this case is a gentleman who has been resident with me for the last eighteen years. During all that time, he has enjoyed excellent health. His habits are very regular; and, being a gentleman of independent means, he has not been subjected to the mental or physical strain of most men who have reached forty-five years of age. The first symptom noticed was about the month of March 1879. At that time, he began to refuse his food, had slight diarrhoea, and the abdomen was somewhat tympanitic. He complained of no pain at this period, nor at any time during the whole course of the disease. The diarrhoea continued, more or less, during the nine months he was ill. Thinking that the illness was owing to some slight derangement of the stomach, I tried all the medicines usually given in such cases; still the diarrhoea continued, and the distension of the abdomen increased. He still complained of no pain. He had no vomiting, unless when forced to take more food than he liked. The constant diarrhoea, and taking little food, produced great emaciation. A remarkable feature of the case was that, about five minutes after he took any food, a loud click-clicking sound was heard; the sound was such as can be produced by a quart bottle full of fluid being laid on its side and allowed to empty itself in that way. The sound was produced by the fluid passing through the obstructed part, wherever that might be. The mechanical pressure of the gas on the kidneys and blood-vessels of the abdomen produced a whole train of peculiar symptoms. The legs became very cedematous three months after the disease was first noticed; and at the end of nine months they were greatly swollen, and the skin was blistered in several places, from which fluid oozed. The heart's action was very feeble; the pulse had gone down to 40 in the minute. No trace of albumen was found in the urine during the whole course of the disease. There was no difficulty of breathing unless he attempted to exert himself in any way. The great pressure on the bowels produced a very large inguinal hernia on the left side. This could be easily reduced; but no truss could keep it up, on account of the great pressure. About the month of June—the disease now going on for five months, and having failed to relieve the distension, which was now very great—I passed the tube of the stomach-pump up the descending colon for nearly two feet, and let off a large quantity of flatus. After the gas was let off, I injected a gallon of tepid water into the bowel through the long tube. I continued to do this every eight days for about two months; but latterly it required to be done every three or four days. I had great difficulty in introducing the tube at first, both on account of the unwillingness of the patient and from the contraction of the sphincter

* Read before the Glasgow Medico-Chirurgical Society.

also be accepted as a genuine case of Dupuytren's contraction; but the first case referred to is a valuable contribution to our knowledge.

When I published my little work on *Dupuytren's Finger-Contraction*, in 1870, I stated that "I have never seen it in women"; and since that time only one case has fallen under my observation, and that occurred in a lady aged 66, who consulted me in October 1880, in whom both hands were similarly affected, but the right in a more severe degree than the left. The little finger of the right hand was flexed towards the palm by a prominent fascial band. Contraction of the ring-finger was only just commencing. In this hand, also, a fascial band passing to the thumb was distinctly prominent, and the thumb was slightly drawn towards the palm. In the left hand, the first phalanx of the little finger was not flexed by a prominent band; and in this finger the chief contraction was between the first and second phalanges. In both hands, the skin over the entire palm was dimpled, depressed, and puckered in folds, showing the extent to which the palmar fascia was involved, and the close adhesions between the skin and fascia. In this case, of which models have been preserved, as some improvement in the right hand followed gradual mechanical extension by an instrument, the operation has been deferred. I may add that this lady had been the subject of gout, and belonged to an extremely gouty family. Her father and brother had both suffered from contracted fingers.

Another case, of a somewhat doubtful character, which might be described as a spurious Dupuytren's contraction, occurring in a lady aged 48 (a single lady), was brought under my notice by Dr. F. M. Mackenzie in September last. The ring-finger of the right hand was drawn nearly halfway towards the palm, as a result of a wound in the palm of the hand from a broken glass bottle fourteen years previously; small fragments of glass remained impacted, and were taken away three years afterwards, since which time the contraction had been gradually increasing. A prominently contracted band of fascia played a more important part than usual in this class of cases of traumatic origin, in which all the tissues are generally implicated; and, after its subcutaneous division, the finger was immediately straightened more than we could have anticipated.

My experience, therefore, agrees with the opinion generally expressed, that this affection very rarely occurs in women; and Dr. Myrtle's large practical experience coincides with this opinion. Dr. Myrtle's valuable paper on Dupuytren's Contraction of the Fingers, published in the *BRITISH MEDICAL JOURNAL* of December 3rd, 1881, is full of practical observations. His views as to the traumatic and idiopathic varieties, also as to the cause or causes and mode of production of the contraction, its connection with gout, etc., are of the greatest interest; but at the present time I wish to refer chiefly to the frequency or unfrequency of the occurrence of this affection in women.

Mr. Reeves, in his communication to the *BRITISH MEDICAL JOURNAL* of December 31st, 1881, differs from other authorities as to the rarity of the occurrence of Dupuytren's contraction of the finger in the female, and observes: "I can clearly recall five cases, and I am sure that I have seen at least seven or eight in females. . . . These cases prove not only that Dupuytren's contraction does occur in females, but that it may be regarded as not very uncommon in them."

Two of these cases are mentioned as occurring in young ladies, one aged 17, the other 25, devoted to piano-playing, the strain and irritation of which Mr. Reeves regards as the starting-point of the pathological change which produces the contraction. Mr. Reeves observes: "The younger patient has the ring-fingers of both hands affected, and the little finger of the right is also contracted. The fascial bands are not strongly marked as yet, although the disease has lasted two years. . . . The second and older patient has only the ring-finger of the left hand affected." No allusion is made to prominence of fascial bands, nor to the condition of the skin in the palm of the hand, in this case; and no description whatever is given of the other cases referred to. Hence it may be asked, Were all these cases genuine examples of Dupuytren's contraction? Did they all present the clear evidence of fascial contraction, with dimpled depressions and puckering of the skin in the palm, and prominent fascial bands leading to the fingers?—characters essential to the class of cases described by Dupuytren. Such cases should, I think, at the present time, when professional attention is directed to the subject, be described accurately in detail, so as to avoid any possibility of error; as we know that contraction of the fingers may take place from a variety of causes, and the pathological conditions will be found to vary according to the nature of the producing cause.

Possibly the affection may be of more frequent occurrence in females than has been supposed, and an unusual number may have fallen under Mr. Reeves's observation; but many cases of supposed Dupuytren's contraction have been sent to me, which I have at once rejected from the class. Within the last fortnight, a young lady aged 16, having the

ring and little fingers of both hands contracted, so as to interfere with her playing the piano-forte, was sent to me; but I at once observed that the fingers were bent at the phalangeal articulations, and that there was no evidence of contraction of palmar fascia. The first phalanx could easily be extended beyond a straight line with the metacarpal bone. The father of the young lady then showed me his hands, in both of which the ring and little fingers were contracted, but to a less extent than his daughter's. In him, there was no evidence of contraction of the palmar fascia; but the phalanges of the fingers were a little flexed upon themselves, and could not be straightened. Care must, therefore, be taken to detect undoubted evidence of fascial contraction, before the cases can be grouped in the class described by Dupuytren.

CLINICAL MEMORANDA.

ON CONJUGATE LATERAL DEVIATION OF THE EYES DIRECTLY AFTER EPILEPTIC FITS.

Conjugate lateral deviation of the eyes, away from the paralysed side and towards the side where the lesion occurs, is well known in the apoplectic coma preceding hemiplegia, but I have not found any record of this deviation occurring in epileptic fits.

Through the kindness of the physicians of this hospital, I have noticed that, supposing that a fit begins with rotation of the head and face to the right (and I believe the tonic stage of epilepsy nearly always begins with rotation of the head to one side or the other), and that this is followed by the clonic spasms affecting both sides apparently equally, instantly the clonic stage is over, and the limbs are relaxed, the eyes will be seen to roll slowly to the other side—in this case the left—and to remain conjugately deviated for half a minute to two minutes; and then they often roll slowly from side to side, but remaining parallel. I have noticed the conjugate deviation in eleven out of the last thirteen fits that I have witnessed; and I should think that this might be explained by the theory that the side on which there was the greater motor discharge—as shown by the initial rotation of the head—becomes at the end of the fit the more exhausted, and suffers more paralysis than the other side; and I look upon the slow parallel movement of the eyes from side to side, as probably due to the recovery from exhaustion in the two halves of the brain not being uniform, but one side preponderating over the other in turns. The head does not rotate with the deviation of the eyes, after bilateral fits, because there is not, I believe, sufficient difference of power to cause this; but I have seen rotation of the head accompany the deviation of the eyes in unilateral fits, when the paralysis was severer and lasted for some hours and affected the convulsed side.

The above symptoms, coupled with the knee-reaction (patellar tendon-reflex) and ankle-clonus being more marked on the side to which the head turns in the initial tonic stage, and with the temporary absence (in one case for 30 minutes) of the superficial reflexes (sole of the foot, etc.), on the convulsed side in unilateral fits, which I have observed, tend, I think, to show that the nervous system is temporarily reduced by violent motor discharges to the same condition which is more permanently produced in hemiplegia, viz.:—paralysis, excessive action of the (so-called) tendon-reflexes, diminution of the superficial reflexes, and conjugate deviation of the eyes.

CHARLES E. BEEVOR, M.D. Lond., Res. Med. Off. to the National Hospital for the Paralysed and Epileptic, Queen Square.

REMARKS ON PEMPHIGUS.

THE numerous readers of the *BRITISH MEDICAL JOURNAL* have, no doubt, read with much interest the graphic description of the cure of pemphigus by arsenic, as given by Mr. Jonathan Hutchinson in an abstract of a clinical lecture recently published. At the same time, if the treatment therein advocated be invariably adopted, it cannot but lead, I think, to dissatisfaction and discouragement.

The idea undoubtedly conveyed by Mr. Hutchinson is, that pemphigus is invariably amenable to a course of arsenic. This I most certainly dispute. Were the disease, in all cases, due to "simple" constitutional causes, then, no doubt, arsenic would be an infallible remedy; but, seeing this is not the case, the logical inference must follow that it is not. That pemphigus is frequently connected with the syphilitic taint, no one, I think, acquainted with syphilis will gainsay. In such a case, arsenic could be of no avail; and the only remedy would be to remove the cause, viz., the syphilitic taint. A case of this kind, treated by my much respected teacher Professor McCall Anderson, in the cutaneous disease wards of the Glasgow Western Infirmary, made upon

not, as a matter of fact, an indication for ressection. This case was a marked one, the body being covered with bullæ from the crown of the head to the feet. The patient himself in an extremely weak condition. After a long and careful observation left no doubt on the mind of the physician that the disease was of syphilitic origin; and that the treatment adopted was most satisfactorily proved by the anti-syphilitic results obtained. In the course of a few weeks, by the judicious use of the bichloride of mercury, this man was cured. That it was syphilitic in origin there could be no doubt, and the mercury, in his weak constitutional state, would have been sure to make him feel worse, whereas the patient himself daily as being "much better". Seeing that the disease was of a syphilitic or other the system has become more robust, it is an uncommon form of cutaneous disease, and the treatment would be well to bear in mind, I think, though an anomaly.

JOHN S. MAIN, M.D., C.M.

Chesham, Bucks. Withington, Manchester.

THERAPEUTIC MEMORANDA.

TREATMENT OF NASAL CATARRH.

I have been for some time, I observe that Surgeon-Major Elliott recommends the inhalation of the spray of a solution of the bichloride of mercury. Now, I have, like myself, have been troubled for some time by attacks of coryza caused by the misery caused by it; and I trust that this treatment will be more successful than the many other remedies which are recommended in the medical journals.

I have obtained comparative freedom from this some affection during the past winter by the expedient of lubricating the nostrils with an attack is impending, with vaseline oil, and a hair brush passed into the nose. If this simple proceeding bring to others the relief it has, or

I am, Sir, very respectfully,
Yours, Sir, very respectfully,
J. S. MAIN, M.D., C.M.

SURGICAL MEMORANDA.

CONTINUED OF THE PALMAR FASCIA.

I have been for some time, I observe that Surgeon-Major Elliott recommends the inhalation of the spray of a solution of the bichloride of mercury. Now, I have, like myself, have been troubled for some time by attacks of coryza caused by the misery caused by it; and I trust that this treatment will be more successful than the many other remedies which are recommended in the medical journals.

I have obtained comparative freedom from this some affection during the past winter by the expedient of lubricating the nostrils with an attack is impending, with vaseline oil, and a hair brush passed into the nose. If this simple proceeding bring to others the relief it has, or

three, there was a history of chronic rheumatism, the symptoms of which were extremely well marked in one case, the metatarso-phalangeal joints of both great toes presenting characteristic evidences of rheumatoid arthritis.

F. A. SOUTHAM, F.R.C.S.,

Assistant-Surgeon to the Manchester Royal Infirmary.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

UNIVERSITY COLLEGE HOSPITAL.

PROSTATIC CALCULI: MEDIAN LITHOTOMY: CURE.

(Under the care of Mr. CHRISTOPHER HEATH.)

[FOR the notes of this case we are indebted to Mr. STANLEY BOYD, F.R.C.S., Surgical Registrar.]

The patient, a man aged 58, a lime-burner, residing at Chalkhill, Bushey, Herts, was admitted on November 2nd, 1881. He had had gonorrhœa when eighteen years of age. For the last seventeen years, he had been in the habit of passing catheters (Nos. 4 and 6), and had undergone an operation for dilatation of the urethra on several occasions. After using the catheter, he frequently passed large quantities of blood. At one time, an abscess formed in the perineum, and discharged, leaving a fistula; this healed in about a month. His urine had been thick and offensive for twenty years. When admitted, he was a stout, healthy-looking man. He complained that he had to pass urine every hour or oftener night and day, of some scalding during micturition, and of shooting pain afterwards in the perineum, but not at the tip of the penis. Blood was rarely present, and then generally appeared merely as a few drops at the end of micturition, after much straining. His symptoms were not aggravated by exercise or sitting. He passed urine in a stream (equal to about a No. 6 catheter), which was passed every day, and never stopped suddenly. There appeared to be two strictures: one in front of the bulb, admitting No. 9; another somewhat further back, admitting No. 6. The catheter struck a calculus, probably of large size, and fixed. The urine was full ofropy mucus, and was offensive.

The structures were systematically dilated by the passage of catheters of graduated size, and on alternate days; and a mixture consisting of 15 minims of dilute nitric acid, 30 minims of tincture of hyoscyamus, and a half of infusion of buchu, was ordered to be taken every four hours.

On November 12th, catheter No. 12 having been passed on the previous day, Mr. Heath performed the operation in consultation with Mr. Heath. The opinion was expressed, that there were several strictures situated at the prostate. After the examination, the temperature rose to 102 Fahr.; but on November 9th it had again become normal. On this day, Mr. Heath performed the operation. A median staff was introduced into the urethra, and the tip of the staff was introduced into the bladder, and the tip of the staff was introduced into the bladder. A vertical incision was made in the middle line of the perineum, and made to cut upwards for about one inch, and was continued to the point of the calculus. A small incision was made in the skin, and the calculus was removed. The calculus was found to be of the size of a walnut, and was removed. The operation was successful, and the patient was discharged on November 15th.

The patient was discharged on November 15th, and was well on November 21st. The patient was discharged on November 15th, and was well on November 21st. The patient was discharged on November 15th, and was well on November 21st.

catheter along it, fourteen ounces of acid urine were drawn off. On the following morning, he was rather better; the urine was clear, acid, and contained only a trace of albumen. There was some tenderness on pressure above the pubes; and in the evening, from some unexplained cause, he had a rigor. On November 16th, the temperature was still a little raised (100° Fahr.), and he had some slight bronchitis; otherwise, his condition was satisfactory, and the urine remained clear and acid. On November 18th, the perineal tube was withdrawn; the urine was still acid when passed. On the following day, he complained much of pain above the pubes, caused by coughing. His temperature ranged from 101.4° to 103° Fahr., and his tongue was furred and rather dry. On November 22nd, the urine had again become ammoniacal, and cough was very troublesome; but, on the whole, he was improving. A week later, he was decidedly better; the temperature had returned to the normal. The bladder, from this date, was washed out with a solution of sulphate of quinine. He steadily improved. On December 9th, it was noted that the urine only occasionally came through the wound, and in small quantities; when fresh, it was pale, clear, acid, and contained no albumen.

He was discharged on December 23rd, 1881. The wound was not quite healed; but the urine was passed *per urethram*, and he could hold it for three hours at a time. The urine was clear, acid, and contained no albumen.

The removal of calculi from the prostate is unusual, although examples of much larger prostatic calculi are recorded. The treatment of the bladder by mopping out with a strong solution of nitrate of silver was both novel and successful; and Mr. Heath said that he was led to its adoption by the success which had followed similar treatment in the female, where, of course, the bladder is much more easily reached through the urethra. He had twice employed the same plan after performing lithotomy in private, and in both cases the results were satisfactory.

KING'S COLLEGE HOSPITAL.

VESICAL, PROSTATIC, AND SCROTAL CALCULI: MEDIAN LITHOTOMY: CURE.

(Under the care of Mr. LISTER, F.R.S.)

[Reported by Mr. W. J. PENNY, Surgical-Registrar.]

H. G., aged 23, was admitted on June 4th, 1881. The patient was a farm labourer, residing in Sussex, a strumous, unhealthy-looking individual. Scattered over his body were numerous scars, the result of abscesses. His right hip was contracted from old hip-disease, and he had had also extensive necrosis of the left tibia and fibula.

In September 1880, after hop-gathering, he suddenly passed a small stone, *per urethram*. For four or five months before this, he had passed his water frequently, but had experienced no pain. After this event, however, he had occasional slight attacks of pain, but never passed blood with the urine. In October 1880, he first noticed a swelling in the scrotum, at its junction with the penis; this burst a week after its appearance, giving exit to some small stones, which were soft, and crumbled under his fingers. The opening closed in six weeks, but after some time reopened; since that time, a little urine had continuously passed through it.

On admission, he complained of difficulty in micturition; the urine dribbled away from the urethra and also from the scrotal sinus. In the scrotum, stones could be felt grating on each other. In the prostate, a hard mass could be made out both by the sound in the urethra and by the finger introduced *per rectum*. The sound was not passed into the bladder, being partly prevented by the stones in the prostate, the position of which Mr. Lister was anxious not to alter. The urine was strongly ammoniacal, of specific gravity 1017, containing mucus, pus, and about one-fourth of albumen. The temperature before the operation ranged between 100° Fahr. and 102.6° Fahr.

Operation on June 10th. The patient was put under the influence of chloroform. Mr. Lister then passed a grooved central staff down to the prostate, cut down on it through the centre of the perinæum, and, running the knife along the groove, cut into the prostate. He then introduced his finger, and found the gland excavated in the form of a sac containing the stones; these he removed with a small pair of lithotomy-forceps. The staff was then passed into the bladder, and a large calculus discovered. The incision was extended into that viscus, a large pair of lithotomy forceps introduced, and the stone seized. Owing to its large size and the contracted state of the pelvic outlet, it was impossible to remove it entire; consequently Mr. Lister, using the same forceps, and exerting considerable force, crushed it and removed it piecemeal.

The cut surfaces were then swabbed with a solution of chloride of

zinc (forty grains to an ounce). A lithotomy-tube was introduced, and secured in position. Mr. Lister then cut down and removed the stones in the scrotum. This wound was also swabbed with the chloride of zinc solution, and left open.

The patient, after the operation, made a rapid recovery without a bad symptom. The temperature, high before the removal of the calculi, ranged between 98.4° Fahr. and 99.6° Fahr. after.

The lithotomy-tube was removed on June 12th, and on that day he said "I feel happy now." On June 19th he first passed urine by the urethra, and on June 28th all the urine was passed by the urethra. He got up on July 8th, and was discharged on July 18th completely healed and cured. A very slight trace only of albumen persisting in the urine.

All the calculi were composed of triple phosphates; that from the bladder weighed when dry 1,010 grains, and was about the size of a hen's egg. The calculus material from the prostate weighed 244 grains; that from the scrotum, 24 grains; making a total of 1,278 grains. The prostatic calculi were irregular in form, and on section presented a mottled appearance, some parts being dark grey and more dense in texture, the greater part being of a lighter colour.

The whole of the vesical calculus (with the exception of a distinct nucleus) was quite white. Externally it presented a smooth surface, and did not show any appearance of having lost fragments. The nucleus, however, in size and appearance like a small tuberculated date-stone, presented on section a mottled surface like that of the prostatic calculi. The scrotal calculi, white in colour and about three-quarters of an inch each way, looked like the segments of a large circle.

Judging from these facts, Professor Lister was of opinion that the calculus originated in the prostate; either one or more were formed; if one, then it underwent spontaneous fracture, a fragment passed back into the bladder, and formed the nucleus round which the vesical calculus rapidly grew; also that the scrotal calculi were probably fragments from the prostatic stones, one of which, of the size of a small walnut, presented an uneven surface, and fitted into the concavity of the scrotal stones.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 17TH, 1882.

SAMUEL WILKS, M.D., F.R.S., President, in the chair.

Penetration of Internal Organs by Ears of Grass and Wheat.—The PRESIDENT read a letter from Dr. Francis Darwin, which related to a case brought before the Society by the President, where an ear of wheat, which had entered by the mouth, had found its way out by the shoulder, where an abscess had formed. The letter alluded to the not uncommon occurrence of ears of grass and wheat penetrating the sheep of South America, and perforating many internal organs.

Bones from Genu Valgum.—MR. PEARCE GOULD showed this specimen. The case came under his notice in the Westminster Hospital in August last, in the person of a man aged 43, whose right knee became valgus at eighteen years of age, and the deformity had gradually increased up to that time. There was no other evidence of rickets. The deformity was very marked, the two ankles being eleven inches apart when the limbs were straight. The foot was in a position of moderate equino-varus. The limb was amputated by Mr. C. Macnamara for synovitis of the knee-joint, which rendered it an incumbrance to the man at his work. The inner condyle of the femur was an inch and a quarter lower than the outer, and the inner condyle of the tibia an inch and a quarter higher than the outer. This deformity was in each bone due, not to any alteration in thickness of the epiphysis, but entirely to obliquity of the line of junction of epiphysis with diaphysis. The patella was small. The bones also showed the characteristic changes of chronic rheumatoid arthritis; but the absorption of cartilage and bone was entirely limited to the outer condyle of the two bones, while the nodular bony outgrowths were equally distributed. The tibia was almost cylindrical, chiefly owing to filling out of the normally concave outer surface of the shaft. The fibula was rather larger than usual. In the foot, the head of the astragalus and the scaphoid were found shorter from side to side, and flatter, than normal. Mr. Gould pointed out that this case was an example of a purely local deformity, and of one coming on later than usual, and also progressing very late in life; and he remarked that the obliquity of the diaphysis of the two bones of the knee supported the views of Mr. Barwell, and justified the operation he performed for this deformity. The genu valgum had caused increased pressure to be borne by the outer condyles of the femur and tibia; and, as a

with Dr. Addison, that severe diarrhoea was indicative of ulceration of the colon.

Sclerosis of the Brain.—The SECRETARY showed, for Dr. HARRISON of Lancaster, specimens of hereditary cerebral sclerosis. These were referred to a committee to be investigated.

Rupture of the Liver.—Dr. SYMONDS showed a specimen of rupture of the liver, almost complete; the direction being antero-posterior. The man died an hour and three-quarters after the accident, and was so violent as to need restraint. The mechanism of rupture of the liver was doubtful.—Mr. JOHN WOOD thought that it was the result of two opposing forces doubling the liver on itself. Dr. Symonds held that the liver was ruptured by being jammed against the spinal column.

"Xanthelasmod" Disease.—Dr. STEPHEN MACKENZIE exhibited two living specimens. The patients were brothers, aged 44 and 46; the disease was congenital; a sister and paternal grandfather were said to have had the same morbid change. The condition presented the appearance of tubercles arranged in linear fashion, having yellow wash-leathery look, not well seen by gaslight, and occupying a varying extent of the body-surface; in both brothers it was well marked about the necks and axillae. The cases were unique as a congenital affection. There was no palpebral change, nor disease of any other organ. Dr. Church had shown that the disease had occurred in two generations.

Hour-glass Contraction of the Stomach.—Dr. CARRINGTON brought forward three specimens. The condition was well marked in all. There was no sign of disease, either inside or outside the stomach, capable of explaining the constriction. Five cases had been recorded in the Society's *Transactions*. Dr. Carrington considered that, whilst ulcers did in some cases give rise to the constriction, yet many were due to congenital malformation, and were a sort of reversion to a type found in ruminants and rodents.—Dr. STEPHEN MACKENZIE thought there was some fibroid tissue on the surface of the stomach in one of the cases.—Mr. R. WILLIAMS had taken some interest in cases of the kind.—Mr. MORRANT BAKER said that, in the case which he had brought before the Society, there was no trace of pathological lesion either outside or in the stomach, and he considered that the change was due to a congenital malformation.

Acute Yellow Atrophy of the Liver in a Child.—Dr. GOODHART showed this as a recent specimen. There was a history of one month's jaundice. The child, aged 2½ years, had grown worse, and died comatose.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 13TH, 1882.

JOSEPH LISTER, D.C.L., F.R.C.S., F.R.S., President, in the Chair.

Adjourned Discussion on Myxœdema.—The adjourned discussion on myxœdema was resumed by Dr. HERON, who brought a patient presenting many of the characteristic features of chronic Bright's disease and of myxœdema. The man was a publican, aged fifty-four, who had been subject to gout. When about twenty he had typhus fever, and ever since had been troubled with palpitation. He looked the subject of chronic albuminuria, but had none; his eyelids were puffy, his face swollen and pallid; his arteries thick, and the left side of his heart enlarged. His hands and feet were also very puffy; but there was no albumen in the urine, and he had no retinal patches in the eyes.—Dr. GOODHART thought there were certain points in Dr. Mahomed's case, mentioned at the former meeting, which should be emphasised. The patient was a male; and, though the symptoms were well marked during life, there were no indications of myxœdema after death. The heart was diseased, and the viscera indurated or india-rubber-like, especially the brain. The connective tissue was full of a jelly-like fluid, but it contained no excess of mucin; the characters were rather of chronic œdema than of myxœdema. Chronic œdema, therefore, seemed to give rise to some of the characters of the latter disease, but not to all. The nervous symptoms, for instance, might be due to a variety of causes. Certainly all the symptoms of myxœdema were not due to chronic Bright's disease.—Dr. MARCET considered myxœdema to be a special malady, and not chronic Bright's disease. It occurred mostly in women. The skin had not the same appearance as in chronic œdema; the nervous symptoms were marked; the illness was protracted, and albuminuria only appeared at the end. Through the characteristic imbecility, it was allied to cretinism. The *post mortem* appearances were those of malnutrition and ill-formed connective tissue. It was rather a malformation than a degeneration. Mucin was not so very characteristic a constituent, but there might be others, and the mucus-like fluid might be due to Dickinson's altered fibrin or waxy material. The urine seemed to contain less urea than normal, but that

was of little importance. Chloride of sodium was commonly diminished in œdema, and the quantity should be tested here. The temperature was lowered in myxœdema; perhaps there were some modifications in respiration.—Dr. F. TAYLER mentioned the case of a female, aged thirty-five, who presented the usual symptoms of myxœdema, with deafness and cramps in the thighs. The tendon-reflexes were normal. There was some menorrhagia. She was the mother of two children, and she dated her illness from the birth of the last. There was a strongly neurotic history on the father's side, and her mother had died of what he (Dr. Tayler) considered must have been myxœdema.—Dr. HADDEN said that in these cases there was slowness of mental processes and of bodily motion. Probably this was due to some lesion of the sympathetic. There were both diminished heat and tissue-change; probably, also, there was disease of the thyroid. He had removed some parts of the sympathetic for examination. Probably, however, the medulla oblongata also was affected, as in some cases there had been symptoms indicating this.—Dr. SEYMOUR TAYLOR thought there was a marked change in the appearance of the brain. Generally, the disease occurred in people who had been much worried and troubled. All the symptoms showed a nervous origin. Often there was no change in the kidneys, either fibrous or epithelial.—Dr. DYCE DUCKWORTH considered Dr. Mahomed's remarks rather pathological than clinical; and, for his own part, he was not prepared to accept the views advanced by Dr. Mahomed. Degenerations were not always produced in the same way; and certainly the malady was not chronic Bright's disease, for albuminuria occurred only at the end, when the kidneys became affected by the disease. Certainly, it would be curious if, out of the vast number of cases of chronic Bright's disease, so few cases of true myxœdema should be recorded.—Dr. ORD, in reply, proceeded to sum up the clinical and pathological characters of myxœdema. Thus, the subjects were generally women; there was never albuminuria in the early stages; nor, in some cases, at all; there was general swelling of the integuments, which were semi-transparent, rough, and non-perspiring; the hair was scanty; the teeth bad; the temperature low; the thyroid small; the speech slow, imperfect, and nasal; thought and perception slow, but perfect. The patients were apt to become irritable and timid, sometimes demented, and finally comatose. Occasionally death arose from general debility, sometimes from uræmia. Throughout the body, the interstitial tissue was swollen and nuclear, increased in quantity, and containing mucin; it encroached on all the normal structures, which became atrophied, as in the case of the hair, the sebaceous and even the sweat glands, the heart, liver, and other internal organs. The idea that this was Bright's disease without albuminuria was soon negated, though Dr. Mahomed would extend the term even to myxœdema, thus amplifying even Gull and Sutton's views respecting arterio-capillary fibrosis. This would surely be carrying the idea of Bright's disease too far. The theory of sympathetic origin did not commend itself to him, for there was no evidence that the sympathetic had trophic functions. Probably, as regards the nervous system, the central organs were affected in the same way as were the peripheral, as suggested by Dr. Goodhart. He did not think, however, that the change was due to a degeneration, but rather to a malformation of tissue. The question of heredity was new. He was not prepared with any special theory to explain the disease in its totality.

EPIDEMIOLOGICAL SOCIETY.

JANUARY 4TH, 1882.

GEORGE BUCHANAN, M.D., President, in the Chair.

Is the Climate of Indian Hill Sanitaria beneficial in Scrofula, Tuberculosis, and Phthisis?—Dr. JOSEPH EWART read a paper on this subject. In a short paper communicated to the Society during the last session, the author endeavoured to demonstrate the ineligibility of the plains of India as a residence for Europeans tainted with scrofula, or affected with tuberculosis or phthisis. In the present paper, the inquiry was extended to an examination of the hill-stations as temporary or permanent resorts for the scrofulous or phthisical. These mountain refuges ranged from over 3,000 to 7,000 or 8,000 feet above the sea-level, and were considered to be beyond the height at which malaria was generated. In order that a just conception of their climate might be formed, the latest information regarding altitude, barometric or air pressure, thermometric range, humidity, and rainfall was necessary; and facts bearing on these points had been gathered from the *Report of the Meteorology of India in 1878*, by Henry F. Blanford, F.R.S.; *The Imperial Gazetteer of India*, by W. N. Hunter, LL.D., C.I.E.; *Health Resorts*, etc., by W. J. Moore, Deputy Surgeon-General, and Honorary Surgeon to the Viceroy of India; supplemented by the author's own experience. Thus were passed in brief review the cli-

from altitude, and the consequent rarefaction of the air, and the increased power of taking exercise in the open air, were highly advantageous. None of these stations were, according to the author's experience, suitable in the rainy season. The very small range then prevailing was more than neutralised by the extreme atmospheric humidity. Persons belonging to this group bore badly the much augmented range in the winter months. For cases of simple tubercular growth or the taint of scrofula, a voyage to India and back, to escape the rigour of an English winter and spring, might often prove far more serviceable than any of the marine sanatoria on either of the shores of the Mediterranean. The long sea-voyage in any of the comfortable steamers now available, in mild, warm, and genial weather, amid ever changing surroundings and associations, and, after arrival, easy travelling to visit places of historic interest on the plains, were calculated to improve and preserve the general health. The journey should be commenced in October, the arrival in India timed to be in November, and the re-embarkation from Calcutta or Bombay about the beginning of March. The time intervening between the return to Europe and June might be passed in some of the congenial resorts in Italy or France.

3. *Influence upon those affected with confirmed consumption or phthisis.* From the earliest times, when soldiers were sent to the hills with phthisis, it was noted that the disease became aggravated and the end expedited. The rule had long been to avoid the transfer of all phthisical invalids of the European army, and others of the various services in India, to any of the hill sanatoria. A few years ago, on reports being received of the favourable influence of high altitudes in consumption, some Calcutta physicians ventured to advise patients to try Coonoor in the Nilgherries. The result was always disappointing. In phthisis, superadded to the scrofulous diathesis or tubercular deposit in a somewhat inactive state, were acute or chronic pneumonic and bronchial inflammation, tending to, and eventually terminating in, disorganisation and disintegration of the structures immediately involved. In such cases, the earliest effect of high altitudes was to cause the inflamed, irritable, and struggling lung to do more work than it was, at lower levels, called upon to perform. The consequence was increased irritation and inflammation around the tubercular growth and in the associated bronchial mucous membrane, and an aggravated tendency to repeated attacks of hæmoptysis. According to Dr. Theodore Williams, the circumference of the chest had been known to increase to the extent of three inches during the season at Davos. A lung in the condition above mentioned did not require any movement that could be averted. This would be in accordance with the principle of rest, which guided the surgeon in the management of injuries and wounds, and the physician in the treatment of pleurisy, pericarditis, or pneumonia. Doubtless, there were cases of chronic tubercular affection of the lung in which prior inflammatory action had subsided, and the patients were much in the same condition as the subjects of simple tubercular consolidation. There was a rarer set of cases in which cicatrisation or cretification—or it might possibly be slow but progressive absorption—had advanced towards the repair of the damaged lung. In such cases, Indian hill climates were suitable in the summer months, not so much on account of the greater expansion of the pulmonary cells, as from the immensely increased facilities for living an open-air life, and for obtaining increasing exercise in a warm, mild, genial, pure, and antiseptic atmosphere. The conclusions arrived at were these: 1. The hill sanatoria of India are beneficial to persons afflicted with scrofula only. 2. They are *fatal*, in the warm months of summer (*a*) in uncomplicated and simple tubercular consolidation, and in tubercular affection in which there is inflammation of the adjacent lung and the bronchial tree, and where there has substance, and (b) where this is proceeding in the direction of repair by absorption, cicatrization, or cretification. 3. They are *beneficial*, probably at some times, but in an aggravated degree, in the summer season and later, in all cases of active and extensive pulmonary consumption. In the discussion which followed, the President, Mr. James F. Taylor, Dr. Nathaniel Cheever, Dr. Douglas Powell, Dr. Marshall, and others took part.

MR. CAMPAN has also added to the Paris Society the knowledge, that the pathological laboratory of the Paris Faculty of Medicine has received, from The Microscopical Society, containing culture of the disease, a number of tubes from myeloid leucemia. The microscopic examination has revealed the existence in these tubes of very numerous leucocytes, formed of a large nucleus, or containing vesicle points (small nuclei). The tubes also contained a reticulum fibrous. Observations made with the focus of the tubes received from Dr. M. Ward have corresponded exactly, and confirmed the results of the results of which were made previously to the society.

REVIEWS AND NOTICES.

A MANUAL OF DISEASES OF THE THROAT AND NOSE, INCLUDING THE PHARYNX, LARYNX, TRACHEA, OESOPHAGUS, NASAL CAVITIES, AND NECK. By MORELL MACKENZIE, M.D. Lond., Senior Physician to the Hospital for Diseases of the Throat and Chest, etc. Vol. I.—Diseases of the Pharynx, Larynx, and Trachea. Pp. 601. London: J. and A. Churchill. 1880.

THIS is the first volume of a comprehensive work, in which Dr. MACKENZIE proposes to give a systematic account of the morbid conditions of the upper parts of the respiratory and alimentary passages—diseases to which he has long and successfully devoted himself as a specialist, and upon which he is decidedly recognised as a high authority. The author informs us that his present work is based, partly upon the courses of lectures which he has delivered for some years at the London Hospital, and partly upon his well known Jacksonian prize essay upon *Diseases of the Larynx*, but that the greater portion of the matter in the pages before us is now published for the first time. The present volume is divided into three sections, devoted respectively to the diseases of the pharynx, larynx, and trachea. Each section opens with a concise account, well up to recent knowledge, of the anatomy of the region in question. This is succeeded by a full description, copiously illustrated by excellent woodcuts, of the instruments used in the diagnosis and treatment of the disorders of the part; and this subdivision of the subject is followed by a systematic exposition of the etiology, symptoms, pathology and treatment of each of the particular affections of the organ under consideration. At the end of the volume we find a well arranged selection of formulae for topical remedies used in the treatment of diseases of the throat, and a copious index, which must enhance the practical usefulness of the work. The best part of the book is that devoted to the description of individual diseases: within a comparatively small space the author has compressed a vast store of information, which he has put together with much literary skill, and supplemented by exhaustive bibliographical references. The work is practical in tone throughout. We commend it as a thoroughly reliable text-book.

WATER-ANALYSIS FOR SANITARY PURPOSES: WITH HINTS FOR THE INTERPRETATION OF RESULTS. By E. FRANKLAND, Ph.D., D.C.L., F.R.S. London: John Van Voorst. 1881.

THE subject of potable water must always be of interest to the medical profession; and a new book, written by our greatest authority on water analysis—Dr. FRANKLAND—must, therefore, be acknowledged worthy of a careful perusal. The present work is evidently the result of the author's great and varied experience in this branch of analysis; and, independently of its value to the medical officer of health and the analyst, it will be of no small service to the general practitioner: for, not only are most of the methods at present in use for the analysis of waters very clearly described, but much useful information is given as to the conclusions to be drawn from the statement of results. The author remarks, in his introduction: "It rests with the analyst now-a-days to determine what formerly the consumer had to discover for himself, by long and perhaps hazardous experience, whether the impurities found in water are of such a nature as to render it unsuitable for the particular purpose for which it is intended to be used." To this, we may add that it rests also with the analyst to report his results in a form intelligible to the unscientific reader; and, in the paragraph on "interpretation of results", material assistance is afforded those chemists following Dr. Frankland's method of analysis.

Part I of this work is devoted to the analysis of water, without gas analysis. Under this head, all the important methods for the detection of organic impurities are given, with the exception of the well-known "albuminoid ammonia" process, which is employed by so many analysts for obtaining approximate results. We are told that the "oxygen process" is "the only volumetric method deserving of any confidence whatever"—a statement which, we venture to think, will not be assented to by many engaged in water analysis. As, however, Dr. Frankland maintains that his own process—viz.: the actual combustion of the residue from the water—"is the only one that affords thoroughly trustworthy evidence of the fitness or otherwise of the sample for dietetic purposes"; and as, moreover, the "oxygen process", in the hands of Dr. Tidy, yielded a remarkable parallelism of results, his predilection for this process is easily understood.

Part II is devoted to water analysis requiring the use of gas apparatus. In this section, the author's combustion process is described at great length; and those who have either the opportunity or the inclination for employing it, may read this part with considerable interest and

profit. We cannot here enter into the question, whether the labour involved in this process is repaid by the results obtained; but we may remark that the author himself acknowledges that "the separate determination of each organic constituent of the suspended matters is of comparatively little use in the present state of our knowledge, because it is impossible to distinguish, amongst the suspended matters in water, those which are injurious from those which are harmless"; and we would suggest that, what is true of suspended matter, may by some be considered true of dissolved. In the appendix, directions are given for the estimation of ammonia, nitrates and nitrites, chlorine, and hardness, together with instructions for the preparation of the standard solutions required.

Some tables and arithmetical operations given will be found of service. It is to be regretted that, by an oversight, several blanks have been left on pages 26 and 96, which render the instructions there given worthless. This will doubtless be remedied in the next edition. We can commend this book, not only to those who follow Dr. Frankland's process, but to all interested in water-analysis, because of the useful general information it contains; and probably it will become one of the standard works on the subject.

In conclusion, we may remark that, in addition to the scientific worth of this work, much matter of general interest will be found—such as directions for the collection of samples, and the conclusions and recommendations of the Rivers Pollution Commissioners, which treat of the quality of water from various sources; the rendering of polluted water again wholesome; the propagation of epidemic disease by water; the hardness of water in relation to health, and to cooking and manufacturing operations; and other topics of universal interest. A popular edition of this part of the work would, we feel confident, do much to call public attention to the too often neglected subject of our water-supply.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A PORTABLE POLYGRAPH.

SIR,—In a recent notice of Professor Marey's work on the circulation, which appeared in your columns, the reviewer gave a description of the clinical polygraph devised by the author. Many of your readers will remember the instrument as exhibited at the Cambridge meeting of the British Medical Association, and the lucid description given by the inventor of his method, by using it so as to demonstrate the movements of the two sides of the heart simultaneously. The instrument appeared to be singularly compact, and made with the finish and perfection for which Parisian instrument-makers are famed. For this reason, however, it is likely to be very costly, if we may judge by the price asked for the ordinary sphygmograph of the same distinguished inventor. I wish to say a few words in favour of a similar polygraph, made by Rothie, of Prague, which, though lacking the beauty and finish of the French instrument, is still most useful, and sold at an exceedingly low price. It consists of a clockwork drum nearly five inches in diameter, two Marey's recording tambours, and two corresponding tambours which can be used either as sphygmographs or cardiographs. This, with an *Athmungsflasche* or bag for registering respiratory movements, and some accessory apparatus, is sold for £5. It serves well for the obtaining simultaneous curves of pulse and heart, or pulse and respiration; while for a few shillings extra a seconds marker can be adapted. The instrument will be found most useful to the teacher for numerous purposes of physiological demonstration in laboratories, where the large and costly recording instruments found in more highly endowed establishments are not forthcoming, as well as to the clinical physician by the bedside. In view of the increasing necessity of rendering our physiological lectures practical demonstrations, rather than mere verbal narrations, any attempt to reduce the present almost prohibitive price of physiological instruments of research is to be welcomed.

ERNEST H. JACOB, M.A., M.D.

Demonstrator of Physiology to the Leeds School of Medicine.

WE understand that Deputy Surgeon-General H. T. Reade, V.C. has been compelled through failing health, to resign the appointment of principal medical officer to the forces at Barbadoes, where he had served through the recent terrible scourge of yellow fever.

THE OFFICE OF CORONER.

II.

IN our last impression we traced the course of judicial investigations as they take place in France, more especially where a crime is supposed to have been committed; and we pointed out some of what we believe to be the merits and also the defects of the French system of making *post mortem* inquiries. In Greece, the system in force is almost identical with that in France. The Scotch system is analogous to the French; the procurator-fiscal, an officer corresponding to the *procureur du roi*, performing the duties of the preliminary investigation, with large powers of taking evidence in private, making arrests, and acting without a jury. These systems, then, may be dismissed without further comment.

In Russia, the whole proceedings in the case of a violent death are placed in the hands of a judge of instruction, who is a judicial officer of the Crown, appointed in and for each district by the central governor, or council of the province or state. On receiving information, the judge of instruction repairs to the place where the corpse is lying, and takes charge of it. He has power to seize all papers and correspondence, and put seals on private papers and boxes. He summons and examines all witnesses, takes their evidence, commits it to writing, calls in experts, and directs their action. He is clothed with large powers, and may arrest, and even place in close confinement, a suspected person. He, indeed, acts as a public prosecutor, and yet is bound in honour and conscience to act as an impartial judge for as well as against the accused. The medical side of the case is entrusted to a physician or surgeon, who is a salaried sworn officer of the Crown. He acts in conjunction with the judge of instruction, but independent of him; and he is bound to make a necropsy if any suspicion or doubts exist as to the commission of a crime. He furnishes to the court, and also to a central medical board, a written account of his necropsy, and his conclusions as to the cause of death. Of late years, each Russian village has certain citizens designated by its mayor, whose duty it is to assist the judge of instruction by searching for and giving evidence as to known facts. They are not, however, a jury, as they neither report nor vote, but are, in fact, lay assessors to the judge.

In Germany, the matter of an inquest is solely an affair of police. There is no coroner, nor any analogous officer, nor any jury, on the preliminary examination, which is conducted by a judicial officer, the district attorney, who has not only the powers of an attorney, but also those of a committing magistrate and police justice. The police are, indeed, his subordinates, and under his control in all respects in the investigation of crime. There are also judicial district medical officers, regularly appointed and selected for their special training and fitness for forensic duty. These are summoned by the district attorney, or by the police authorities, when it is deemed necessary to have their services. They examine dead bodies, make necropsies, and report on the medical examination. The criminal code prescribes a form for the conduct of the judicial medical examination of the corpse; and the cases and manner in which experts may be called in by the district attorney or the magistrate are, in the precise German fashion, strictly defined. After the inquest (if it may be so called) has been held, and the medical examination and report made, if the district attorney be of opinion that a crime has been probably committed, he moves before the proper court; and if the court, after hearing the evidence, think that sufficient reasons are adduced, it orders a preliminary judicial investigation, which is conducted before a justice, with the assistance of the district attorney. The German system is too much a matter of police—too Bismarckian—to permit of its introduction into this country. The medical examiners are mere servants of the police, and in this the system is not to be commended.

In most of the States of the American Union, the English system, or a close approximation to it, of coroners' inquests, has prevailed, and indeed still prevails. In 1877, however, after discussion the State Legislature of Massachusetts, assisted by the powerful aid rendered by the Medical Society of that State, adopted an entirely new

system, which is stated to have worked admirably, and will doubtless be shortly adopted by others of the States of the Union. The statute which worked these radical changes abolished the office of coroner, dispensed wholly with juries on the preliminary inquiry as unnecessary, and introduced a new system, by which a competent medical man takes charge of the medical part of the investigation, and makes arrangement for proper officials to take charge of the legal and statutory aspects of cases where the death is in anywise proper to be made the subject of a legal inquiry preliminary to a final trial of the accused after indictment. Medical examiners are appointed by the governor and council of the State for each several district. In the opinion of those best able to judge, the workings of the new system furnish an admirable view of the results of a peculiarly fortunate attempt to provide an intelligent and practicable substitute for an acknowledged faulty system, and may be commended to the consideration of Englishmen as a system well adapted to our free British institutions and prejudices. It is claimed for the Massachusetts system, that it compels a careful and proper medical examination and necropsy in all cases where a coroner formerly acted; that it secures the services of a competent officer to conduct the medical examination, and also, where necessary, of an officer fitted to conduct the legal inquiry; and that it dispenses with a jury on the preliminary investigation.

In all cases where the cause of death demands inquiry, it is most needful that a formal and careful medical examination by a perfectly competent medical man should be made *at once*, and that he should decide upon the facts by a careful scientific inquiry as to the cause of death. The Massachusetts system provides an officer for that duty, and requires him, by the terms of the law, to be "an able and discreet man, learned in the science of medicine", to be even eligible to hold the office of medical examiner. This officer is required to examine the body; and if, in such examination, and after personal inquiry into the cause and manner of death, he deem further examination necessary, he is required, on the written authorisation of the district attorney, or other competent judicial authority, to proceed in a specified careful way to make a necropsy in the presence of at least two discreet persons, and then and there to carefully reduce to writing every fact and circumstance tending to show the condition of the body and the cause and manner of death, together with the names and addresses of the witnesses. If, on this inquiry, the medical examiner, after the examination and necropsy, be of opinion that the death was caused by violence, he has to notify this to a judicial authority, and file his signed report and certificate in court. The judicial authority then takes up the case and conducts the legal inquiry. The medical examiner is empowered to call in the aid of a skilled chemist to analyse the viscera and any articles capable of throwing light upon the case, and provision is made for adequate payment for the analysis. To guard against negligence and fraud on the part of the medical examiner, if he report that the death was not caused by violence, and the district attorney or the State attorney-general be of a contrary opinion, either of the latter functionaries may direct an inquest to be held; and for this, provision is made by the Act.

It has been found, as we have already stated, that the Massachusetts system works well, and that the results are in every way satisfactory. The saving in cost, too, is considerable; the saving amounting to one-third of the cost under the old system of holding coroners' inquests. The serious consequences resulting from the inexperience and ignorance of incompetent persons taking charge of the medical investigation as to the cause of death, or the legal part of the inquiry into the cause of death, are said to be avoided. Provision being made, too, for the appointment of competent and trained medical examiners, and these being all of equal official status, the blunders attendant upon the employment of subordinates under the control of a superior officer are avoided; and though there would, at first sight, appear to be an advantage in having some supreme consulting medical authority to refer to in cases of great difficulty, the advantages of having officers each of equal authority in his own district, perhaps, on the whole, preponderates.

Mr. Clark Bell's pamphlet on *Proposed Reforms in the Coroner's*

Office, to which we are largely indebted in making the above remarks, is well worthy of perusal by all interested in the question of the retention, modification, or rejection of the office of coroner in this country. Some reform is necessary, and hence it is well that our readers should be made acquainted with a system which appears to have worked so admirably as that adopted by the State of Massachusetts.

ATTENDANCE ON THE FAMILIES OF MEDICAL MEN.

MEDICAL fees are a fruitful subject of discussion; and especially at the present season of the year, when books are balanced and averages struck, our professional brethren are forcibly reminded of the fact that they generally have to work hard for very inadequate fees, and that their anxious and arduous labours receive a very scanty acknowledgment from the public. It is no wonder, then, that questions of professional remuneration often come under our consideration, for they are apt to be "burning questions"—questions which come painfully home to many men, and harass them with pecuniary cares.

One such question has lately been fully discussed in our columns—Should gratuitous attendance be given to the families of medical men; and, after their death, should their widows and children receive a similar benefit?

Now, this is a question which it is impossible to answer in an off-hand way. We cannot lay down a hard-and-fast rule, applicable alike to all cases. As far as the question has reference to the families of medical men in practice, we have no hesitation in saying that they should be attended gratuitously. If the medical man call in his neighbour this year, next year his neighbour may be glad to avail himself of his professional advice. Sicknes enters, sooner or later, into every family; and there may well be an exchange of good offices among medical men. In this way, if we view the profession as an united body, any obligation that may be incurred by one is repaid by another; and thus a friendly feeling is maintained among those who have great need to stand "shoulder to shoulder". We agree, therefore, with those of our correspondents who have held that the attendance upon the families of medical men in practice ought to be gratuitous. And surely the same general rule may well be extended to the widows and children of medical men who are living upon the proceeds of professional work. When the "bread-winner" is taken away, their circumstances are likely to be such as to form an additional claim upon our sympathy.

The case is different when medical men have retired upon an ample pension, or when their widows are evidently in affluent circumstances. Then they would probably be the first to wish to remunerate their medical attendant; and, indeed, it is better, in such a case, that a regular charge should be made, than that the patient should be left under an obligation, which he endeavours to discharge by sending the medical man a drawing-room clock or a piece of silver plate.

In the case of medical men with a rule as we have suggested, we have no doubt that a healthy feeling will be done, for our profession always looks to the public with respect, and wherever a case arises about which there is any doubt, we are determined that the benefit of the patient will always be borne in mind.

The Singapore Medical Board, at our suggestion, has passed a resolution that every physician in the Straits Settlements should be bound to attend the families of the members of the profession in a similar manner to that in which we have suggested. It is well to see that our profession is not only bound to the public, but that it is also bound to its members. It is a good thing to see that the profession is not only bound to the public, but that it is also bound to its members. It is a good thing to see that the profession is not only bound to the public, but that it is also bound to its members.

Dr. BURQ, the inventor of metalloscopy and metallotherapy, is gazetted Chevalier of the Legion of Honour.

IT is announced that Lord Coleridge will make a contribution to the literature of vivisection in the February number of the *Fortnightly Review*.

SMALL-POX has broken out in the Local Board District of Liversedge, where seven cases have already been reported.

Dr. FELIX SEMON has been appointed Assistant-Physician for Throat-Diseases to St. Thomas's Hospital.

AN outbreak of typhoid fever, of considerable extent, has occurred at Savile Town, near Dewsbury. The outbreak is attributed to the bad sanitary arrangements of the locality.

A COURSE of eleven lectures on the Mechanism of the Senses is now in course of delivery at the Royal Institution, by Professor McKendrick, the new Fullerton Professor. The first lecture was delivered on the 17th instant.

At a meeting of the General Court of Governors of Guy's Hospital, held on Wednesday last, Dr. F. A. Mahomed was appointed Assistant-Physician, and Mr. C. J. Symonds was appointed Assistant-Surgeon, to the Hospital.

THE French Minister of Public Instruction has asked the Paris Academy of Medicine to furnish statistics, concerning deaths and accidents consequent on scientific occupations, researches, and undertakings of all kinds.

A NOTEWORTHY reduction is reported in the infantile mortality at Long Sutton. Last year, seventeen deaths of infants were registered, against forty in 1880, and twenty-nine in 1879. This is the lowest infantile death-rate that has been recorded since the formation of the district.

M. CAMILLE GUARD has left 100,000 francs (£4,000) to be devoted to the purposes of creating a botanical garden at Bordeaux, for the use of the Faculty of Medicine. He has also bequeathed an annual sum of 3,000 francs to be given in prizes to the pupils.

WE are desired to remind our readers that the preliminary examinations of the Royal College of Surgeons in England having come to an end, inquiries with respect to the next preliminary examinations should be referred to the Registrar of the General Medical Council, 299, Oxford Street, London, W.

M. DEBRIE, member of the Paris Institut, Inspector-General of the Veterinary Service, has been raised from the rank of Officer to that of Commander of the Legion of Honour. Medical science has been recognized by the official Government of the country as an important and active branch of the profession of Veterinary Surgery and Medicine.

IN the city of Bristol, whenever a birth is registered, the registrar sends to the parent, gratuitously, a little booklet of two pages, containing short and plain directions for the treatment of children. In cases, when the mother is ignorant of the value of such a guide, it is proposed to make it a condition of practice.

It is reported that the Government of West Bengal, India, have passed a resolution that the medical officers of health in that province should be authorized to all public, private, or voluntary, what is known as an improvement in the sanitary arrangements of the country, and that the Government of West Bengal should be authorized to all public, private, or voluntary, what is known as an improvement in the sanitary arrangements of the country, and that the Government of West Bengal should be authorized to all public, private, or voluntary, what is known as an improvement in the sanitary arrangements of the country.

At a meeting of the Local Board of Health, held on Wednesday last, the subject of a public meeting, at which Lord Coleridge was the President. He stated, in the course of his speech on the occasion, that £100,000 had been raised for

the purposes of the institution, which the corporation had provided with a building; and seven professorships had been endowed with £10,000 each. Professor Rendall has been appointed Principal of the College.

M. LAULAINÉ has observed that the eggs of a certain nematoid, the *Strongylus Muscularum*, encysts itself in the pulmonary parenchyma, and determines in it the formation of a pathological tissue histologically similar to that of a tubercle. True tuberculosis is transmissible by inoculation—that is to say, it is virulent. The tuberculosis which forms round the egg of the strongylus has not that characteristic.

MR. EDMUND BOULNOIS, chairman of the St. Marylebone Board of Guardians, has sanctioned a scheme for giving lectures to the Nightingale staff of nurses, at the St. Marylebone Poor-law Infirmary, Notting Hill, to be delivered by Dr. Lamb and Dr. Percy Potter. The lectures will be on the outlines of physiology, the principles of ventilation, and cognate subjects—a knowledge of which, on the part of the nurses, would be likely to enhance the comfort of the sick.

We learn from *Nature* that the number of students who have entered the Chemical Laboratory of Firth College, Sheffield, this session, has been so great, that the present accommodation has been quite insufficient. The Council, therefore, decided at their last meeting to erect working benches for sixteen more students. The University of Edinburgh have recently recognised Dr. Carnelly, Professor of Chemistry in Firth College, as a Teacher of Medicine in Sheffield, whose lectures on Chemistry, and course of instruction in Practical Chemistry, shall qualify for graduates in Medicine in that University. The lectures on Chemistry and Laboratory Practice at Firth College have also been recognised by the Royal College of Surgeons and the Royal College of Physicians.

ABATEMENT OF SMOKE.

SINCE we last mentioned the Smoke Abatement Exhibition, it has progressed with as much vigour as the heartiest well-wisher of this sanitary movement could wish. Several of the great landlords in London have deputed their architects and engineers to visit the exhibition, with a view to determine which of the exhibits are most likely to be useful in any new houses which may be built, and how far the introduction of smoke-abating grates may properly be made a condition in the renewal of leases on their London estates. The greatest interest in the question has also been shown by manufacturers, by all the various trades, by the Government departments, and by provincial towns. Most of the leading foreign Governments have sent reporters to the exhibition, who have carefully investigated all the exhibits; and have expressed the greatest satisfaction at the important and useful character of the improved grates, stoves, heating apparatus, and industrial smokeless furnaces shown. The delegates of the French Government, of the German Government, and of the American Government, after thoroughly going through the exhibition, have prepared careful reports, which will be presented to their respective Governments, and of which copies will be subsequently available for use in this country. Meantime, it is satisfactory to find that it has been shown, by trials at this exhibition, and at various industrial establishments, of new inventions shown at South Kensington, that many of the trades, in which it had hitherto been believed that the production of smoke was an industrial necessity, can be carried on without any such production. For instance: pottery-burning was considered to be so difficult an operation to conduct without the production of smoke, that special exemptions have been made in its favour in the Smoke Acts; the trials at Messrs. Minton's, however, and those with the gas-kilns shown at the exhibition, have proved completely successful; and henceforth there will be no scientific reason why potteries and glass furnaces should not be conducted without the production of smoke. As to bakers' ovens, the results of the exhibition show that the production of smoke is not a necessary incident of the baking trade.

FOR ships of war it is especially important for strategic reasons, that no smoke should issue from the chimneys and hence it may be hoped that the Admiralty will take care that the engineers of the Fleet, as well as the officers of its land establishments, will carefully examine and investigate the subject as illustrated with relation to ships at South Kensington.

WE are glad to add that in more than one instance practical results have at once been manifested, and not only have a very large number of orders been already given to exhibitors of various apparatus shown, but the Executive have received a large number of inquiries asking them to recommend any apparatus specially suited for particular purposes. These somewhat delicate inquiries were met with a refusal to take the responsibility of selection; but, of course, a further guide will be afforded by the excellent trials which are being assiduously conducted in the testing houses at South Kensington. Meantime, the proprietors of several important blocks of buildings now in course of erection in London and suburbs have, it is understood, signified their intention of using one or other of the improved coal-saving and smoke-consuming grates shown.

NEARLY sixty thousand visitors have passed through the Exhibition, and, it is satisfactory to be able to add, deputations from a considerable number of important country districts and towns, where the smoke-nuisance is felt at least as strongly as in London.

WE are informed that a considerable desire has been manifested from influential quarters in Manchester, that the exhibition, at its close in London, should be transferred to Manchester, with probably some interesting additions; and there is a great prospect of arrangements being made which will effect this purpose. Many of the leading members of the corporation of Manchester and others in that city, deeply interested in the suppression of smoke and noxious vapours, are, at the present moment, actively engaged in making preliminary arrangements for the purpose.

LAST week H.R.H. the Prince of Wales signified his desire to attend the exhibition, and paid a long visit of upwards of two hours, carefully examining a considerable number of the most interesting objects. The Prince was received by Mr. Ernest Hart, Chairman of the Smoke Abatement Committee, and the Right Hon. Lyon Playfair, M.P., Dr. Siemens, F.R.S., Professor Chandler Roberts, F.R.S., and Mr. W. R. E. Coles, Members of the Executive.

SUBCOMMITTEES of Jurors have been appointed in each class, under the respective chairmanship of Professor Abel, C.B., F.R.S., Professor Frankland, F.R.S., Dr. Siemens, F.R.S., and Professor Roberts, F.R.S.

ST. THOMAS'S HOSPITAL.

AT a Special Court of Governors held at St. Thomas's Hospital on Wednesday, the Duke of Connaught was elected President of the hospital. The Duke was unexpectedly prevented from being present.

ONE of the governors of St. Thomas's expressed the hope on this occasion that, by the election of His Royal Highness, means would be forthcoming to furnish the wards which were now empty for want of funds.

THE present state of that hospital is not altogether satisfactory, and might, perhaps, appropriately form a part of the inquiry by Royal Commission which has been suggested.

AT Guy's Hospital, also, there are a considerable number of desolate and untenanted wards, and there is likewise apparent need for the intervention of public benevolence to increase the funds provided by the generosity of the donors of the past. Probably part of this is due to the depreciation of agricultural rents; but this would hardly furnish

on the advantage of having a lady at the head of the nursing staff. He engaged to bear in mind the establishment of a training school for nurses at St. Marylebone Infirmary—a scheme which he hoped to see carried out.

HOSPITAL AMBULANCE SERVICE.

THE profession will learn with great satisfaction that the work of providing London with a hospital ambulance service, which was first commenced in these pages by the communications of Dr. Benjamin Howard of New York, temporarily resident in London, is proceeding with very satisfactory rapidity. In Dr. Howard's interesting paper published in the *BRITISH MEDICAL JOURNAL* for July 16th, 1881, he described, not for the first time, the excellent system in New York, under which each of the hospitals is provided with a well-constructed, well-horsed, and well-arranged ambulance, connected with the other hospitals and police- and principal alarm-stations by electric communication. Immediately on the occurrence of any accident requiring hospital aid in any part of the city, telegraphic communication is at once made with the nearest hospital by the police, and a horse-ambulance is sent out, provided with stretcher and necessary appliances for first aid to the wounded, and in charge of a skilled dresser, who is able to discriminate the necessities of the case, and to take the necessary steps for having the patient taken at once to the hospital, after giving the assistance best suited to the case. The same aid is at hand, where helpless or bedridden patients require to be taken to the hospital from their houses. Of course, a separate provision is made for contagious and infective cases. All this contrasts very advantageously with the absence of such arrangements in connection with our London hospital system. It is an oft-told tale how rudimentary are the means of conveyance, and how remarkable, for want of organisation, are the means of giving first aid to the wounded in the streets of London. The patient is often lifted by ignorant hands in such a manner as to aggravate the original injury, and carried by a cab, or by some other quite unsuitable conveyance, to a hospital. Hand-ambulances now exist at the police stations, but these are quite insufficient to meet the requirements of special cases; and it may be fairly said that, to be carried through the streets on one of the police ambulances, persistently followed by a crowd of inquisitive boys and roughs, as is often the case under the present arrangements, would be, for an ordinary invalid, in itself no small aggravation of his suffering. Dr. Howard has recently found, as we have before mentioned, a very generous and prompt supporter in Mr. Crossman, Vice-Chairman of the London Hospital; and that gentleman has liberally borne the expense of having constructed a very admirably devised and most convenient horse-ambulance, from the plans of Dr. Howard. We have had the opportunity of seeing this ambulance, and can speak of the remarkable ease with which the patient is carried, the facility with which he can be moved into the ambulance bed and transferred from that into the hospital—accomplishing the whole series of movements, and the journey, without any lifting or concussion. Dr. Howard has had considerable experience in this matter, his army ambulance having been highly approved by Professor Longmore and other of the best authorities; and certainly this hospital ambulance-carriage is remarkable for its lightness, ingenuity, simplicity, and efficiency. After the publication of the paper in our pages to which we have referred, which was published after a conference of Dr. Howard with Mr. Ernest Hart, the latter advised Dr. Howard to proceed in the matter by communication with several of the leading authorities in London; and, for this purpose, gave him introductions to the authorities at the London and other hospitals. The prompt generosity of Mr. Crossman, and the continuous devotion of Dr. Howard to the work, promise to achieve a much earlier solution of the question than could have been anticipated. The model ambulance is now ready, and has been presented to the London Hospital. It has been arranged, at the instance of Dr. Howard and Mr. Crossman, that a meeting should be held early in February, at the United Service Association—the president of this association, his Royal Highness the Duke of Cambridge, who is also President of the London Hospital, to be in the chair. This meeting would have been held some weeks since, but for the other engagements of His Royal

Highness; meantime, it is satisfactory to see that the St. John's Ambulance Association—an association which has already done so much in the general cause of first aid to the sick—has also taken up Dr. Howard's suggestion; and that a meeting has been held at which his plans have been approved by many of the staff of our various hospitals, and by active members of St. John's Association. Mr. Reginald Harrison has moved in a similar direction in Liverpool; and it may be hoped that the Liverpool authorities will act upon the suggestions in Mr. Harrison's excellent pamphlet, and will not be outstripped by the generally more ponderous and clumsy organisation of this overgrown metropolis.

ST. BARTHOLOMEW'S HOSPITAL.

ON January 25th, several important propositions with regard to the enlargement of the permanent and the temporary surgical staff of St. Bartholomew's Hospital will be officially submitted to the consideration of the governors. The addition of one extra surgeon and assistant-surgeon is, we believe, practically settled; and one of the new appointments will involve duties in the surgery similar to those discharged by the out-patient surgeon at Guy's Hospital. Another important proposition is for the appointment of out-patient house-surgeons. This has long been opposed by the hospital authorities, and has the great objection that no single medical officer has the opportunity of seeing accident cases as they are brought in, and attending to them afterwards in the wards, observing their subsequent condition as they recover or succumb to their injuries. The work in the surgery and in the wards, however, has become too much for one junior resident to superintend; and, at the same time, the beds hold far more patients than four visiting surgeons can attend to and draw instruction from in their visits to the wards. Hence, for purely administrative reasons, the out-patient and ward duties will be assigned to a separate set of house-surgeons. This arrangement will also afford opportunities for a fairer proportion of the vast number of students at this great medical school enjoying the advantages of a house-surgeoncy at the hospital. Mr. Harrison Cripps, Mr. Macready, and others, are already spoken of as candidates for the new assistant-surgeonship. We believe that there is no intention of inviting the candidature of any distinguished senior surgeon from another hospital to fill the vacancy which, should the new propositions be agreed to, will exist in the senior surgical staff.

THE MISADVENTURE AT GUY'S HOSPITAL.

IT will be satisfactory to know if the lay managers of Guy's Hospital have taken any steps towards signifying their sense of the great gravity of the blame due to the sister and nurse, and also to those who were responsible for the terrible miscarriage and fatal result of the nursing, which was recently the subject of a coroner's inquest. Has any censure at all been inflicted upon those persons who were palpably so much to blame; or, have they, on the contrary, received sympathetic tokens of approval and support?

SMALL-POX AT CAMBERWELL.

At a recent meeting of the Camberwell Vestry, Dr. Bristowe, the health-officer, reported that during the previous three weeks small-pox had caused seven deaths in the district. In addition to these, however, twelve more, due to the parish, had occurred in hospital, making a total of nineteen deaths from the disease. At the same meeting, Dr. Bristowe presented a memorandum relating to the prevalence of small-pox, together with a diagram giving a representation of the disease in the parish. The table and diagram showed that during the whole of the six years to which they related there had been a disproportionately large prevalence of small-pox in Peckham, and that there had been an increasing prevalence therein during the last three years. Lately, when the disease appeared to be dying out in London and in other parts of Camberwell, there was a sudden and alarming increase of small-pox (which is still in progress) in that locality. There was, however, an undue prevalence of the disease in the Peckham district before the Kent Road Hospital was opened. This hospital was prepared for the recep-

sider that free service a right which is only a gift, and to claim that generous bestowal of time and care for which they have no intention of making any sacrifice to requite, and which they will not strain their means to meet by any corresponding effort at remuneration. Imposition by the mean and well-to-do, grinding hardness from public officials, severe judgment from an easily moved press readily led to take the popular side, small fees, and hard labour, are but too frequent incidents in the life of the general practitioner. Boards of Guardians and local newspapers are but too apt hastily to seize upon an opportunity of pointing out shortcomings in the work of a hardly pressed medical officer, and only too slow to give any public or practical expression to the gratitude which is due to long years of faithful labour and a succession of acts of liberal kindness and generosity. This case at West Cowes appears to be only one illustration of a series of such instances, which should not pass without severe comment. The heading of "Charge against a Medical Officer" is, unhappily, not an unfrequent one in provincial papers, but only rarely is any such charge based upon fact. Every medical man engaged in the public service will do well to remember that he carries the reputation of his class and of his profession in his hand, and that any such charge, if it should be well founded either on acts of omission or commission (which he may regard as trifling at the moment), may easily lead to a public scandal and a public attack which are for the time being injurious to the character of the profession as well as to his own peace of mind. Happily, the conduct of the members of our great poor-law medical service has been such that we may point to it with pride as that of a body of men who have for a long series of years performed most laborious and thankless work, at a very unfair rate of remuneration, with singular ability and humanity and public spirit.

SMALL-POX AT LEEDS.

AN inquest has recently been held at Leeds, upon the body of a man who had been in Armley Gaol since the 2nd of January last. A rash on the man's face developed into confluent small-pox; and, upon the discovery of this, he was isolated, and special precautions taken to prevent the spread of the disease. Notice of the outbreak was communicated to the health-officer for the borough, who ordered the isolation of the case within the gaol, as there was no small-pox hospital in the district. This is the second death from small-pox which has recently occurred in the parish of Armley.

A FATAL PRESCRIPTION.

AN inquest has been held at Waddesdon, near Aylesbury, on the body of a little girl, who had been about ten weeks previously unwell, and was attended by the assistant to a firm of local surgeons. Death resulted, and the child was interred. Subsequently, the medical officer of health for the district visited the house, and was shown the remaining portion of the medicine administered before death. He at once came to the conclusion that the concoction was dangerous, and that the doses were too large. The medicine was sealed up and handed to the police. The body has been exhumed, and an examination of the contents of the stomach made. The certificate of the county analyst pronounced the medicine to be of a nature unfit for a child. The inquest was adjourned.

RECONSTRUCTION OF THE BRISTOL GENERAL HOSPITAL.

MR. EASSIE, C.E., has most successfully completed for the General Hospital, Bristol, a reconstruction and redecoration of some of the wards. This hospital, with many excellent qualities, has to contend against an ancient form of construction, which makes sanitation very difficult, and thorough ventilation in many parts of the hospital almost an impossibility, unless by exceptionally ingenious methods. Mr. Eassie has contrived very thoroughly to ventilate the wards he has taken in hand, by a simple method of cross-ventilation. He has laid down over the old concrete floor an excellent smooth and impermeable wooden floor, with polished paraffin surface, and carefully tongued, so as to avoid crevices. The walls are painted with the albisima paint,

which recently received the highest award at the International Exhibition, and the silver medal at the Brighton Sanitary Exhibition—a paint which has the great advantage of being non-poisonous and inodorous, and is stated to be in every way preferable to lead paints, which are both offensive and poisonous; Albissimahas, it is claimed, the further merit of being much cheaper in use, possessing twice the covering power of ordinary zinc or lead paints, and giving a purer colour. It is very durable, and unchanged by sulphuretted hydrogen or other sulphur compounds and gases.

COLOUR-BLINDNESS.

THE recommendations of the London International Medical Congress on the important subject of colour-blindness and other defects of vision, in relation to railway and sea service, will probably be fresh in the recollection of every scientific man. The general indisposition on the part of public opinion in this country to realise and adopt anything new, especially anything of a scientific character, has its effect in regard to this subject, and needs to be combated by such brief and pertinent statements of fact as appeared last week in the form of a letter from Mr. Morton in the *Times* newspaper. We must, however, bear in mind that the whole subject is still under the consideration of the Government, from whom it doubtless will receive, in due course, the recognition it merits, not only on account of the obvious practical importance of the subject in relation to life and property, but as the deliberate expression of opinion of the largest and most authoritative meeting of medical men that the world has ever seen.

UNCONSUMED CARBON.

DR. ALFRED CARPENTER writes to the papers on the subject of the heavy fog on Wednesday last, pointing out that the fogs with which London has again been visited during the last few days have been of a dark smoky character, and that the wasteful manner in which the consumption of coal is carried out in the present day was never more noticeable than in the darkness which has hung like a pall over the city of London during the present week. He calls attention to the Smoke Abatement Exhibition at South Kensington; but the special object of his letter is to complain that the railway companies, during the prevalence of these fogs, have greatly added to the intensity of them by the hundreds of naked coal-fires which the railway authorities have kept burning along the lines of rail, with the apparent object of giving light, but in a very unscientific manner, to the men who were standing about the line in charge of fog-signals.

SCOTLAND.

GIFT OF £10,000 TO THE UNIVERSITY OF ABERDEEN.

A PLEASANT and agreeable surprise was in store for the Senatus of the University on Saturday last, when Professor Pirrie read a communication to the Senatus from Sir Erasmus Wilson, intimating the offer of Sir Erasmus to give a sum of ten thousand pounds to found and endow a chair of Pathological Anatomy in Aberdeen, "as an expression of my regard for an institution in which my father, a native of Aberdeen, received his medical education, and as a recognition of the honour which the University has been pleased to confer on me by granting me the distinguished degree of LL.D." The Senatus accepted, with great gratitude and pleasure, the munificent gift of Sir Erasmus, and accorded its warmest thanks to the donor for his timely generosity, by which he has placed not only the whole medical school under a deep debt of gratitude, but has supplied a long felt want in this University. This princely liberality was all the more appreciated as it was not expected, and came suddenly and very opportunely. Sir Erasmus is to be congratulated on his wise discretion and his just appreciation of the best means to advance medical education, not only in his native country and county, but also in the metropolis. The gift cannot be too highly appreciated, for it gives to Aberdeen the one chair which was required by

SMALL-POX IN BELFAST.

SLOWLY, but surely, the epidemic of small-pox which has existed for some weeks in Belfast, is spreading. The disease is not confined to a single district, as alleged, but prevails over the entire town. For the week ending January 7th, there were 115 cases under treatment in the Belfast Union Hospital, 23 fresh cases of the disease having been admitted during that period, and nine deaths having taken place. At a meeting of the Belfast guardians, held last week, Dr. Seaton Reid drew attention to the fact that he had ascertained that boarders were kept on in a school from which a servant was sent to hospital ill with small-pox, from which she died. Another girl was then engaged as a servant, without being told that the disease was in the house, and fell ill with small-pox. It is stated that during all this time day-scholars were attending the institution as usual; and if this statement be correct, the occurrence was most reprehensible. Since writing the above, we understand that the school in question has been temporarily broken up—a step which has been taken by the proprietors acting on the advice of Dr. Browne, medical superintendent officer of health, and which, in the interests of the community, should not have been delayed so long. At the same meeting of the guardians, a demand was made by a constable for a sum of twelve shillings and sixpence, being amount of costs obtained against the guardians in the recent prosecution for refusal to vaccinate. A formal seizure having been permitted, the amount due was paid. The seizure was allowed under legal advice, as, if they acted otherwise, the interests of the board might be prejudiced in the event of an appeal. The guardians have forwarded a statement to the Local Government Board, in which they point out that the decision of the magistrate in the case referred to would entirely frustrate future prosecutions of defaulters under the Compulsory Vaccination Act, not only in that union, but all over Ireland, unless the legality of the decision were tested by the board by taking the necessary steps for an appeal.

HEALTH OF CORK.

DURING December, the deaths registered in Cork amounted to 151; and 153 births took place. The annual death-rate per 1,000 inhabitants gives a total ratio of mortality of 25.05, and a birth-rate of 29.02. These figures, although somewhat higher than those of the previous month, yet contrast favourably with those of a corresponding period last year.

CHARGE AGAINST A MEDICAL OFFICER.

WE recently referred to a charge brought against Dr. O'Ryan, medical officer of Carrick-on-Suir Workhouse, and to the evidence given at the inquiry held by Dr. MacCabe, inspector of the Local Government Board. Dr. MacCabe has now reported that the injury in the case of the patient Hickey was of a formidable nature, and it appears doubtful if the patient would have survived the accident, whether removed from the workhouse or not. Further, he considers that, from a professional point of view, Dr. O'Ryan's treatment of the case was open to no objection.

MALE AND FEMALE PRISONS, CORK.

DR. BEAMISH, late medical officer to these institutions recently resigned after forty-one years' service, thirty-eight being under the corporation and three under the prisons' board. On his retirement the treasury granted him a pension of £110 per annum, of which sum £33 5s. is the portion payable by the city. This amount does not by any means represent that to which an officer of forty-one years service would have been ordinarily entitled, as it does not even amount to two-thirds of his late salary, the proportion which has hitherto been awarded to officers not having had half his service. He has brought the matter under the notice of the corporation, so that they may reconsider his strong claims, and grant him a sum at least equivalent to what he would have been entitled to under the late board of superintendence. Dr. Beamish was under the impression that his superannuation would not come up until the half-yearly presentments, otherwise he would have laid his claims before the council. The corporation have referred his application to the law and finance committee for consideration.

UNIVERSITY OF LONDON.

THE half-yearly meeting of Convocation took place on Tuesday last, at the University building in Burlington Gardens. Dr. F. J. WOOD presided, in the absence from illness of Dr. STORRAR, Chairman of Convocation.

The first business was the nomination of a list of three persons to be submitted to Her Majesty for the selection of a Member of the Senate. The scrutineers reported that the result of the voting was as follows: George Buchanan, M.D., B.A., 617; Samuel Newth, M.A., 580; Robert Barnes, M.D., 338; George Carey Foster, B.A., 213. The Chairman declared Dr. Buchanan, Mr. Newth, and Dr. Barnes duly nominated.

The next business was the adjourned debate (from the 10th of May last) on the following motion and amendment:—"Moved by Mr. A. P. Hensman, seconded by Mr. H. A. Nesbitt: That it is just and desirable that women who are graduates of this University, and of the requisite standing, should be entitled to become members of Convocation, and to vote at the election of the member of Parliament for the University. Amendment—Moved by Mr. A. McDowall, seconded by Mr. A. W. Bennett: "That female graduates be admitted to Convocation." After a discussion, in which Mr. Tyler, Mr. McDowall, Mr. Nesbitt, Mr. Godlee, Mr. Shaen, Mr. Dolleymore, the Chairman, Mr. Temple, and Mr. Hensman took part, the motion was withdrawn, and the amendment was agreed to with but three or four dissentients.

Some discussion took place upon a resolution moved by Dr. PYE-SMITH, requesting the Senate to consider the advantage of constituting boards of studies, one for each faculty, to advise the Senate on matters connected with the detail of examinations, and to form a medium of communication between the Senate, the examiners, and the teachers of candidates for degrees; the members to be nominated by the Senate from their own body (either in addition to or including the present committees on examinations), from professors in the affiliated colleges, and from present or past examiners. Eventually the resolution was amended by being made to conclude with the words "between the Senate, the examiners, and the teachers"; and in that form it was carried.

Mr. McDOWALL proposed a resolution affirming the expediency of increased representation of Convocation on the Senate. It was resolved to refer the subject to the annual committee for reconsideration and report.

Mr. W. J. SPATLING moved: "That, in the opinion of this House, the establishment of London University local examinations similar to those conducted by the older universities is desirable." Mr. TIDMARSH seconded the resolution, which was carried.

LUNACY LAW REFORM.

A MEETING of the Law Amendment Society was held this week, at their Rooms, Adam Street, Adelphi, Mr. J. Dodds, M.P., presiding, when a Paper on the Reform of the Lunacy Laws was read by Mr. Commissioner MILLER, Q.C.—The CHAIRMAN, in introducing Mr. Miller, observed that it was considered that the Lunacy Laws required amendment, which was shown by the fact that last year Messrs. Dillwyn and Litton introduced into the House of Commons Bills proposing to deal with this subject, which were ultimately abandoned, and that other Bills were contemplated and prepared, and would have been introduced if there had been any chance of passing them into law.—Mr. MILLER then read his paper. He was satisfied that, if public attention were once directed to this question by any occurrence sufficiently startling to arouse general sympathy, it would be seen that the law at present governing our treatment of lunatics offended more against the fundamental principles of personal liberty than did any part of our judicial system. He should like it to be brought home to the public at large, that there was no man or woman in England who was not liable to be incarcerated for life, without notice either to himself or to any one else, and without any power of securing an investigation of his case, if only any one were sufficiently interested in getting him out of the way to make it worth his while to secure the services of two reckless, needy, or ignorant practitioners, and the confederacy of the keeper of a so-called private asylum. He referred to instances in support, and also to cases where wrongful incarceration had taken place in public hospitals. The general principles of our law of lunacy assumed imprisonment as the normal treatment for lunatics, and threw the onus of proof, not upon the would-be incarcerator, but upon the alleged lunatic, if only the prescribed certificate had been previously obtained in all

OBITUARY.

CHARLES DELACHEROIS PURDON, M.B., F.R.C.S.I.

ON last Sunday, the 8th instant, death removed a distinguished practitioner—one holding an honoured name in Belfast—Dr. C. D. Purdon. He succumbed, in his sixty-fourth year, after a couple of days' illness, much regretted by the profession, and a large circle of friends and acquaintances. Dr. Purdon was the son of Dr. Henry Purdon, who practised as a surgeon in Belfast many years since, and received his medical education at Trinity College, Dublin, where he duly graduated in Arts and Medicine; while, two years previously, he obtained the Fellowship of the Royal College of Surgeons in Ireland. He proceeded to practise in Belfast, and became medical officer to the Belfast Charitable Society, and, for nearly twenty years, physician to the Deaf and Dumb Institution. He also received the appointment of surgeon under the Factories' Acts, and was elected vice-president of the Ulster Medical Society. Dr. Purdon was connected with various scientific societies; and, being possessed of a strong bias in relation to antiquarian subjects, he was well qualified to hold the position of Secretary for Ulster for the Royal Archeological and Historical Society of Ireland. Of a genial and kind disposition, Dr. Purdon was greatly esteemed; and his loss will be regretted by a large number.

RICHARD W. W. GRIFFIN, M.D.

DR. GRIFFIN, well-known as one of the medical practitioners of Southampton, died on December 24th, at the age of forty-five. He had been suffering for some time past from a painful malady. For some years, Dr. Griffin filled the post of medical officer under the Incorporation, the duties of which he discharged with satisfaction till he retired from it. He was also on the medical staff of the Southampton Dispensary, in the welfare of which institution he took much interest. He likewise assisted in the establishment of the Charity Organisation Society at Southampton, the cause of which he advocated with much earnestness and ability, both by means of his tongue and pen. In the Hospital Sunday Fund he also took a lively interest, being a member of the executive committee; and at the annual meeting, held a few weeks ago, reference was made to his serious illness, which elicited an expression of sympathy from those present. He was the son of the late Mr. Griffin of Weymouth, whose name was well-known some years ago as the representative of the cause of Poor-law medical officers.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology, at a meeting of the Board of Examiners, on the 12th instant, and when eligible will be admitted to the pass examination.

Messrs. Geoffrey S. Clayton, William H. F. Farmer, and William A. Griggs, students of St. Bartholomew's Hospital; William A. Shelswell, of Guy's Hospital; Charles R. Bishop, of King's College; Henry W. Dixon, of the Newcastle School; Arthur W. G. Thomas, of the Charing Cross Hospital; Edward R. Tweed, of St. George's Hospital; and Sydney B. Jolly, of St. Thomas's Hospital.

Two candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

With this meeting the primary examinations were brought to a close, when, out of the 179 candidates examined, no fewer than 69 were referred to their studies, including 11 who had an additional three months.

At a meeting of the Council on the same day, Mr. Richard Cross, M.D. St. Andrew's, of Carlton House, Scarborough, who had previously been elected a Fellow of the College, was admitted as such, his diploma of membership bearing date March 13th, 1840.

The following gentlemen, having undergone the necessary examinations, were admitted Members of the College at a meeting of the Court of Examiners on the 17th instant.

Messrs. Robert Hulis, L.S.A., Carshalton; Alfred C. Wallace, L.R.C.P. Lond., Streatham; George L. L. Lawson, L.R.C.P. Ed., Egremont, Cumberland; Frederick C. Mears, L.S.A., Bromley-by-Bow; Joseph H. Martin, L.S.A., Northampton; Thomas H. Openshaw, L.S.A., Bury, Lancashire; Octavius A. G. Collins, Kingstown, Dublin; Geoffrey F. Travers, Garden Court, Temple; Arthur R. Broom, Ottery St. Mary; F. Herbert Mayo, Deal; Charles E. Paget, Cambridge; Charles R. Bamford, Utoxeter; Herbert Canton, Epsbury Park; Rayner D. Batten, Palace Gardens, Kensington; Richard S. Wright, Sutherland Gardens; Charles T. Griffiths, Cathcart Road, South Kensington; Edward J. Jenkins, M.A. Oxon., Sydney, N.S.W.; William

Mill, Cholwell, near Tavistock; Alexander G. Wildey, Southsea, Hants; and Cecil M. Hendriks, Jamaica.

Eight candidates were rejected.

The following gentlemen were admitted members on the 18th instant.

Messrs. Lockhart E. W. Stephens, L.S.A., Emsworth, Hants; James Robertson, L.R.C.P. Ed., Pall Mall, S.W.; D'Arcy Power, M.A. Oxon., Great Cumberland Place, Hyde Park; Edward T. Trevor, Queen's Gardens, Bayswater; Charles L. Stow, Tunbridge; Quinten R. Veitch, Exeter; Herbert C. Simmons, Tufnell Park, N.; John A. P. Price, Brecon, South Wales; Arthur S. Nance, Eccleshall, Staffordshire; William G. Ellis, Wellington, Somerset; Frederick Bass, Tufnell Park, N.; and Charles F. Rumbold, Melksham, Wilts.

Ten candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 12th, 1882.

Davies, Edward Cluneglas, Pontfain, Lampeter.
Mears, Frederick Charles, Bromley-by-Bow.
Nicholson, Frederick William, Upper Richmond Road, Putney.
Openshaw, Thomas Horrocks, Bury, Lancashire.
Stuart, Sidney Offord, Woolwich.

The following gentleman also on the same day passed the Primary Professional Examination.

Crone, John Smyth, Queen's University, Ireland.

MEDICAL VACANCIES.

THE following vacancies are announced:—

BEDFORD GENERAL INFIRMARY.—Resident Surgeon. Salary, £100 per annum. Applications by 26th January.

BELMULLET UNION.—Medical Officer for Binghamtown Dispensary District. Salary, £100 per annum, with £10 yearly as Medical Officer of Health, registration and vaccination fees. Election on February 2nd.

CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor.—House-Surgeon. Salary, £100 per annum. Applications by 11th February.

CHARING CROSS HOSPITAL, West Strand, W.C.—Assistant-Physician. Applications by 28th instant.

CRAIGLOCKHART HYDROPATHIC, near Edinburgh.—Resident Physician. Applications to the Managing Director, Craiglockhart Hydropathic Company, Limited, 40, Frederick Street, Edinburgh, by 6th February.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental Surgeon. Applications by February 13th.

DROGHEDA UNION.—Medical Officer for Duleek Dispensary District. Salary, £110 per annum, with £20 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 23rd instant.

EVANGELICAL PROTESTANT DEACONESSES INSTITUTION AND TRAINING HOSPITAL, Tottenham.—House-Surgeon. Salary £150 per annum. Applications to M. Laserson, Esq., M.D., The Green, Tottenham, by the 23rd instant.

GENERAL HOSPITAL, Birmingham.—Assistant Surgeon. Salary, £100 per annum. Applications by the 30th instant.

GENERAL HOSPITAL AND DISPENSARY FOR SICK CHILDREN, Pendlebury, and Gartside Street, Manchester.—Physician. Salary, £300 per annum. Applications by February 8th.

GRANARD UNION.—Medical Officer for Finnea Dispensary District. Salary, £100 per annum, with £14 per annum as Medical Officer of Health, registration and vaccination fees. Age of candidate not to exceed forty years. Election on 3rd proximo.

GREAT WESTERN RAILWAY.—Medical Officer. Salary, £600. Applications by 26th January.

HECKMONDWISE INDUSTRIAL CO-OPERATIVE SOCIETY (Limited), Medical Aid Department.—Resident Medical Officer. Salary, £200 per annum. Applications by 26th January.

HUDDERSFIELD INFIRMARY.—Senior House-Surgeon. Salary, £80 per annum. Applications to F. Eastwood by January 20th.

HUDDERSFIELD INFIRMARY.—Junior House-Surgeon. Salary, £40 per annum. Applications to F. Eastwood by January 21st.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square, W.—Visiting Physician. Applications by January 28th.

LEAMINGTON AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £200 per annum. Applications to the Secretary, Mr. C. Wildman, 6, Woodbine Street, Leamington.

LONDON LOCK HOSPITAL, Male and Out-Patient Department, 91, Dean Street, Soho, W.—House-Surgeon. Salary, £50 per annum. Applications by January 21st.

MERCER'S HOSPITAL, DUBLIN.—Resident Medical Officer and Apothecary. Applications to the Medical Registrar by January 20th.

ROYAL COLLEGE OF SURGEONS (IN IRELAND)—Professor of Practical and Descriptive Anatomy. Application to John Brennan, Registrar, by January 21st.

ROYAL CORNWALL INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by 26th January.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon. Salary, £75 per annum. Applications by January 30th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square.—Honorary Physician. Applications by January 30th.

ST. ASAPH UNION.—Medical Officer. Salary, £83 per annum. Applications by 25th instant.

ST. OLAVE'S UNION.—Resident Assistant Medical Officer and Dispenser. Salary, £100 per annum. Applications by 20th January.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY..... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Eye, M. Th., 1.30; Ear, M. Th., 2; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1; Eye M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Second Lettsomian Lecture, by Mr. Hutchinson Royes Bell, on Diseases of the Testicles and their Coverings.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Robert Barnes: On Hernia of the Ovary; with the Relation of Cases observed by the author.

WEDNESDAY.—Hunterian Society, 7.30 P.M., Council Meeting. 8 P.M., Report of Committee on Mr. Stevens's Case of Cerebral Tumour. Dr. Carrington: Cases of Hepatic Abscess associated with Dysentery. Dr. Turner: Military Aneurysms from a Case of Cerebral Haemorrhage.—Association of Surgeons practising Dental Surgery, 8.30 P.M. General Meeting for the Election of Officers and Council.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. W. H. Kesteven: A Case of Unilateral Xanthopsia. Cases of Renal Calculus removed by Operation: by—1. Mr. Marcus Beck; 2. Mr. Butlin; 3. Dr. Whipham and Mr. Haward. —Quekett Microscopical Club, 8 P.M. Mr. J. G. Haller: On Sand.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

FEES AT CORONERS' INQUESTS.

M. B. M. A.—No provision is made for the payment to a medical witness of any further fee than one guinea for attending to give evidence at an inquest in Great Britain in obedience to the order of a coroner, when the *post mortem* examination has been already made, or more than two guineas for making the examination, either with or without an analysis of the contents of the stomach, and attending to give evidence thereon. Nor are there any legal cases recorded in which it appears that any additional remuneration has been granted to or applied for by medical men for their attendance at adjourned inquests. We have been informed by one of the greatest authorities in the metropolis upon the law of inquests, that no fee or fees had been or would be allowed to medical witnesses for attending at and giving evidence at adjourned inquests. It seems to us, therefore, that provision should be made for due remuneration for going to, and giving testimony at, adjourned inquests.

SIXTEEN COMMANDMENTS OF THE FRENCH ACADEMY OF MEDICINE.

THESE commandments relate to the care and feeding of infants; and Dr. Halliday, who translates them for an American contemporary, expresses the sincere hope that all mothers and nurses will commit them to memory and observe them as faithfully as the ten commandments. 1. During the first year the only suitable nourishment for an infant is its own mother's milk, or that of a healthy wet-nurse. Suckling should be repeated every two hours—less frequently at night. 2. When it is impossible to give breast milk, either from the mother or a suitable nurse, cow's or goat's milk given tepid, reduced at first one-half by the addition of water slightly sweetened, and after a few weeks one-fourth only, is the next best substitute. 3. In giving milk to an infant always use glass or earthenware vessels, not metallic ones, and always observe the most scrupulous cleanliness in their management, rinsing whenever used. Always avoid the use of teats of cloth or sponge so frequently employed to appease hunger or quiet crying. 4. Avoid carefully all those nostrums and compounds so liberally advertised as superior to natural food. 5. Never forget that artificial nourishment, whether by nursing bottle or spoon (without the breast), increases to an alarming degree, the chances of producing sickness and death. 6. It is always dangerous to give an infant, especially during the first two months of its life, solid food of any kind—such as bread, cakes, meats, vegetables or fruit. 7. Only after the seventh month, and when the mother's milk is not sufficient to nourish the child, should broths be allowed. After the first year is ended, then it is appropriate to give light broths or paps, made with milk and bread, dried flour, rice, and the farinaceous articles, to prepare for weaning. A child ought not to be weaned until it has cut its first twelve or thirteen teeth, and then only when in perfect health. 8. A child should be washed and dressed every morning, before being nursed or fed. In bathing a child, temper the water to the weather, carefully cleanse the body, and especially the genital organs, which require great cleanliness and care; and the head should be carefully freed from all scabs and crusts which may form. Where the belly-band is used, it should be kept on for at least one month. 9. An infant's clothing should always be so arranged as to leave the limbs freedom of motion, and not to compress any portion of the body. 10. An infant's clothing should be studiously adapted to the weather; avoiding at all times exposure to the injurious effects of sudden changes in temperature without proper covering; but nurseries and sleeping apartments should invariably be well ventilated. 11. An infant should not be taken into the open air before the fifteenth day after birth, and then only in mild fair weather. 12. It is objectionable for an infant to sleep in the same bed either with its mother or nurse. 13. No mother should be in too great a hurry to make a child walk; let it crawl and accustom itself to rising on its feet by climbing on articles of furniture, or assisted by the arms of a careful attendant. Great care should be taken in the too early use of baby wagons, etc. 14. No trifling ailments in infants, such as colics, frequent vomiting, diarrhoea, coughs, etc., if persistent, should be neglected—a physician's advice should be at once obtained. 15. In cases of suspected pregnancy, either of mother or nurse, the child should be weaned at once. 16. A child ought to be vaccinated before the fifth month.

SCRUBBING vs. WAXING HOSPITAL FLOORS.

SIR,—May I ask, through your columns, what is the experience and opinion generally entertained of the relative merits of the above named processes, more especially with regard to cleanliness, sanitary value, economy of servants' time, appearance, and safety of locomotion, in the case of aged or feeble patients?—Yours truly,

SCRIPTOR.

It is now pretty generally admitted that scrubbing of hospital floors is undesirable, both on account of the time and labour required, and also because it is difficult to dry them with sufficient rapidity. Scrubbing ought certainly not to be done in wards while they are in occupation, the damp so produced being hurtful to patients. Floors that require scrubbing are usually of common deal, and, therefore, objectionable, both on account of the absorbent nature of the wood itself, and also because they seldom fit well, and so leave interstices in which organic matter lodges. Waxed floors, or floors rendered otherwise impervious, are to be preferred in every way; the only possible objection being the chance of falling for the aged or the feeble. The use of soft slippers would, however, obviate any such danger.

SELF-MUTILATION.

SIR,—The case of Isaac Brooks is no doubt one of great psychological interest. In connection with it, I should like to record the following case, which was under my charge when I was resident surgeon to the Guest Hospital, Dudley.

A labourer, aged 40, was admitted on July 20th, 1876; he was brought in by the police, who had discovered him lying in a field, bleeding severely, and with a pocket-knife—which they produced—by his side. I found he had an incised wound the whole length of, and completely opening up, the scrotum; the left testicle was missing; the cord had retracted considerably, and there was a great deal of hemorrhage, which I had difficulty in stopping. About an hour after his admission, the police brought to the hospital the missing testicle, covered with dirt, which they had succeeded in finding in the grass, about six yards from the spot where he was first discovered.

A woman who had been lately seen in his company was arrested, in the belief that she had inflicted the injury; but she was released, on the man subsequently confessing to me that he had removed the testicle himself with his pocket-knife, in a fit of remorse. It appeared that he had had a quarrel with his wife, and had then been drinking for several days in company with a prostitute; he informed me that he considered his act of self-mutilation was an atonement for his misconduct. He was perfectly calm and rational on admission, and I could not detect, during his stay in the hospital, any trace of insanity; neither did there appear to have been any in his family. He was discharged, cured, on August 14th.

I heard of him occasionally for about a year afterwards, and during that time he did not make any further attempt upon himself.—I am, sir, yours faithfully,
2, Ospringe Road, N.W., January 17th, 1882. ARTHUR ORWIN, M.D.

REPORTS TO THE SCIENTIFIC GRANTS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

THIRD CONTRIBUTION TO THE LIFE-HISTORY OF CONTAGIUM.

By PETER MURRAY BRAIDWOOD, M.D., F.R.M.S.,

AND

FRANCIS VACHER, F.R.C.S.Ed.

*Original Experiments.**

The accompanying table gives a concise view of the various experiments performed by us at different times; but those comprised in Series A are given in detail, according to Groups, as an example of how the table should be studied.

GROUP A.—Experiments 1 and 3 show the effects of lochia applied to a surface-wound.

Experiment 1, May 19th.—A pellet of cotton-wool was soaked in lochia, and inserted into a valvular wound made on the upper and inner side of the right thigh of a rabbit. The lochial fluid here used was removed from a patient who, four days previously, had passed through a normal confinement. She was a multipara, and perfectly healthy. At the time of experiment, the patient's pulse was 96; she had slight pyrexia; the lochial fluid was somewhat foetid, as if putrefying; and there was slight uterine tenderness on pressure. The lochia squeezed from the wool-pellet showed, microscopically, epithelial cells, blood-corpuscles, and some vibriones. After inserting the pellet beneath the skin, a piece of plaster was applied to retain it. Every precaution was taken to expose the lochialised pellet as little as possible to the air. Next day, all around the wound was swollen, the neighbouring inguinal glands were enlarged, and the wound itself closed by a crust.

Experiment 3, May 21st.—Another pellet soaked in the lochia of the above patient was inserted on the top of the former pellet into the same wound. Before this was done, on removing the scab, a few drops of foetid pus escaped. The patient herself was perfectly well, having been syringed twice daily since the 19th instant with warm water containing Condy's fluid. This second lochialised pellet was kept rolled up in gutta-percha for twelve hours before being used, and a drop squeezed out of it under the microscope showed epithelial elements, blood- and pus-corpuscles. May 27th.—The wound looked sloughy, gaped to the size of a sixpence, and discharged very foetid fluid. The rabbit's health was apparently unaffected, while the neighbouring inguinal glands were much swollen, and slightly tender. May 29th.—The wound gaped through most of its extent, its edges were indurated, and it smelled very foetid. There was great tenderness over the adjoining abdominal surface. In a few days later, the wound took on a healthy action (after extruding the pellets), and healed steadily without interruption.

Experiment 2, May 20th.—A lochialised wool-pellet was inserted subcutaneously by a valvular wound into the opposite (left) thigh of the same rabbit. The lochial fluid in this instance was derived from the same patient as before, but was removed on a day intermediate between experiments 1 and 3. It appeared to be healthy, and showed, microscopically, epithelial elements, blood- and pus-corpuscles. Next day (May 21st), a few drops of foetid pus exuded from the wound. The rabbit's health was unaffected. May 29th.—The wound gaped, and discharged freely, but the discharge was not foetid, neither was there tenderness around the wound. From this date, after extruding the pellet, the wound healed rapidly.

GROUP B.—*Experiment 4*.—A drachm of lochial solution removed from Mrs. J., a primipara, who had been delivered thirty-six hours previously, was injected *per vaginam* into the pelvic cavity of a rabbit. Her labour had been very tedious, but was terminated with the forceps. She had severe *post partum* hæmorrhage, but made an excellent recovery. The lochial discharge was very foetid, sanious, and grumous, showing, under the microscope, epithelial elements, blood- and pus-corpuscles, a

few vibriones, and multitudes of granules. This patient's milk, at this date, was a sanious brown fluid, revealing, under the microscope, fat-globules, epithelium, large brown granular cells, and granules. About twelve hours after experimentation, this rabbit's ears felt very hot, and its respiration was rapid. Twelve hours later, it was listless, and would not move. Death occurred about thirty hours after experimentation. The abdomen was greatly distended. Necropsy, about fourteen hours after death, showed that the puncture in the vaginal wall made at the time of experiment led to a large clot, which filled the right iliac region between the skin and the abdominal wall. There were no signs anywhere of purulent infiltration. Congested patches were to be seen in the liver and in the lower lobe of the left lung.

Experiment 5.—Half a drachm of the lochial solution used in the last experiment* was injected into the peritoneal cavity of a rabbit, immediately below the umbilicus. Six hours after experimentation, this animal looked languid, and would not eat. Death occurred about fifteen hours after experimentation. Necropsy, about fifteen hours after death, showed a slight recent adhesion between two coils of ileum in the neighbourhood of the caput cecum, with some lymph on their surface. On opening the ileum a minute puncture was discovered, which had been made during the operation and had healed. All the viscera were healthy.

Experiment 6.—We injected into a rabbit's pelvis, *per vaginam*, a mixture of a drachm each of the lochial fluid used in the last instance with an aqueous solution of carbolic acid (1 to 20). Six hours after experimentation this animal appeared languid, refused food, and its ears felt very hot. A few hours later the animal appeared brisk, and ate its food; while next day it seemed well, except being stiff in its hinder limbs. Four days later, it seemed in good health and took food greedily. Convalescence was uninterrupted; and, on the eighteenth day after experimentation, it gave birth to a litter which survived two days. It recovered well from this affliction also.

Experiment 7.—August 5th.—We injected, *per vaginam*, as above, a mixture of a drachm of lochial fluid with 40 minims of solution of sulphurous acid (*B. P.*) and 20 minims of diluted water. Six hours after experimentation this rabbit looked languid, would not eat, and its ears felt hot. Next day, it seemed well, showed stiffness of the hinder limbs, and œdema of the vaginal orifice. On the following day, (August 7th) the animal looked well and ate heartily, but there was observed a large sloughing wound above the pubes, laying bare the pelvic viscera. Four days later, this wound was seen to have doubled in size.

Experiment 9, August 11th.—We embraced the opportunity thus offered to insert two pellets of cotton-wool saturated with foetid lochia from Mrs. J. into the pelvis of the last rabbit, so that it might be thoroughly infected. The wool, after soaking in the lochia, was kept for seventy hours carefully sheltered from the air before being applied to the wound. The patient had not been washed nor syringed for about eighteen hours previous to our removing the discharge, so that her pyrexial condition had increased, as was indicated by a rise in her pulse and temperature. After inserting the septic pellets, the wound was covered with gutta-percha, and the part bandaged. This bandage was retained for two days, and then cast off. The original wound looked very sloughy, and was very offensive. There was also observed another sloughing wound, as large as a shilling, near the umbilicus. Next day (August 14th) the large suprapubic wound seemed healthier, but still discharged very foetid fluid, while the smaller wound was covered by a scab. On the following day, the suprapubic wound was still very sloughy-looking and offensive. The animal seemed well, but refrained from using its right hind limb when possible. The discharge from the large wound, examined microscopically, showed pus- and blood-corpuscles, some large granular cells, a few granular cells of irregular form, actively moving vibriones, and minute highly refracting granules. Three days later (August 17th) this rabbit seemed feverish, and its body felt hot, but the wound looked healthy. From this date, the animal improved in health, the larger wound contracted and healed kindly, while the umbilical ulcer cicatrised rapidly. In fourteen days later the larger wound had contracted to the size of a shilling, and the smaller had healed up, but the animal was noticed to be groaning much. Two days later, the suprapubic wound was nearly healed, and the animal appeared lively and well. Two days subsequently this rabbit showed two large sloughing superficial ulcers over its right hip, while it appeared in good health, and the suprapubic wound was nearly closed. The rabbit died suddenly three days

[Continued at page 111.]

* These experiments were performed before the Vivisection Act came into force. Their publication has been delayed by the pressing claims of private practice.

* In all our experiments we made use of Wood's hypodermic syringe, and got for our work two perfectly new syringes. One of these we used in the experiments in which we injected septic fluid alone; the other only for experiments in which we employed mixtures of septic fluid with germicides.

TABLE OF SEPTICÆMIA EXPERIMENTS—continued.
SERIES A.—Group C—continued.

No.	Designation of Animal.	Date of Experiment.	Date of Death.	Nature of Experiment.	Characters of Fluid used for Injection.	Principal Post Mortem Appearances.	Remarks.
XIV.	Rabbit.	Aug. 29.	—	Injected subcutaneously over the left shoulder 20 drops of a mixture (equal parts of filtered water and purulent fluid from rabbit, exp. XIII).	No bacteria found; odour very offensive, and fluid readily coagulable.	—	—
XV.	Puppy (dog).	Aug. 29.	—	Injected this fluid, in amount the same as in the last experiment, subcutaneously over the left shoulder.	Ditto.	—	Formed a large abscess, which burst, and the remaining wound healed kindly.
Group D.							
XVI.	Rabbit (doe).	Aug. 29.	Aug. 31.	Injected <i>per vaginam</i> a drachm of septic fluid obtained by macerating muscle in distilled water for 14 days, at 70° Fahr. (Sanderson's fluid).	Fluid seen to be crowded with actively moving bacteria.	Examined in a few hours <i>p. m.</i> Found very great congestion, with serous infiltration into lower half of abdomen. Blood fluid; decomposition rapid.	Blood removed after death from the spleen showed red corpuscles, with crenated edges, vibrios, and granules.
XVII.	Rabbit.	Aug. 29.	Aug. 31, about 50 hours <i>post experim.</i>	Injected subcutaneously over the left shoulder half a drachm of the septic fluid used in the last experiment.	Ditto.	Examined about 12 hours <i>p. m.</i> ; seat of puncture indicated by a colourless clot. Mesenteric glands enlarged; patches of red congestion in colon and adjoining ileum; secondary deposits in liver; congested patches in right lung; secondary deposits in caput caecum coli.	—
XVIII.	Rabbit.	Aug. 29.	Sept. 21.	Injected subcutaneously over the left shoulder half a drachm of Sanderson's septic fluid (same as last), mixed with half a drachm of a saturated solution of cupralum.	Ditto.	Examined about 18 hours <i>p. m.</i> Found in the viscera <i>nil</i> ; but at site of injection a very large abscess containing extremely fetid whitish pus, disintegrating all the soft tissues—a typical "scrofulous" abscess.	—
XIX.	Rabbit (doe).	Aug. 29.	Sept. 3, sixth day <i>post experim.</i>	Injected <i>per vaginam</i> half a drachm of the last described septic fluid, mixed with half a drachm of solution of carbolic acid (1 to 20 water).	Ditto.	Examined 3½ hours <i>p. m.</i> Mesenteric glands enlarged and caseified, lymph-vessels much engorged. Secondary deposits in liver and spleen. A large amount of lymph and some purulent fluid in the pelvic cavity.	—
Group E.							
XX.	Rabbit (doe).	Sept. 1.	Sept. 8, eighth day <i>post experim.</i>	Injected <i>per vaginam</i> half a drachm of lochial solution just removed from Mrs. Y.	Showed epithelium, pus, blood, minute highly refractive globules, but no bacteria.	Examined 5 hours <i>p. m.</i> A large amount of fluid and flakes of lymph floating in abdomen. Congested patches in wall of colon. Mesenteric glands enlarged. Secondary deposits in liver. Bladder punctured during experiment.	—
XXI.	Rabbit (doe).	Sept. 1.	Sept. 9, ninth day <i>post experim.</i>	Treated like the rabbit in the last experiment.	Ditto.	Examined about 10 hours <i>p. m.</i> Abdomen filled with a large amount of grumous fluid of very offensive odour, and containing flakes of lymph. Secondary deposits in liver and kidneys. An abscess found behind the bladder.	Injected subcutaneously half a grain of quinine in solution about 30 hours after experimentation, and two similar doses on the following day.
XXII.	Rabbit (doe).	Sept. 1.	Sept. 2, twelve hours <i>post experim.</i>	Injected <i>per vaginam</i> half a drachm of the lochial solution used in the last experiment, mixed with half a drachm of a saturated solution of cupralum.	Ditto.	Examined 20 hours <i>p. m.</i> Lower lobe of right lung densely congested. Over remaining portion of this lung and over lower lobe of left lung, congested patches to be seen.	Lochial solution coagulated by the cupralum.
Group F.							
XXIII.	Dog.	Sept. 9.	—	Injected subcutaneously over the right hip half a drachm of the fetid grumous fluid from abdomen of rabbit, exp. XXI.	—	—	Did not produce any appreciable effect, local or constitutional.
XXIV.	Rabbit (buck).	Sept. 9.	—	Injected subcutaneously over the right hip half a drachm of the same septic fluid as was used in the last experiment.	—	—	Ditto.
XXV.	Rabbit (doe).	Sept. 9.	Sept. 21.	Injected <i>per vaginam</i> 15 drops of the same septic fluid as was used in the last experiment.	—	Examined about 12 hours <i>p. m.</i> Nothing found in the viscera, but a blood-clot in the spinal canal outside the pia mater, but inside the dura mater, extending from the first cervical to the seventh dorsal vertebra, and diminishing in size downwards.	Death probably resulted from an accident, as shown by the necropsy.
SERIES B.—Group A2.							
I.	Rabbit (doe).	Sept. 29.	Oct. 12.	Injected <i>per vaginam</i> half a drachm of the dialysed portion of normal lochial solution of the fourth day after delivery. Dialysation was conducted through porcelain.	Not fetid, no organisms seen. Contained the usual ingredients.	Examined 3 hours <i>p. m.</i> Showed secondary deposits in the liver. Mesenteric glands enlarged. Congested patches in the right lung. An abscess found behind bladder.	—
II.	Rabbit (doe).	Sept. 29.	—	Injected subcutaneously over the right shoulder half a drachm of the same dialysed fluid as used last.	—	—	No appreciable effect produced.
III.	Rabbit (buck).	Sept. 29.	Oct. 6, eighth day <i>post experim.</i>	Injected <i>per perineum</i> half a drachm of the undialysed portion of the lochial solution last described.	This differed from the preceding by exhibiting actively moving bacteria.	Examined about 12 hours <i>p. m.</i> Secondary deposits found in the ileum and in the mesenteric glands.	—
IV.	Rabbit (buck).	Sept. 29.	Oct. 25.	Injected subcutaneously over the right shoulder half a drachm of the undialysed fluid used in the last experiment.	—	Examined about 8½ hours <i>p. m.</i> Showed a large subcutaneous abscess at site of injection. Secondary deposits in both lungs and in the liver; some in the liver as large as hemp-seeds.	—
V.	Rabbit (doe).	Oct. 7.	Oct. 9, third day <i>post experim.</i>	Injected <i>per vaginam</i> half a drachm of the dialysed portion of lochial solution from Mrs. P.	Had an offensive odour. Showed microscopically many actively moving bacteria.	Examined about 36 hours <i>p. m.</i> Found secondary deposits in liver, each surrounded by a zone of congested vessels; pylorus thickened; pelvic cellulitis.	The lochial solution had been put into the dialyser on Oct. 1.

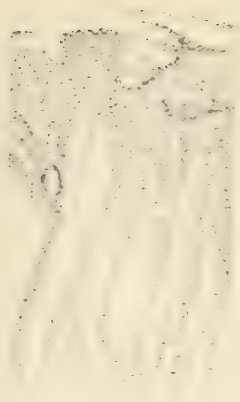
TABLE OF SEPTICÆMIA EXPERIMENTS—continued.
 SERIES B.—Group A2—continued.

No.	Designation of Animal.	Date of Experiment.	Date of Death.	Name of Experiment.	Results of Blood Examination.	Principal Post Mortem Appearances.	Remarks.
VI.	Rabbit (doe).	Oct. 7.	—	Injected subcutaneous over the right shoulder half a drachm of the septic fluid (dialysed).	Had an offensive odour. Showed microscopically.	—	—
VII.	— (buck).	Oct. 7.	Oct. 11, fifth day post experiment.	Injected <i>per forinsum</i> half a drachm of the undialysed portion of this last lochia.	Had a very offensive odour. Showed microscopically blood.	Examined 12 hours <i>p.m.</i> Secondary deposits in the liver and in the right lung.	—
VIII.	Rabbit (buck).	Oct. 7.	Oct. 12, sixth day post experiment.	Injected subcutaneous over the right shoulder half a drachm of the undialysed septic fluid.	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in the pectoral region.	—
Group B2.							
IX.	—	Oct. 7.	—	Injected <i>per vaginam</i> half a drachm of a mixture of series B and distilled water.	—	Examined 12 hours <i>p.m.</i> Many secondary deposits in liver, lung, and heart. The purulent material consisted of pus re-	The purulent material consisted of pus re-
X.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	death, mixed with ag.
XI.	—	Oct. 7.	—	Injected <i>per forinsum</i> half a drachm of the undialysed septic fluid.	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XII.	—	Oct. 7.	—	Injected subcutaneous over the right shoulder half a drachm of the undialysed septic fluid.	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XIII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XIV.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XV.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XVI.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XVII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XVIII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XIX.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XX.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXI.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXIII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXIV.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXV.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXVI.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXVII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXVIII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXIX.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXX.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXI.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXIII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXIV.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXV.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXVI.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXVII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXVIII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XXXIX.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL I.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL II.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL III.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL IV.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL V.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL VI.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL VII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL VIII.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
XL IX.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—
L.	—	Oct. 7.	—	—	—	Examined 12 hours <i>p.m.</i> Hemorrhagic spots in right lung.	—

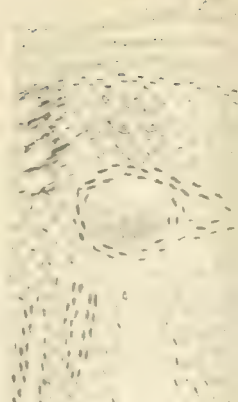
M¹



N³



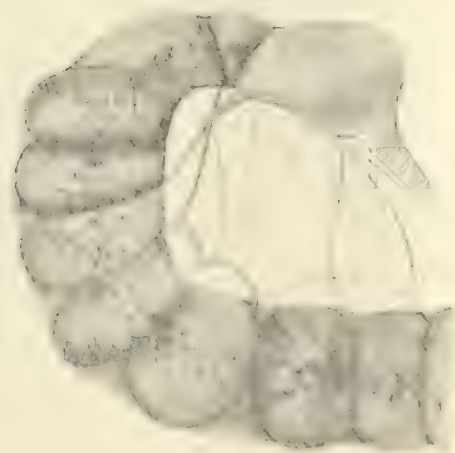
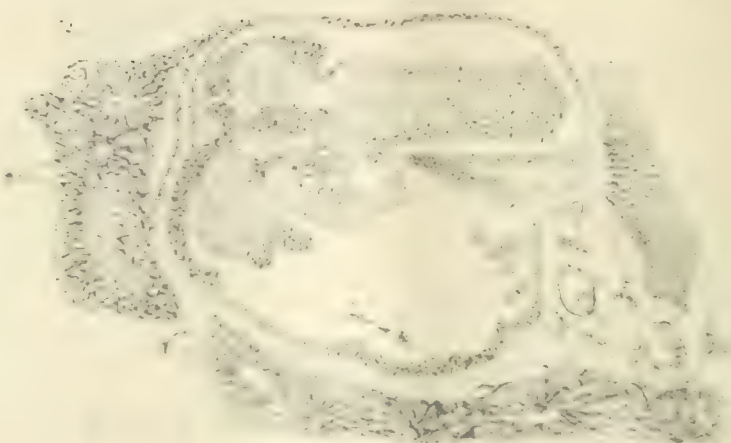
N²



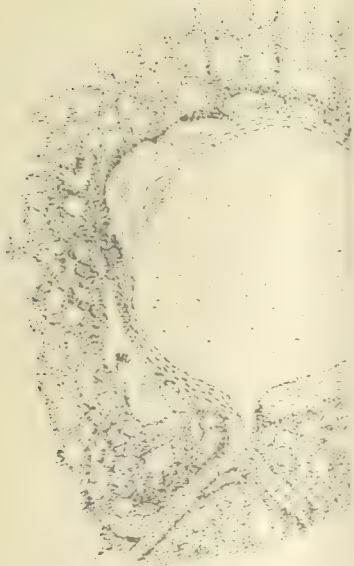
O¹



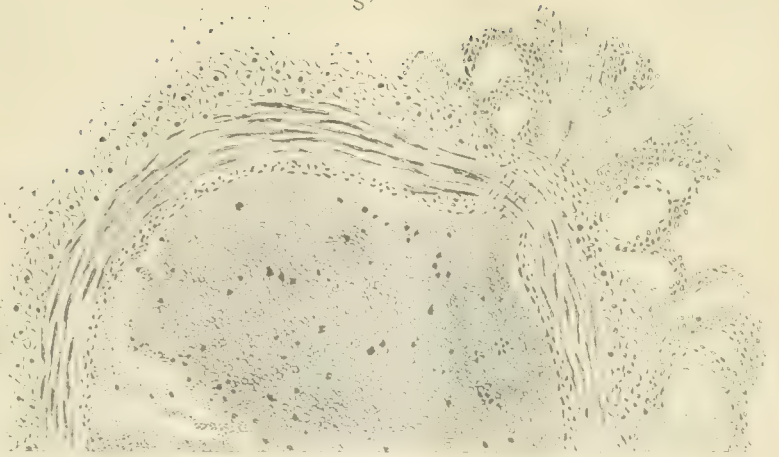
O²



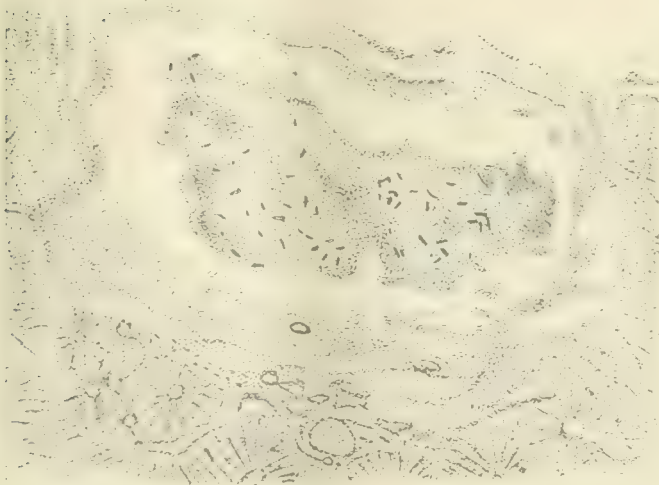
S¹



S¹



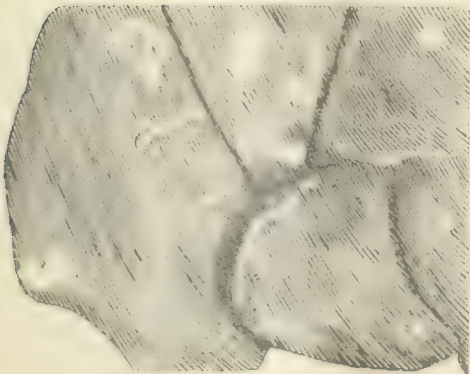
T¹



V¹



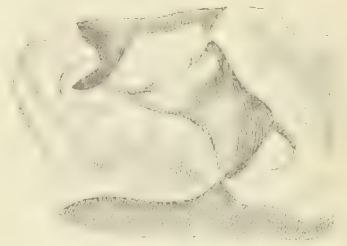
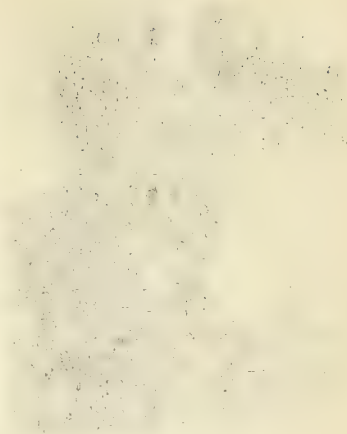
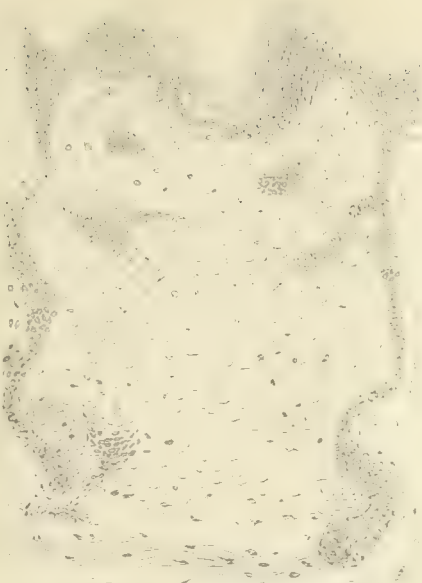
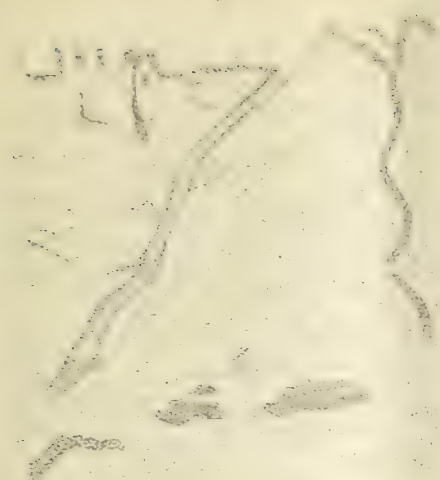
W¹



X¹



G³



H³

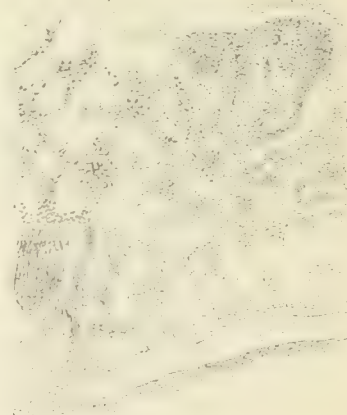
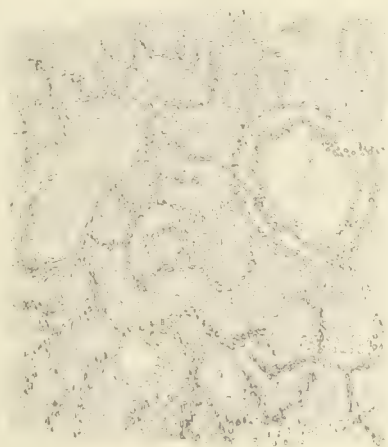
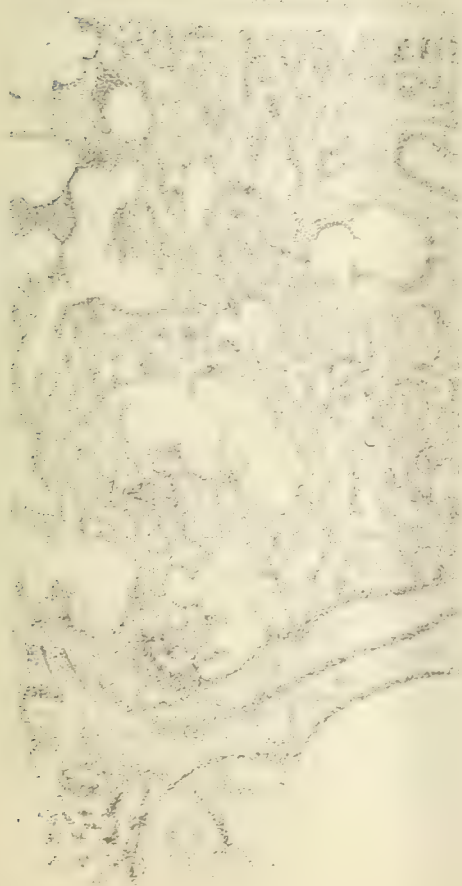


TABLE OF SEPTICÆMIA EXPERIMENTS—continued.
SERIES C.—Group A3—continued.

No.	Designation of Animal.	Date of Experiment.	Date of Death.	Nature of Experiment.	Characters of Fluid used for Injection.	Principal Post Mortem Appearances.	Remarks.
II.	Male rabbit (doe) weighed 2½ lbs.	July 27.	Aug. 5, eighth day post experiment.	Injected <i>per vaginam</i> half a drachm of the septic fluid used in the last instance.	Showed pus-elements, vibriones, large oval cyst-like bodies, and minute sparkling granules.	Found secondary deposits in the liver, and a large abscess with thickened wall filling the pelvis between the uterus and rectum.	—
III.	Rabbit (doe) weighed ½ lbs.	July 27.	Aug. 7, twelfth day post experiment.	Injected <i>per vaginam</i> half a drachm of the septic fluid used in the last experiment.	Ditto.	Found a large abscess situated as in the last instance. The anterior wall of the urinary bladder showed patches of recent lymph on its inner surface. Secondary deposits in the liver and in the cardiac wall, an abscess in a gland of the gastro-hepatic omentum, and several large congested spots in the left lung.	—
IV.	Rabbit (buck) weighed 2½ lbs.	Aug. 9.	Aug. 23, fifteenth day post experiment.	Injected subcutaneously into the back half a drachm of peritonitic pus like that used in the last instance.	Showed pus-cells, entire and breaking down; fat and epithelial cells; vibriones; granules.	Found a large abscess between the external and internal muscular layers of abdominal wall; liver well studded with secondary deposits; ulcer of stomach.	—
V.	Rabbit (buck) weighed 2 lbs.	Aug. 9.	Aug. 16.	Injected subcutaneously into the back half a drachm of the septic fluid used for the last experiment.	Ditto.	Found a thick layer of recent lymph beneath skin near site of injection; secondary deposits in liver.	—
Group B3.							
VI.	Rabbit (doe) weighed 4 lbs.	Aug. 10.	—	Injected <i>per vaginam</i> a drachm of peritonitic sanguineous serum from Mrs. W.	Showed blood-cells, entire and breaking down; large granular ovoid cells; bacteria; vibriones; and granules.	—	Recovered without showing any special symptoms. The fluid was obtained from a patient suffering from diffused carcinoma of the abdominal viscera, and was used immediately after removal.
VII.	Rabbit (doe) weighed 5 lbs.	Aug. 10.	—	Injected subcutaneously on the back ½ drachms of the septic fluid used in the last experiment.	Ditto.	—	Recovered without showing any special symptoms.

after (September 5th), exactly one calendar month after experimentation. A necropsy was made three hours after death. The animal was greatly emaciated. There were found secondary deposits in the liver (Fig. M. 3), in both lungs scattered dusky white spots, and minute subpleural hæmorrhagic extravasations on the surface of the right lung (Figs. K 3 and L 3); minute whitish deposits in the iliac mesentery in close proximity to its blood-vessels; the spleen was very small; but there was no peritonitis.

REMARKS.—This animal showed all the signs of subacute septicæmia. The large sloughing wound resulting from the injection *per vaginam* was due probably to the corrosive action of sulphurous acid. It is noteworthy that carbolic acid did not act thus, though a larger quantity of it was employed. The several superficial subcutaneous abscesses which occurred in this instance were, we believe, to be ascribed to the septicæmic condition induced. The application of septic media to the sloughing wound may have aided in aggravating the systemic poisoning, but that this means alone would not have induced pyæmia and its characteristic pathological lesions, in this animal, is rendered probable by the results obtained in Group A of our experiments. On the other hand, as will become apparent from our subsequent experiments, the secondary visceral lesions, found after death in this rabbit, can without fail be produced by the injection *per vaginam* of septic lochial fluid. It is further worthy of remark that the animal, when in this poisoned state, did not exhibit any characteristic constitutional symptoms, and this is to be noted in all our experiments. In fact, the animals at intervals appeared to enjoy health, and the end came suddenly upon them.

Experiment 8.—We injected a mixture of a drachm of lochial solution (same as in the last instance) with one drachm of a saturated solution of permanganate of potash into a doe, by puncture over the symphysis pubis. This rabbit, like the others operated on at the same time, seemed languid about six hours after experimentation, and did not eat its food. Next day it showed slight stiffness in the hinder limbs, but otherwise appeared well. There was no further change till the fourteenth day after experimentation, when the animal was observed to be very ill and did not eat. It also dragged its right hind limb, evverting it, and there was seen a large fluctuating swelling over the right hip. In the evening, the animal looked brisker. We now remembered that, while replacing this animal into its box after experimentation it had sustained a slight squeeze of its right hind limb by the falling on it of the box-lid. Next day this rabbit appeared well, but was listless. It died during this day. A necropsy was held about eight hours *post mortem*. On

opening the abdomen, the deeper coils of the ileum were found firmly agglutinated by lymph, and there were seen scattered at intervals through the iliac wall patches of congestion. The left kidney was very congested. Scattered through the liver were secondary deposits. The lungs, heart, and spleen appeared healthy. An oval, fluctuating swelling, bound down by firm adhesions, was found filling up the right iliac region and communicating through the sciatic notch with the subcutaneous swelling noticed during life over the animal's right hip. This pelvic swelling compressed the rectum, and was filled with laudable, somewhat fetid pus. The blood in the veins was preternaturally fluid. The abscess over the right hip was probably excited originally by the bruise we have before mentioned, which the animal received when being put into its box; although the rabbit did not, for many days, show any ill effects from this bruising.

Experiment 10. We injected *per vaginam* into a rabbit one drachm of the lochial solution employed in Experiment 9. This septic fluid, on microscopical examination, showed, granular cells, epithelial elements, blood- and pus-corpuses, vibriones, and multitudes of minute highly refractive bodies.* Next day, this animal seemed dull. On the following day it appeared very ill; it was thirsty, its coat was rough, it had no appetite, and lay listless, but the temperature of the body was not raised. There was observed a superficial sloughing wound over the right thigh. In the evening, this rabbit appeared better and took food. On the fourth day after inoculation (next day), it was again listless and would not move; its coat was rough and respiration hurried. In the left iliac fossa was felt a hard swelling twisting the tail to the opposite side, but there was no sense of fluctuation nor increased heat of the skin. Next day, the animal died (lying on its left side) about one hundred hours after experimentation. The swelling had increased considerably, the hair over it separated with the cuticle, and exposed gangrenous looking tissue. At the necropsy, three hours after death, on opening the abdomen, slight signs of inflammation were found around the bladder. All the subcutaneous soft tissues in both gluteal regions were discovered to be in a sloughing state, but there was no evidence of

* In our several experiments where inoculation in the pelvic cavity was used, the nozzle of the Wood's syringe was made to puncture the right wall of the vagina as far up from the external orifice as possible. It was then carried cautiously parallel to the vaginal wall, till it impinged against the side of the pubic arch, below which it was carefully passed, the fluid being injected thus as far as possible into the pelvic peritoneal cavity. So also with male rabbits, the perineum having been pierced, the same procedures were followed as with does; but there was greater care required not to injure viscera, and the result was not considered to be so certain as with does.

purulent infiltration. A few white secondary deposits were observable on both surfaces of the liver, in both lungs, and in the left cardiac wall. Fig. N^o. The blood was noticed to be very fluid.

GROUP C. *Experiment 11.*—We injected into a rabbit, *per vaginam*, a mixture of half a drachm each of purulent fluid from rabbit Experiment 8, and of distilled water. The purulent fluid had been removed from the dead rabbit about twelve hours before it was used for inoculation; it was very viscid, and stank horribly. Under the microscope this fluid showed pus- and red blood-corpuscles, bacteria, minute highly refracting bodies, phosphates, and granules. This animal died next day, about twenty-four hours after experimentation; and at the necropsy about six hours after death it showed swelling and signs of putrefaction among the soft tissues of the perineum. The blood was fluid; the right chambers of the heart were filled with fluid blood, while the left were empty and firmly contracted. No evidences of secondary deposits were found.

Experiment 12.—We injected into the abdominal peritoneal cavity of a buck rabbit a drachm of the same mixture as was employed for the last experiment. To avoid puncture of the intestine, an incision was made, and the fluid inserted through a blunt-pointed syringe, while the wound was closed by transfixion with a hare-lip needle with carbolised catgut ligature twisted over it. Next day, the hare-lip needle and thread were observed to have been discarded, and the wound was patent. The animal's health was unaffected. On the following (third) day the rabbit appeared ill and ate little; while the wound was open and sloughing. Two days later (fifth day) the wound was as large as a shilling, looked sloughy, and burrowed deeply, but the animal's health seemed unaffected. Next (sixth) day the rabbit looked ill, with rough coat and drooping ears, and would not eat. There was seen a sloughing wound of the abdominal wall extending up to the point of puncture, and downwards as far as the scrotum, exposing the peritoneum. Death occurred on the following day—the seventh after experimentation. Necropsy, held two hours *post mortem*, showed that all the soft tissues in the lower half of the abdominal wall superficial to the muscles were sloughing, while the same tissues in the upper half of the abdomen were firmly bound together by inflammatory adhesions. Between the peritoneum and the intestines, as also between the several coils of intestine, a considerable amount of lymph, forming recent adhesions, was observed. The blood was very fluid. Scattered over the liver, especially in its right lobe, were seen very minute yellowish-white secondary deposits. In both lungs, especially in the lower lobe of the right lung, were seen minute superficial blackish spots. The heart showed the same condition as that in the last experiment. The brain appeared healthy, but its membranes were congested.

Experiment 13.—After careful dissection, we injected into the right femoral vein of a rabbit a few drops of the same septic mixture as was used in the last two experiments. The vein having been thereafter ligatured, the wound was stitched with carbolised gut. Next day, the animal seemed well; but there was slight erythema along the edges of the wound. Two days later, the wound had healed, and the rabbit looked quite well. On the morning of the seventh day from this date (being the tenth day after experimentation), the rabbit was found dead. At the necropsy, diffuse subcutaneous inflammation, with lymph formation and purulent infiltration, were found extending from the umbilicus downwards, especially on the right side, where they involved also the inguinal region. Some of the fetid creamy-looking fluid from this tissue was received in a watch-glass. The larger veins in the right abdominal wall were seen bound down by a thin, and filled with clots. All the veins in the body were engorged, and the blood coagulated readily. A few very minute yellowish-white spots were seen on the liver. In the spleen there was a congested patch, and several small whitish spots. The heart was firmly contracted, and filled with clots. There was no purulent infiltration.

Experiment 14.—We injected subcutaneously, over the left shoulder of a rabbit, two drachms of a mixture of equal parts of distilled water and of a solution of cupralum, mixed with an equal quantity of a saturated solution of cupralum. Next day, this rabbit seemed dull, with hot skin and roughened coat. Two days later, it looked well and ate heartily. On the ninth day after experimentation, it showed subcutaneous thickening and firm adhesion of the skin to the deeper tissues at the site of puncture. The animal's health was perfect. Next day, the rabbit seemed out of sorts, but recovered again in a few days. Thus it lived till the twenty-third day after experimentation, when the animal looked languid and would not eat. Death occurred next day. Necropsy, about eighteen hours after death, revealed no secondary deposits in the viscera; at the site of inoculation was found a large subcutaneous abscess-cavity, containing a creamy fluid pus and disintegrating tissue.

Experiment 15.—We injected, *per vaginam*, into a rabbit, a mixture consisting of half a drachm each of the septic fluid tried in the last

instance and of a solution of carbolic acid (1 to 20). Next day, the rabbit was languid, with hot skin and roughened coat. On the fourth day after experimentation, it still seemed ill, and walked heavily on its left hind limb. Death occurred two days later, the sixth day after experimentation. Necropsy, about three and a half hours after death, showed the mesenteric glands greatly enlarged and inflamed, (Fig. O^o.) The lymph vessels were so engorged that they could be traced like fluid vessels. Minute secondary abscesses were found in the liver, and two in the spleen only. The kidneys and lungs appeared healthy. The right cardiac cavity was dilated and filled with clot and with fluid blood, while the left was firmly contracted. In the left cardiac cavity was found a large quantity of fluid blood, and a small amount of pus.

GROUP D. *Experiment 16.*—A rabbit received, *per vaginam*, a drachm of Dr. Burdon Sanderson's septic fluid (a solution of muscle, macerated for fourteen days in distilled water at 70° Fahr.). This fluid was shown microscopically to be swarming with bacteria. This animal was found dead next morning, having survived the inoculation probably twelve hours. The necropsy (held a few hours later) showed very great congestion, with serous infiltration into the lower half of the abdomen. The blood was fluid. There was a clot in the right ventricle, but the left was firmly contracted. The viscera appeared healthy. We examined, microscopically, serum from the abdomen, but found nothing; while blood from the spleen (which was much enlarged and engorged) showed red corpuscles, with crenated edges, and interspersed with vibrios and highly refractive granules. Decomposition had proceeded rapidly.

Experiment 17.—We injected subcutaneously, over the left shoulder of a rabbit, half a drachm of the same septic fluid as was used in the last experiment. Two days later, this animal seemed languid; its abdomen was swollen, and apparently painful. It died during the night with convulsions. Necropsy (twelve hours *post mortem*) showed a venous clot at the site of puncture. On opening the abdomen, the mesenteric glands were found greatly enlarged, patches of bright red congestion were seen scattered over the surface of the colon (Fig. L^o), and over the adjoining ileum; while a few small whitish spots (like caseous deposits) were to be observed in the ileum, near the caput cecum. The liver tissue had a nutmeggy appearance, and scattered through it were several comparatively large caseous deposits. Scattered over the right lung were patches of livid congestion. The right cardiac cavities were filled with clot and with fluid blood, while the left were firmly contracted.

Experiment 18.—We injected subcutaneously, over the left shoulder of a rabbit, half a drachm of Sanderson's septic fluid (as in the last two experiments) mixed with an equal quantity of a saturated solution of cupralum. Next day, this rabbit seemed dull, with hot skin and roughened coat. Two days later, it looked well and ate heartily. On the ninth day after experimentation, it showed subcutaneous thickening and firm adhesion of the skin to the deeper tissues at the site of puncture. The animal's health was perfect. Next day, the rabbit seemed out of sorts, but recovered again in a few days. Thus it lived till the twenty-third day after experimentation, when the animal looked languid and would not eat. Death occurred next day. Necropsy, about eighteen hours after death, revealed no secondary deposits in the viscera; at the site of inoculation was found a large subcutaneous abscess-cavity, containing a creamy fluid pus and disintegrating tissue.

Experiment 19.—We injected, *per vaginam*, into a rabbit, a mixture consisting of half a drachm each of the septic fluid tried in the last instance and of a solution of carbolic acid (1 to 20). Next day, the rabbit was languid, with hot skin and roughened coat. On the fourth day after experimentation, it still seemed ill, and walked heavily on its left hind limb. Death occurred two days later, the sixth day after experimentation. Necropsy, about three and a half hours after death, showed the mesenteric glands greatly enlarged and inflamed, (Fig. O^o.) The lymph vessels were so engorged that they could be traced like fluid vessels. Minute secondary abscesses were found in the liver, and two in the spleen only. The kidneys and lungs appeared healthy. The right cardiac cavity was dilated and filled with clot and with fluid blood, while the left was firmly contracted. In the left cardiac cavity was found a large quantity of fluid blood, and a small amount of pus.

GROUP E. *Experiment 20.*—We injected, *per vaginam*, into a rabbit, a mixture consisting of half a drachm each of the septic fluid tried in the last instance and of a solution of carbolic acid (1 to 20). Next day, the rabbit was languid, with hot skin and roughened coat. On the fourth day after experimentation, it still seemed ill, and walked heavily on its left hind limb. Death occurred two days later, the sixth day after experimentation. Necropsy, about three and a half hours after death, showed the mesenteric glands greatly enlarged and inflamed, (Fig. O^o.) The lymph vessels were so engorged that they could be traced like fluid vessels. Minute secondary abscesses were found in the liver, and two in the spleen only. The kidneys and lungs appeared healthy. The right cardiac cavity was dilated and filled with clot and with fluid blood, while the left was firmly contracted. In the left cardiac cavity was found a large quantity of fluid blood, and a small amount of pus.

Experiment 21.—We injected subcutaneously, over the left shoulder of a rabbit, half a drachm of Sanderson's septic fluid (as in the last two experiments) mixed with an equal quantity of a saturated solution of cupralum. Next day, this rabbit seemed dull, with hot skin and roughened coat. Two days later, it looked well and ate heartily. On the ninth day after experimentation, it showed subcutaneous thickening and firm adhesion of the skin to the deeper tissues at the site of puncture. The animal's health was perfect. Next day, the rabbit seemed out of sorts, but recovered again in a few days. Thus it lived till the twenty-third day after experimentation, when the animal looked languid and would not eat. Death occurred next day. Necropsy, about eighteen hours after death, revealed no secondary deposits in the viscera; at the site of inoculation was found a large subcutaneous abscess-cavity, containing a creamy fluid pus and disintegrating tissue.

cough, and was listless. Death occurred on the evening of the following day (the eighth after experimentation). Necropsy, five hours after death, revealed a large amount of serum in the abdominal cavity, containing flakes of lymph floating about, and a decolorised clot, as large as an apple. There was also found a punctured wound, extending through the right wall of the bladder, but sealed by recent lymph. There were seen several congested patches in the walls of the ascending colon. The mesenteric vessels were engorged. Secondary deposits were seen scattered over the liver. The spleen was small. The kidneys were anæmic in their centres, while their cortices were congested. There was slight congestion in the left pulmonary apex. The cardiac cavities showed the same appearances as in the last two experiments, and there was an excess of pericardial fluid.

Experiment 21.—Another rabbit, of almost the same size and age as the last, was inoculated at the same time, and in a similar manner. The object was to test the efficacy of quinine in cutting short pyæmia when developed. Next evening, this animal seemed ill and refused food. Accordingly (thirty hours after experimentation), it received, by hypodermic injection, half a grain of sulphate of quinine in neutral solution. On the following day, this hypodermic injection was twice repeated. During the succeeding days, this rabbit improved in health, ate well, and looked lively. It was found dead on the morning of the ninth day after experimentation. Necropsy, ten hours after death, showed the abdominal cavity filled with a large quantity of grumous fetid fluid, having flakes of lymph floating in it. The smaller intestine was congested; the liver contained numerous secondary deposits, of which some were larger than any yet met with. (Fig. R 3.) The heart, lungs, kidneys, and spleen appeared healthy. In the pelvic cavity, but encased, was found an abscess as large as a walnut, containing purulent fluid of milky appearance.

Experiment 22.—We injected, *per vaginam*, into a rabbit, a mixture of half a drachm each of the septic fluid (lochia solution) used in the last experiment, and a saturated solution of cupralum. Seven hours later, this rabbit was observed lying listless, and would not eat. It died during the course of the night, probably about twelve hours after experimentation. Necropsy, about twelve hours later, revealed the lower right pulmonary lobe converted into a firm congested mass, which sank in water. There were also limited patches of congestion scattered through the upper lobe of this lung and through the lower left pulmonary lobe. The vagina was very congested: all the other viscera seemed healthy.

GROUP F, *Experiment 23.*—We injected subcutaneously over the right hip of a dog half a drachm of the grumous fetid serum removed four hours previously from the rabbit (*Experiment 21*). This animal showed no bad symptoms after experimentation, nor did an abscess form at the site of puncture. It was unaffected by the inoculation.

Experiment 24.—Injected subcutaneously over the right hip of a rabbit half a drachm of the septic fluid used in the last instance. This animal also did not show any effects, local or constitutional, from the inoculation.

Experiment 25.—We injected *per vaginam* into a small rabbit 15 minims of the septic fluid used in the last two experiments. Next day the animal appeared lively and well. It occurred now to us to examine the blood of this animal microscopically, and to compare it with that of a rabbit which had not been experimented on. We had the advantage of the assistance of a well-known microscopist when doing this. A drop of blood was removed from the ear of each rabbit in succession. We observed that the drop removed from the rabbit (*experiment 25*) which had been inoculated, showed the red corpuscles almost without exception to have crenated (not irregularly puckered) edges, and to have less adhesiveness than normally, while the blood itself seemed more prone to coagulate. Another comparative microscopical examination, held ten days later, showed the red blood-corpuscles of this rabbit (*Experiment 25*) to exhibit crenation of their edges, but there were many fewer such than when the former examination was held. On the thirteenth day after experimentation, this animal died of convulsions.

As noted in the table of experiments, the necropsy showed the cause of death to be spinal meningitis, unconnected with the experimentation, but how produced could not be ascertained.

[To be continued.]

YELLOW FEVER AT SENEGAL.—M. Joubert, Chief Inspector of the French navy, has received an order from the Minister to go to Senegal to report on the sanitary condition of the hospitals and ambulances in connection with the navy, after the late visitation of yellow fever. M. Joubert is also instructed to make a report on the condition of the troops stationed there, their barracks and general organisation.

A NOTE ON THE AFTER-TREATMENT OF SOME EXCISIONS OF JOINTS.

By WILLIAM THOMSON, M.A., F.R.C.S.I.,

Surgeon to the Richmond Hospital, Dublin; and Examiner in Surgery, Queen's University, Ireland.

IN a paper entitled, "Excision of the Knee in Early Life," which appeared in the BRITISH MEDICAL JOURNAL, of December 10th, 1881, my colleague, Mr. W. Stokes, observes: "The method of fixation of the limb adopted in the Richmond Hospital is a modification of that of Dr. P. H. Watson; and it appears to me to fulfil, as perfectly as need be, all the required conditions. An antiseptic dressing having been applied to the leg first, and subsequently to the thigh, two metallic splints, made of common hoop iron, are applied on the anterior and posterior surfaces of the limb, and then are fixed—first on the leg, and subsequently on the thigh, by gypsum bandages applied in the ordinary manner, care being taken to leave the portion of the limb near the situation of the wound open, so as to allow the application of antiseptic dressings without any disturbance of the limb. I consider this method of fixing the limb far superior to any others with which I am acquainted; and it has the merits of cheapness, simplicity, and thorough efficiency."

The method of dealing with these cases, thus approvingly spoken of by Mr. Stokes, was first introduced by me; and it was in my practice that he first saw it. I am very glad to know that, since he adopted it, he has had an experience of it so favourable, and so much in accord with my own. Although he has anticipated my intention to describe this plan, I may be allowed now to refer to it more fully. I had previously used Dr. Watson's apparatus; but I found that with a posterior splint of scored wood, afterwards covered with plaster-of-Paris, the whole covering made an unnecessarily bulky case, not always comfortable to the patient. Moreover, the scored splint did not lie so accurately as to prevent movement; and there was consequently not only, at times, pain from the jarring of the bones, but the risk of some displacement. The anterior splint, also made of rod iron, with lateral flanges attached to make it rest easily on the limb, and to give grip to the plaster, had to be specially prepared from careful measurements in each case, and entailed a cost worth considering in a large hospital. It therefore occurred to me that all the advantages of Dr. Watson's plan of fixation might be received with less trouble and cost and with certainty, by using hoop iron instead of the rod, and the Gooch splint. The material selected was about an inch-and-three-quarters wide, and of the ordinary thickness. This gives us a substance at once firm and resisting, and yet sufficiently pliable to be bent with the hands across the knee, or on the edge of a table, into any shape that we may require. A number of punch-holes should be made, passing from the under to the upper side, so that the roughened surface may be caught in the bandages. The anterior splint reaches from near the groin, along the front of the thigh, arches over the knee to give room for dressing, passes along the leg, and terminates on the dorsum of the foot. It is, in fact, of the shape adopted by Dr. Watson, with the exception that there is no suspension hook near the lower end of it. The posterior splint is modelled after that proposed by Mr. P. J. Hayes, of the Mater Misericordiarum Hospital, Dublin. That portion of the metal which corresponds to the popliteal space is bent obliquely upwards and forwards, so that the leg piece is on a slightly higher level than that of the thigh. The limb is rolled up in a gauze bandage; and the splints, protected by a light layer of cotton wadding, are then applied, and kept in position by a well fitting gypsum roller. The whole limb presents a size very little greater than natural, and the divided bones are kept firmly in position. The reason is that the plaster-of-Paris is applied directly to the surface of the limb (separated only by thin gauze layer) throughout the greater portion of its surface, and the two iron splints serve as bridges between the thigh and the leg. It will be found that the width of the iron is sufficient to afford a hold for the bandages, and that therefore the lateral flanges are not required. If the surgeon should fear hæmorrhage, requiring examination of the wound, and therefore be disinclined to apply the plaster immediately, he can postpone this operation until next day. The splints may meanwhile be secured with a gauze or flannel roller, and they will be found to give, even thus, very great security.

During the illness of one of my colleagues, I had an opportunity of trying the same method in a case of excision of the hip-joint of one of his patients. There is always difficulty in keeping the limb in a fixed position after operation in these cases; and I believed I could secure the necessary extension and fixity by very simple means. Moreover, the child had a very bad lateral curvature of the spine, and it appeared

unusual number of complicated cases; and it would not be fair to omit, in these columns, some more details than could be included in the above statistics. I will, therefore, following the order of the tables, briefly describe some of the special experiences of each operator.

1. Dr. Bischoff was one of the earliest surgeons to employ the spray in ovariectomy. He made use of a two per cent. spray in 1872. Four of his cases, included in the tables, were oöphorectomies: all of these recovered; eight out of the remainder were double ovariectomies. The seven deaths were "all from peritonitis"; three of these were cases of sarcoma extending to the peritoneum.

2. Dr. Kuhn used the clamp in three cases; in the remainder, he secured the pedicle by complete intraperitoneal ligature. Two of his fatal cases died of "sepsis" on the fourth day. The third fatal case was incomplete; a large papillary cyst existing without a pedicle, it could not be completely removed; the patient had hydro-thorax and hydro-pericardium. In one patient, there were temporary symptoms of carbolic acid poisoning.

3. Professor Socin used the clamp exclusively until his last case, where the pedicle was secured by complete intraperitoneal ligature, silk thread being used. Two of his fatal cases died of "collapse", two from septic peritonitis; both of these latter had advanced visceral disease.

4. Dr. Kottmann used the clamp twice, silk or catgut ligatures in the remaining cases. One clamp case died of "ileus" on the eighth day. The second case died on the second day "of collapse", possibly carbolic acid poisoning.

5. Dr. Bircher used the ligature; his experience, though small, was remarkable. One case was an oöphorectomy for neuralgia. Another was complicated by the formation, after operation, of an abscess bursting into the stomach, and also perforating the abdominal walls. A third was a "mixed cystic sarcoma". The fatal case was "fibroid of the right ovary and of the uterus, which was removed, excepting the cervix". Drainage was employed, but the patient died on the fifth day. The uselessness of statistical tables without details such as these, is well illustrated in this record of the eventful career of Dr. Bircher as an ovariologist.

6. Dr. Bleuler's cases were all three "proliferous cystomata". He used the ligature for the pedicle.

7. One of Dr. Egli-Sinclair's cases was a "double castration for hysteria", the second a "fibro-sarcoma of the ovary". The fatal case was an ovariectomy performed during pregnancy; the tumour was sessile; the ligature was applied to the cornu of the uterus, and Paquelin's cautery also used. Premature labour, and death in twelve hours, was the result.

8. A. Reverdin's patient had twice been tapped. The tumour was a multilocular cyst, strongly adherent, two adhesions requiring ligature. The pedicle was secured by catgut.

9. Dr. Cornaz used the ligature; the tumour was a cyst, never tapped before the operation. An abscess formed on the cicatrix.

10. Dr. Max Hasler's case was a "unilocular cyst". He used the clamp, but appears to have employed the strictest Listerian precautions. The clamp separated on the ninth day, and the patient made a rapid recovery.

11. M. Buman's fatal case was a single woman aged 51, with cirrhotic liver. There were extensive intestinal and pelvic adhesions; death from collapse occurred four hours after the operation.

12. Professor Kocher of Berne has had the advantage of greater practical experience in ovariectomy than can be claimed by any other Swiss surgeon. He has also methodically tried and proved both the Listerian and the non-antiseptic methods. Table II shows how he lost three patients out of five before he employed spray; but only one more—namely, four—of his strictly Listerian cases. Still, it must not be forgotten that his non-Listerian ovariectomies were his first attempts at the removal of diseased ovaries. All the three fatal cases where spray had not been used died of "peritonitis"; in two of these the clamp, in one the ligature, had been applied to the pedicle. Complete intraperitoneal ligature of the pedicle was adopted in the last thirteen of the antiseptic cases. Amongst this later series, the four deaths were from the following causes: one died of "peritonitis, on the second day"; one, a case of carcinoma of the ovary, died of "septic peritonitis"; one died with septic symptoms, the cyst-contents being putrid through tapping before the operation; the fourth died through a singular accident. The sponges had been carefully counted before the abdominal wound was closed, and the nurses and sister reported that all were out of the abdominal cavity. The patient died on the third day of acute peritonitis, and a piece of sponge was found in the body. "The sister", Professor Kocher states, "accused one of the assistants of having torn one sponge into two pieces during the operation."

13. In the last ten of Professor Müller's cases, complete intraperitoneal ligature of the pedicle was adopted, the clamp being used in several earlier cases. Three of the fatal cases died from "peritonitis"; one from "hypostatic pneumonia"; and the last, an incomplete operation, died in one month, apparently from peritonitis.

14. M. Julliard of Geneva has tried more methods of securing the pedicle than any other Swiss surgeon; he is also partial to drainage, this appears to have saved his last case, which is not marked "antiseptique rigoureux" in his statistics. This was a case of universally adherent multilocular cyst. The bladder was lacerated, and a portion of the cyst-wall, "of the size of the palm of the hand", was left in the abdomen. The pedicle was secured by a silk ligature, cut short, and drainage maintained by one glass and two gutta-percha tubes. Two months after the operation, a small fistulous track remained in the abdominal wound at the site of the drainage-tubes. In only this and one other of M. Julliard's cases was complete intraperitoneal ligature of the pedicle adopted; and the second case died. The results of incomplete intraperitoneal ligature were not encouraging: one case, where the ends of the silk were left hanging out of the abdominal wound, died from hæmorrhage on the fourth day; spray had been used for this operation.

15. Dr. Koller's fatal case died of hæmorrhage half an hour after the operation. In one successful case, the ligatures of the pedicle were left dependent from the abdominal wound; the pedicle being secured by complete intraperitoneal ligature in all the remaining cases.

16. Dr. Neuhaus, in all his cases, transfixed the pedicle, which was retained against the abdominal wound. Of the two fatal non-Listerian cases, in one the cyst was gangrenous, the second was a double ovariectomy, the uterus being removed as well. The patient died of volvulus on the twenty-eighth day.

17. M. Rouge lost two of his antiseptic cases, one from carbolic acid poisoning, one from hæmorrhage; this latter was the only case in his entire series where the pedicle was not retained against the abdominal wound.

18. Dr. Kappeler used the clamp in three cases, the ligature, cut short, in the remainder. One clamp case died in eighty hours from acute obstruction, due to adhesion of the transverse colon to the pedicle; another died through hæmorrhage from the pedicle after violent retching; another from peritonitis. One ligature case died of peritonitis.

19. M. Dupont makes no reference to antiseptic precautions. Of the three bearing the words "ligature perdue" instead of "clamp", one, that recovered, is described as "fibrocyste utérin"; the second, a multilocular cyst, without adhesions, recovered; the third, a similar case, died of "hæmorrhage from the pedicle and peritonitis". With the clamp, M. Dupont had better results; one successful case was a "fibrocyste utérin".

20. The fatal case of Dr. Ziegler's had already undergone an operation, by another surgeon, for the removal of one ovary, apparently a cystic sarcoma. There was malignant deposit in the abdominal wall.

21. M. De Montet is described by a colleague as having "performed two ovariectomies in young subjects, two recoveries, no antiseptics"; and M. Michaille (No. 25 in the list) "performed one last year" (1880)—"cured, same luck as M. De Montet."

22. Dr. Schläpfer's solitary case was precisely similar to that which fared unluckily under Dr. Ziegler, being a second ovariectomy, with malignant deposit in the abdominal walls.

23. M. Piachaud describes his case as "cyst of the ovary with much ascites and a certain amount of surgical peritonitis". The cyst burst during the operation, much of its contents escaping into the peritoneal cavity.

24. M. J. L. Reverdin employed a catgut ligature; the case died of septic peritonitis on the tenth day.

It being ever the aim of the British Medical Association to encourage collective investigation, I doubt not that its members will sincerely desire that Professor Kocher's example in collecting statistics of this kind should be followed in Great Britain and Ireland. If a few metropolitan and provincial medical gentlemen in this country adopted a similar method, statistics of incalculable value, concerning all major operations in surgery, could be collected in a very short time. The different operations for partial or complete extirpation of the uterus particularly need publicity of this kind, down to the very minutest points of detail.

MEDICAL BENEVOLENT FUND.—At the annual general meeting of the subscribers to this fund, the following resolution was carried: "That the very best thanks of this meeting be given to Mr. Ernest Hart, Editor of the BRITISH MEDICAL JOURNAL, for his continued services to the fund."

CASE OF OPTIC DISTURBANCE, PROBABLY FROM INTRACRANIAL TUMOUR.*

By A. R. SAUNDERS, M.B., F.R.C.S., Kingston, Jamaica.

MR. J. E. consulted me, some weeks ago, respecting his eyes. About eight years ago, he was under the care of Mr. Swanzy of Dublin, for paralysis of his right third nerve, which was thought to be due to syphilis, though no constitutional symptoms, other than some slight glandular enlargements in the groin, had manifested themselves then, nor have any appeared since.

On examination, I found, in the right eye, slight drooping of the upper lid, the folds of which were obliterated; the eyeball was prominent, the sixth nerve paralysed, consequently there was inability to rotate the globe outwards, though the strabismus was slight, because of paresis of the third nerve; the movements of the globe upwards, downwards, and inwards, being very slowly and imperfectly performed. The pupil was dilated, did not contract on exposure to light, but contracted readily on convergence. There were several blind spots in the visual field, but there was no apparent diminution of its area. Perception of colours was normal. On ophthalmoscopic examination, a well marked myopic crescent was seen; the margins of the disc, particularly on the inner side, were ill defined, raised, and irregular in outline, the vessels in places covered by exudation, but not much diminished in size. The refraction was myopic. Vision = $\frac{20}{40}$ with - 1.25 D.

In the left eye, there was paralysis of the superior, inferior, and internal recti muscles, and of the inferior oblique, but not of the superior oblique, nor of the external rectus; therefore external strabismus, with the cornea directed outwards and downwards. Cycloplegia was so complete as to cause total inability to read ordinary type, though this was readily effected by + 4 D. There was no contraction of the pupil, which was widely dilated, either on exposure or on convergence. Ophthalmoscopically, the fundus and disc appeared normal, though possibly there was some fulness of the vessels, a condition not uncommon in hypermetropia. Vision = $\frac{20}{40}$ with + .5 D.

There was, of course, crossed diplopia, and the images did not lie in the same horizontal plane.

There are several points of interest in this case. The anisometropia, or unequal refraction in the two eyes (the right being myopic, and the left hypermetropic), is a very uncommon condition, and one not easily rectified by glasses; since, though it is easy to correct the refraction, it is almost impossible to harmonise the accommodation and the convergence. In the right eye, there is what is called the Argyll Robertson symptom, *i.e.*, contraction of the pupil on convergence, but not on direct exposure to light. This symptom was found by Dr. Argyll Robertson in cases of paralysis of the radiating fibres of the iris, due to lesion of the cervical sympathetic, and was supposed by him to be due to arrest of function in the sympathetic, on the assumption that the contraction of the pupil, when exposed to light, was not effected solely by contraction of the circular fibres of the iris produced by a stimulus from the third, but partly by loss of action of the radiating fibres, resulting from arrest of function of the sympathetic. Such an action as that attributed to the sympathetic would be physiologically quite unique. If it were the case, myosis and this peculiar symptom would be coincident; but, in one case of Dr. Grainger Stewart's, the pupil was of normal size; and in another quoted by him from Wernicke, it was not contracted; here mydriasis was associated with it. Wernicke has advanced the view that it is due to lesion of the nerve-trunk connecting the centres of the second and third nerves; reflex action is interrupted with, more or less, though central stimuli are readily transmitted. Dr. Grainger Stewart thinks that there are different centres for these fibres of the third nerve, so that the contraction of the iris on convergence, and for the slow contraction of the iris on exposure to light. In the present case, the cause appears to be rather some lesion of the nerve-trunk, which, though it tends to prevent the transmission of the reflex stimulus, yet allows the conduction of the direct stimulus, emanating centrally. The lesion in this case is almost certainly one of the nerve-trunk itself, and not of the sympathetic, as the latter is not a motor nerve, and it is more marked on one side of the disc, the result, therefore, of partial involvement of the nerve-trunk; so that, being of the same nature, and the third nerve, a smaller contraction of the second is needed to produce the reflex stimulus, and the power of the second is more powerful than if the second were intact. In the left eye, where there is no contraction on convergence, and only of the third nerve, a smaller contraction of the

prevent the conduction of either central or reflex stimuli. This explanation is supported by analogy, since nerves recovering from certain paralytic conditions are capable of conveying mental, before they can conduct electrical, stimuli; under diseased conditions, their electric conductivity is also variously altered. It is also well known that conductivity for certain rays of light is lost before that for others; *e.g.*, in cases of colour-blindness from optic atrophy, perception of green is first lost, then that of yellow, while that of blue disappears last. Under certain conditions, too, sensations of touch, temperature, and pain, are conveyed with varying facility, or the power of transmission of some may be altogether lost, while that of transmitting others remains.

The Argyll Robertson symptom has been likened to the absence of the patellar tendon-reflex; in both, power of reflex movement is lost, while that of voluntary motion remains. The paralytic eye-symptoms in this case might be due to locomotor ataxy, disseminated sclerosis, or diffused syphilitic gummata at the base of the brain. The absence of lightning pains, of anaesthesia, of loss of muscular sense, of inco-ordination of muscles, of gastric and other crises, and the presence of the patellar tendon-reflex, exclude ataxy; though the neuritis, temporary ptosis, oculo-motor paralysis, and the Argyll Robertson symptom, occur in this disease. The absence of vertigo, nystagmus, rhythmical tremor, and paresis of limbs, with the duration of the symptoms, exclude sclerosis. I think that there can be but little doubt that multiple tumours, involving the nerves at the base of the brain, are the cause of the symptoms, and that these tumours are syphilitic gummata.

CASE OF LOCOMOTOR ATAXY: STRETCHING OF THE SCIATIC NERVE.

By H. E. SPENCER, L.R.C.P. Edin., York.

A. B., aged 30, general labourer, came under my care in March 1880. He stated that, in very early life (at fifteen years of age), he had been led into all kinds of excess, drinking and indulging his sexual passion to a frightful extent. Still, he did not contract venereal disease. But, about the age of seventeen, he began to notice an irregularity in his gait—having to calculate each step. He also observed a loss of feeling in his soles. Previously to this, he had "slight touches of the rheumatics", but "nothing to notice". The irregularity of gait became more and more marked, though he did not feel any loss of strength in his legs; but he did not think he was any worse then than he was four years before he consulted me. There was no family history of nervous disease. His "present state" was this. He was quite unable to walk without support. He brought up his feet with a flourish, and down again with a clumsy stamp. The least touch threw him off his balance, and he could not turn round without much trouble. He could not stand at all with his feet close together. There was no loss of power in the limbs; but there was much anaesthesia. Patellar and plantar reflexes were both absent. The characteristic pains of locomotor ataxy were absent, and there was no nervous or other trouble elsewhere. He was a man of powerful build, and in excellent general health. He articulated the liquids with some hesitancy; but he had always done this ever since he began to speak at all, and it always disappeared when he spoke in public—he being an energetic platform orator for the cause of total abstinence.

Sixteen months after the above notes were taken, I decided to try the effect of nerve-stretching, as no change whatever was to be perceived in him, and he regarded himself as a hopeless cripple. On July 7th, therefore (Messrs. Weekes and Kirsopp assisting me), he was placed under the influence of chloroform, and the left sciatic nerve stretched, under antiseptic precautions. It was first pulled steadily and vigorously downwards, and then upwards; and, finally, passing my fingers under the nerve, I lifted up and held the entire weight of the limb suspended by the nerve for about a minute.

On the following morning, there was complete return of plantar reflex on both sides. A week after the operation, I got him out of bed, and enabled him to walk across the door. There was now a marked difference between the two sides. The movements of the left limb were now nearly normal, while the right remained as before. He stood pretty firmly on the left foot with a slight support; while, if he attempted to do so on the right, he reeled over at once. There was also much increase in sensation on the left side. Patellar reflex was still absent. A month afterwards, however, this difference had disappeared, and everything was as bad as ever again. I therefore, of course, abandoned the idea of operating on the right nerve, as I should otherwise have done. Yet, I think the result instructive. We had to deal with a case in which pain was absent, and in which we had simply to test the effect of the operation on muscular co-ordination. The interesting

* Read before the British Medical Association.

points in the case are the restoration of plantar reflex, and the temporary improvement, both in sensation and motion, of the limb operated upon. The operation itself was followed by no bad consequences, either local or general.

SURGICAL MEMORANDA.

EXCISION OF THE KNEE IN EARLY LIFE.

AMONG the Surgical Memoranda published in the BRITISH MEDICAL JOURNAL of the 31st ult. appear some kind and appreciative remarks by Mr. C. Macnamara on a recently published paper of mine on early excision of the knee-joint. According to Mr. Macnamara, the reason why there is such a remarkable difference of opinion as regards the propriety of early excision of the knee, between the metropolitan surgeons, and those perhaps not so fortunately situated, is mainly due to the fact that the former can send their patients to convalescent homes, many of which are "situated in healthy seaside localities". The effect of a residence at one of these "homes" has, he says, been attended with the most signal benefit to many of his patients afflicted with articular disease, so much so as to render excision or other operative measure unnecessary. I regret that my experience in this matter does not coincide with that of Mr. Macnamara. In a convalescent home near Dublin, at Blackrock, than which no situation more healthy could possibly be imagined, and where the greatest care is taken of the patient, I have not seen those remarkably favourable effects on joint-disease resulting from a residence there.

The necessity for excising a thin slice from the ends of the bone when the disease is confined to the synovial membrane, Mr. Macnamara does not see. The reason why I did, and do still, advocate this practice is, that the probabilities of getting firm union between the bones are increased. In truth, by leaving the articular ends of the bone intact, it is hard to understand how satisfactory union could take place. Notwithstanding Mr. Macnamara's able advocacy of incision and drainage, I cannot alter my view that, as a treatment for extensive pulpy gelatinous thickening of the synovial membrane of the knee-joint, it is unsatisfactory.

Although I regret that some of the views put forward in my paper do not meet with Mr. Macnamara's approval, it is still a source of much pleasure to me that the paper proved of interest to him, as he has deservedly become a high authority on all matters connected with osseous and articular disease.

WILLIAM STOKES.

CLINICAL MEMORANDA.

THE GEOGRAPHICAL DISTRIBUTION OF GOITRE IN ENGLAND.

THE admirable articles of Dr. Low, on the Etiology of Goitre, which have appeared in the last two numbers of the JOURNAL, might suggest to the newly appointed Collective Investigation Committee a subject for their first essay on the geographical distribution of disease, as goitre rarely figures in the returns of the Registrar-General (although I have seen death result from its rapid development), and is a disease of great interest and importance from the obscurity which envelops its etiology. Or the Association, out of the abundance of its funds, might make a small grant, and invite Dr. Low to reduce his views to the form of a schedule for distribution in other parts of the country, or, at any rate, in the county of York. I urge this measure, because I fear his careful investigations, if left where they are, will only confirm the common, but, I believe, erroneous, belief, that goitre is a very local disease, confined to hilly districts. Some years ago, I was, for a short time, resident medical officer to the York Dispensary, and for a long time house-surgeon to the York County Hospital; and I saw a large number of goitrous out-patients at these institutions. The majority of the cases came from the villages in the low country to the east and south of York—the districts extending from Helmsley to Selby—while comparatively few cases came from the west (Tadcaster district), and still fewer from the north (Thirsk district). I know the Helmsley district pretty well, and I know the western slopes of the Hambleton hills very well indeed; and I do not think there is much difference in either the physical conformation or the geological formation of the two districts; but goitre is very rare in the western, while Dr. Low has shown that it is very common on their southern slopes. They are both on the margin, but well outside of the great Cleveland iron-fields, where, indeed, I know, goitre is of comparatively rare occurrence.

With respect to the racial characters of these districts, I think Dr. Low is in error in stating that the inhabitants of his district "are

descendants of the ancient Britons, with a 'dash' of Scandinavian blood in their veins". He might reverse this statement with more probability of truth. The people of the greater part of the North and East Ridings are Scandinavian, with the very faintest dash of ancient British, and with a much larger dash of Anglian blood in their veins. The Anthropometric Committee of the British Association have found the average stature of the male adults in the two Ridings to be 69.08, a small fraction below that of the Helmsley volunteers given by Dr. Low, which body must be, to a slight extent, selected men. Where the ancient British blood is represented, the stature is much lower, as in Chester, Salop, and Gloucester, where it is represented by 66.50, 66.33, and 66.31, respectively.

I may add that we were very successful at York in the treatment of goitre when it was not of very long standing. Our treatment consisted of the administration of tolerably large doses of iodide of potassium, and the frequent blistering of the thyroid gland, together with a constant application of the iodide of lead ointment. It was to Dr. Hughlings Jackson, one of my immediate predecessors, that I was indebted for this line of treatment.

CHARLES ROBERTS, F.R.C.S., Bolton Row, Mayfair.

P.S.—With regard to the distribution of goitre, I think too little importance is attached to its hereditary transmission.

PEMPHIGUS.

IN the JOURNAL of January 21st, 1882, Dr. Main quotes a case of pemphigus occurring in his student days, in which the patient was covered from the crown of the head to the sole of the foot with bullæ. I had a case last year of a similar sort; there was not a square inch on the body of the patient devoid of bullæ, head and face, feet and hands, included. I looked upon the case at the time as unique; for, on looking through many medical books on the subject, such a case was not described, and gave one the impression that the bullæ never exceeded one hundred in number.

I treated the case with sarsaparilla and liquor arsenicalis at first, and latterly with tincture of perchloride of iron and liquor arsenicalis, gradually increasing the arsenic, till the patient took fifteen minims three times a day. The patient quite recovered from the pemphigus in about six weeks, and he went to a public institution, subsequently, to be treated for the ensuing debility. I never treated it as a syphilitic disease, or possibly it might have recovered sooner. The patient was a lad aged 17.

A. H. BOYES, M.R.C.S. Eng., L.R.C.P. Ed., Lodway Villa, Pill, near Bristol.

OBSTETRIC MEMORANDA.

A COMPLICATED MIDWIFERY CASE: EPILEPTIC CONVULSIONS: INVERSION OF UTERUS.

THE following case possesses many points of interest, not the least being the power shown by the human frame to recover after the most violent strains and shocks.

Celia R., aged 44, wife of a quarryman, and mother of eight children, commenced her ninth labour on Monday night, December 12th, having engaged a supposed "midwife" to attend her. She continued (according to the midwife) in strong labour until the night of Wednesday, the 14th, when, epileptic convulsions having set in, the husband called me in.

When I arrived, I found her in strong convulsions, taking two persons to hold her. On examination, I found the head of the child well in the vagina; and without any difficulty I used the short forceps and delivered her. The placenta came away in about twenty minutes' time, without any tension whatever being used. She remained insensible for some time, but had no return of the convulsions. The next day, I found her going on very favourably, and, except that I had to use the catheter, gave no cause for any anxiety. At my visit on Monday, December 19th, I ordered a dose of castor-oil, which the midwife, who was still in attendance as nurse, gave her. About five o'clock the same day, I received a very urgent message to go up, as "there was another baby coming, which the nurse could not get away". When I arrived, more than one hour had elapsed; and during that period I found that the midwife, still persisting in her idea of another child, had been continually "hauling" at its supposed head, until made to desist by the cries of the patient and the interference of her neighbours. Upon inquiry, I found that, when the oil given in the morning was about to act, this midwife had made her unfortunate patient get out of bed and have the action of the bowels in a standing position and leaning over the back of the chair, when, as the patient afterwards informed me, she soon felt something give way and fall.

Sometimes, Mr. Cowell observed, are accustomed to the marvellous neglect of symptoms which is common amongst hospital patients; but, in this case, a man, after serious warning, habitually neglected to wear the truss that was provided for him; permitted the hernia to increase to an enormous size; continued at his work after the more serious symptom of strangulation had set in; and refused to go to hospital until it was too late.

This morning, however, I have not the usual "stomach trouble," noted by me on many occasions more than in 1896. For several years the stomach has seemed a regular nuisance. I have, at the best, only one, that case of indigestion, in 1896, and 1898 and 1900. It is not there was any doubt of my stomach trouble, which in 1896 was still a "stomach trouble." I have never felt better, and I am far from good, than in 1896, when I was "stomach trouble" by the name of "stomach trouble," which has the "stomach trouble" of a "stomach trouble" in the matter, is the case of a "stomach trouble" in the "stomach trouble."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 24TH, 1882.

A. W. BARCLAY, M.D., President, in the Chair.

On Hernia of the Ovary. By ROBERT BARNES, M.D.—The author said that scanty advantages had been taken of the opportunity which the ovary, brought to the surface of the body, offers for physiological observation. He cited in abstract some of the most marked cases of hernia of the ovary which have been published, notably those of Goucy, Fott, Desault, Lallemand, and Poquet, Deneux, Veboux, Cesar Hawkins, Oldham, Holmes Coote, Oettingen, Meadows, and Lawson, Courty, Leopold, Beigel, Boinet, Rheinstädter, and Raffo, and related two cases observed by himself. The first case was admitted by him into St. George's Hospital in 1877. The patient, a single woman, aged 41, had always enjoyed good health. At 24, she sustained a rupture in the left groin and wore a truss; at 38, she observed a second swelling behind the first. The swelling and tenderness of the ovary were observed before and during the menstrual periods. Corresponding sphygmographic observations showed distinct rise of tension preceding the flow, and subsiding when the flow set in. The ovary was removed. A description and illustration of it were submitted by Dr. Goodhart. Dr. Barnes referred to Dr. Chambers's case in the *Obstetrical Transactions*, in which bodies simulating ovaries turned out to be testicles. He discussed the etiology of hernia of the ovary and uterus, citing Cruveilhier's views. He referred to the frequent complication of anomalies of development of the genital organs in association with hernia of the ovary; also with extra-uterine gestation. He enumerated the varieties of hernia of the ovary, and referred to the supposed greater frequency of inguinal hernia when the ovary was concerned; to the greater frequency of congenital hernia; the complications with intestine and epiploon; the dependence of hernia of the uterus upon pre-existing hernia of the ovary, citing Cruveilhier's theory and the confirmatory conclusions of Puech, Deneux, and Cesar Hawkins. The author then discussed physiological points, illustrated by the observation of the herniated ovary; how the ovary swelled concurrently with increased tension of the vascular system before menstruation; how the round ligaments swelled. He discussed the order in which the phenomena of menstruation occurred, arguing that the ovarian nissus was the *primum mobile*, that nervous and vascular tension followed, and lastly, the menstrual flow; resting greatly upon sphygmographic observations. He suggested that the recent practice of oöphorectomy on Battey's principle would supply opportunities for deciding this and other questions; and proposed that sphygmographic observations should be made upon the subjects of this operation. He then discussed the diagnosis and treatment of hernia of the ovary, contending that it furnished a legitimate motive for Battey's operation *quoad* this affection at least. The paper was illustrated by sphygmographic tracings by Dr. Fancourt Barnes; by drawings of the amputated ovary by Dr. Goodhart; and by a cast of the parts by Dr. Harper.—Dr. ROUTH said that such cases as those described by Dr. Barnes were important, not only as indicating the symptoms of ovarian hernia, but as contributions to the history of menstruation, which no doubt began in the ovary. He had, however, observed some symptoms to which Dr. Barnes had not referred, in cases in which the ovary had fallen into Douglas's pouch; especially on the left side. In one case, that of a young lady, who had a displacement of the ovary into the left side of Douglas's pouch, where it had become adherent, pressure on the ovary caused sexual excitement. This, if observed in hernia of the organ, would be an additional means of diagnosis. Another symptom observed in these displacements was, that pressure on the ovary produced a feeling of sickness like that arising from pressure on the testicle.—Mr. HULKE said that cases of hernia of the ovary were rather frequently met with by surgeons. Of course, care was necessary in making a diagnosis. In 1871, 38 cases of hernia of the ovary were recorded and classified by Englisch of Vienna (see *Biennial Retrospect* of New Sydenham Society, 1871-72). Of these, in 27 the hernia was inguinal; and in 9 of these the displacement was on both sides. In most of the inguinal cases, the hernia was congenital. As regarded the absence of any process of peritoneum in one of Dr. Barnes's cases, this might have existed and have become atrophied. In congenital cases, it appeared that the ovary was almost always accompanied by the Fallopian tubes; while, when the hernia was acquired later in life, the ovary generally came down alone. In many of the recorded cases, a distinct tubular process of peritoneum was described. As regarded operation, each case must be judged on its own merits. He had seen

cases where a lightly fitting truss produced no discomfort to the patient, while in others it could not be borne.—Mr. LANGTON referred to the difficulty of diagnosis. At the Truss Society, among more than 4,000 cases of inguinal hernia in women, there were 67 cases of hernia of the ovary. Of these, 42 were congenital, and in 25 the displacement occurred at various ages. The ovary was reducible in 29 of the congenital cases, and in 27 of these the patients were quite relieved by the use of a truss; the other two did not report themselves, and were probably cured. Of the cases in which the hernia occurred later, 8 were reducible and 17 irreducible; the proportion being the reverse of that in congenital hernia. The conditions of the ovary during the menstrual periods varied. In some, there was swelling of the ovary with effusion of fluid, which became absorbed; but, when the hernia had been first observed between the ages of one and twelve, no such excitement of the ovary was developed. The application of a truss gave relief in most cases; in none were there any indications for operation.—Dr. HEYWOOD SMITH said that it was very rare to find sexual excitement produced by pressure on the ovary; pressure generally caused pain of a sickening character. Might not the sexual excitement in Dr. Routh's case have been caused by irritation of the pudic nerve, in consequence of the adhesions to the pelvis?—Dr. BARNES thought that the remarks of Mr. Hulke and Mr. Langton tended to confirm the opinion of Cruveilhier that most cases of hernia of the ovary were congenital, and that the displacement was most frequent on the left side. He had not met with any cases in which distinct sexual excitement was produced by pressure on the ovary. He thought that the greater frequency of displacement in Douglas's pouch on the left side was caused by the round ligament and the ovary being more lax there than on the right.

OPHTHALMOLOGICAL SOCIETY OF GREAT BRITAIN.

THURSDAY, JANUARY 12TH, 1882.

WILLIAM BOWMAN, F.R.S., President, in the chair.

A Case of Acute Vascular Disease, with Retinal Hæmorrhage.—Dr. STEPHEN MACKENZIE read a very carefully recorded history of a case of this nature. The patient was a young blacksmith, aged 28, not overworked, getting meat three times a week, and vegetables daily, and in large quantity on Sundays. Four days before admission, he was attacked with swelling, pain, and bleeding of the gums, and abundant purpuric spots on the skin. At night, he vomited bloody fluid, and became delirious. On admission into the London Hospital, he was well nourished; there were numerous hæmorrhagic extravasations on the skin, but no subcutaneous or intermuscular extravasations; the gums were spongy, bleeding, and sloughy; there were extensive hæmorrhages into the retina, and some vitreous extravasations. There was a high degree of anæmia (corpuscles, 24.9 to 27.5 per cent.; hæmoglobin, 25 to 22 per cent.), and the temperature was high (maximum, 103.6° Fahr.). The disease ran a rapidly fatal course; antiscorbutics were of no service, and transfusion caused a rally of but very short duration; death occurred within a week of the onset. The body decomposed so rapidly after death that the necropsy threw little light on the nature of the disease, revealing only subarachnoid and subperitoneal hæmorrhages. The case was brought forward on account of the rapid and large retinal hæmorrhages, and also to raise the question of its nature. Dr. Mackenzie, after passing in review the most important vascular diseases attended with retinal hæmorrhage—namely, scurvy, idiopathic anæmia, hæmophilia, and purpura hæmorrhagica—said that he thought the case fell under the last head, though it was peculiar in that there was a condition of the gums similar to that seen in scurvy. This seemed to him to indicate that spongy gums had not the specific significance usually attached to the condition—a view which was supported by a case of idiopathic anæmia, in which the gums were swollen and bleeding, brought before the Society by him in the previous session.

Case of Double Optic Neuritis, following Purpura.—Mr. LAWFORD communicated this case, which had been under the care of Mr. Nettle-ship, at St. Thomas's Hospital. The patient was a girl, aged 12. During the greater part of the summer of 1880 she suffered from purpura; the purpuric eruption appeared in crops, a new crop being discovered on rising in the morning; she had several severe attacks of epistaxis, but no hæmorrhage from other sources. When admitted, on March 16th, 1881, there had been no purpura for many weeks; she had experienced some pain in the right eye, which was followed by loss of sight. She was sent to the hospital by Dr. McDonald, because she had lately begun to experience a similar pain in the left eye; at that time, the right eye had perception of light only, while the left had $\frac{2}{3}$ and 1 finger. The ophthalmoscope revealed neuritis, with fine striated hæmorrhages, on the disc on the right side, and commencing neuritis on the left side.

A week later, the swelling of the left optic disc had increased ; the right disc was clearing rapidly. There was some disturbance of vision of colour in both eyes. Four days later, vision had greatly improved in the right eye, but it had markedly deteriorated in the left eye ; the right disc was nearly clear, and the left was beginning to clear. From this date, vision in each eye rapidly improved—so that, on May 7th, she could read 12 lines with either eye. She was examined on the day of the meeting : vision was then normal in both eyes, and ophthalmoscopic examination revealed no definite deviation from the healthy state. Optic neuritis was quite rare, if known at all, with purpura ; and, in this case, it was debated whether any causal relation existed. The interval of time and degree between the changes at the discs and the state of vision, together with the history of pain referred to each eye shortly before the failure of sight, probably pointed to the ascending rather than the descending type, rather than a descending neuritis. In the discussion, Dr. S. J. Mackenzie, Mr. Lawford said that there was no heart-disease.—Dr. STEPHEN MACKENZIE, in reply to several questions, stated that there was no evidence of any infective disease, and that he did not attach any great diagnostic importance to the high temperature ; it was commonly met with in various forms of severe anaemia. In Mr. Lawford's case, he was led, by the manner in which the spots appeared in crops at night, to regard it as a case of peliosis rheumatica : the neuritis followed so long after the eruption that he doubted whether there was any good reason for connecting the two, though it was worthy of note that, in his case, Mr. Wilson had observed the swelling of one disc.

Case of Epithelioma of the Cornea.—The patient, a man aged 50, had been suffering some time from a tumour on the cornea. In September 1877, Mr. ADAMS saw him. It grew from the conjunctiva a small, hard, lobulated growth, which extended from the outer and inner part of the ciliary region on the right side, and overlapped the cornea. No further trouble occurred until the following year, when a tumour appeared at some distance from the site of the former one. It grew rapidly, and, on September 3rd, 1881, the globe was extirpated. On microscopical examination, the growth proved to be undoubtedly an epithelioma, though it showed some tendency to penetrate the deeper tissues. The fact that the growths were situated at different points of the cornea induced Mr. ADAMS to excise the globe in these cases, he still felt that repeated removal of the growths would be attended with the same results as the use of chloride of silver, viz., the recurrence of the tumour, since it was possible sometimes thus to eradicate the growth.—Mr. ADAMS said that he had removed the growths after the first operation; but now somewhat regretted that he had not removed them with the globe. At the time he regarded the removal of the growth merely as a palliative measure.

[illegible][illegible]

and he suggested this fact might account for the site of the chancre being exactly the same in the two cases referred to.

Trans. Med. Ch. Soc..—Mr. NETTLESHIP read the case of a woman who had suffered partial dislocation of the lens in one eye, owing to an accident; and when first seen, three years later, was suffering from diabetes. There was then partial cataract in each eye, but more advanced in the injured one. Afterwards, the displaced lens made much slower progress towards complete opacity than the other. The question was: whether the rupture of the suspensory ligament by injury prevented the diabetic state from having so great an influence on the lens in the injured as in the sound eye.—The PRESIDENT suggested that as, when the lens lost its natural connections, the normal processes of nutrition went on less rapidly, so, under the same condition, it might be less affected by any morbid state.

Mr. McD. M. HAY exhibited and explained a new perimeter, made for him by Messrs. Pickard and Curry. He claimed that it combined most of the advantages of other perimeters; that it was more portable; and especially that the automatic recording apparatus, which last year by Dr. Stevens, was here rendered simpler and more effective.

Card:

Lacrimal Gland.—At the last meeting of the Society, Mr. HENRY POWER and Mr. JULER showed a patient with a tumour of the lacrimal gland. The tumour was removed on December 22nd, 1881, and proved, on microscopical examination, to be a fibro-sarcoma. The patient, who was in attendance on this occasion, also presented slight ptosis of the left eyelid; the cicatrix was firm, and there was no evidence of recurrence.

Case No. 100.—This patient, a girl aged four years, was examined by Mr. HENRY POWER and Mr. JULER. A whitish lobulated tumour grew apparently on the lower and outer part of the ciliary processes, and projected into the vitreous body, behind the lens. The retina was extensively infiltrated with deposit, which extended to and included the disc.

HARVEIAN SOCIETY.

JANUARY 5TH. 1882.

HENRY POWER, M.B., F.R.C.S., President, in the chair.

Mr. FIELD related several cases, in which he had successfully removed the growths from the roots of the Anterior dental engine, drilling through the growth—thus making a permanent opening. In other cases of pedunculated osseous tumours, exostoses, made up of bone, were removed from them with stump forceps, such as are used by dentists for the upper jaw. In some of the patients referred to, the growths were removed entirely. In the case of multiple growths, the removal was partial; but the patient's appearance was left unaffected. Of the tumours, which, growing from opposite sides of the canal, became wedged together—so that the aperture was not perceptible.—Five patients, with ivory exostoses, were accustomed to bathe regularly in the sea. From this fact, he was led to conclude that the disease, instead of being principally due to gout, rheumatism, or syphilis, or being influenced thereby, is more often the result of a local inflammation of the canal, and of a gradual mental such as would be produced by a foreign body in the presence of pus in the canal.—Dr. STEPHEN MACKENZIE asked if serious brain-symptoms ever followed the removal of the growths? Mr. FIELD answered that he never remembered a case in which they occurred, and a distress occasionally attended the operation, but that the worst cases were cured, and the patient recovered. Mr. LITTLE said that he had never met with a case in which serious brain symptoms followed the removal.

1. The first of these is the "2000-year-old" Egyptian Papyrus roll found in the tomb of Hunefer, a scribe who died about 1850 B.C. The roll is 18 feet long and 18 inches wide, and it contains 34 lines of text in hieroglyphs. The text is a list of 34 names of gods and goddesses, and it is written in a cursive script. The roll is made of papyrus, and it is the only one of its kind found in Egypt. It is now in the collection of the British Museum.

the peritoneum, while she was under the author's observation. Suppression of urine led to tapping of the peritoneum, which gave temporary relief; but she died with uræmic symptoms without further operation. The *post mortem* examination revealed very advanced granular disease of the kidneys, a large spleen, and an encysted dropsy, which had become general by breaking down of adhesions. The ovaries were healthy. Case 11 was that of a young girl, in whose abdomen a doubtful collection of fluid existed. It was a very difficult case for diagnosis; but, on the whole, the author leaned to the view that it was a case of flaccid cyst of the broad ligament. Abdominal section showed that it was an encysted dropsy of the peritoneum. The fluid was removed, the sac carefully sponged out, and the incision closed without drainage. The patient made a good recovery, the intestines gradually reoccupying the space where the fluid had been; and, when she was last seen, there was no appearance of reaccumulation. In his concluding remarks, Mr. Thornton urged the importance of the faithful record of rare cases, and pointed out that the knowledge of this disease was still too limited for it to be possible to lay down rules as to diagnosis. He would accept Peaslee's statement, that "encysted" dropsy of the peritoneum was always preceded and caused by peritonitis. The causes of the peritonitis were, however, very various. With regard to treatment, he thought it right to open the abdomen, and sponge out the sac, in any case in which the condition was diagnosed in a patient free from kidney-disease. Drainage was not necessary. He urged the advantage of incision, as compared with tapping; and spoke strongly as to the value of Listerism in abdominal section. At the Samaritan Hospital, in 1881, he had had forty-one cases of ovariectomy; he had not once drained, and had only had two deaths, both occurring in young patients, the subjects of malignant tumour.—Dr. BROADBENT mentioned a case of peritonitis, with dropsy, limited to the great omentum.—Dr. HARRIS also stated that he had seen a case of localised dropsy following childbirth.—Dr. HAYES said, after Mr. Thornton's success, he would be encouraged to operate in these cases, though he felt the whole difficulty lay in the diagnosis.—The PRESIDENT spoke; and Mr. THORNTON replied.

BORDER COUNTIES BRANCH.

OCTOBER 28TH, 1881.

S. GRIERSON, M.R.C.S.Eng., in the chair.

Amputation of the Hip-joint.—Dr. MACLAREN read a short account of three cases of amputation at the hip-joint. The first patient, a boy aged 10, had acute necrosis of the upper end of the femur. He died twenty-six hours after the operation from exhaustion consequent upon extensive intrapelvic suppuration. The second case, a boy aged 17, was one of chronic osteitis and subperiosteal suppuration of the femur. He made a good recovery. The third, a lad aged 20, had hip-disease of six years' standing. A large portion of the pelvis was subsequently removed. He made a slow recovery, and all the sinuses had not yet healed. He was able to go about and work at his trade. The method of removing the limbs was circular incision in two cases, anterior and posterior flaps in the other, all at the upper third; then an incision along the femur, and disarticulation. The advantages of this operation were: easy control of hæmorrhage; a small cavity in the centre; division of important structures, further from the trunk than by the old method; and diminution of shock. Davy's lever was used to control hæmorrhage in two of the cases, and answered admirably. In the other, which was a right limb, it could not be placed upon the common iliac artery; and Lister's tourniquet, supplemented by digital pressure, was employed.

The Treatment of Scarlet Fever.—Dr. HENRY BARNES, in introducing a discussion on this subject, first spoke of the prophylactic measures necessary for preventing a patient suffering from this disease from becoming a source of danger to others. The most essential of these were thorough isolation, and efficient disinfection. The unsatisfactory character of the experiments for the inoculation of the disease were referred to; and a hope was expressed that the infective germs might, at some early period, be identified and cultivated—so that the good results obtained by Pasteur, in splenic fever, might be also forthcoming in regard to scarlet fever. The medical and hygienic treatment was then considered. In mild cases, the necessity for great precautions against cold, and the risks of secondary complications, were insisted upon. The good effects of the blanket bath, and inunction with oil, in allaying irritation, reducing pulse and temperature, and conducing to the greater comfort of the patient, were pointed out. In discussing the treatment of graver cases, the unfavourable symptoms which the author had met with in different epidemics were alluded to, and the plan of treatment which he had found most successful in obviating these symptoms was described. The antiseptic salts of soda, especially

the hyposulphites, were prescribed in some cases with decided benefit. The indications for the use of quinine, pilocarpine, chlorate of potash, carbonate of ammonia, and other remedies, were detailed, and especial reference was made to the external use of cold water, in the form of either cold pack or of cold affusion. The applications to the throat which had been found most useful were, sulphurous acid and glycerine, liquor sodæ chlorinatæ, solution of nitrate of silver (five grains to one ounce), and the liquor calcis saccharatus—the latter especially in those cases where there was any tendency to the formation of false membrane. When the urinary secretion was scanty or suppressed, a condition which might continue sometimes for four or five days, the internal administration of benzoic acid produced good results. The sequelæ of the disease and their treatment were also shortly alluded to, special prominence being given to the treatment of the tubal nephritis.

REVIEWS AND NOTICES.

OBSERVATIONS ON THE LOSS OF SENSIBILITY, OR ANÆSTHESIA, IN FUNCTIONAL CONDITIONS, AND ON CORD DISEASE, ETC.
BY DAVID DRUMMOND, M.A., M.D. Newcastle-on-Tyne, 1881.

THIS essay, a reproduction of papers presented by Dr. DRUMMOND at different times to the Northumberland and Durham Medical Society, represents an attempt to treat of the various anæsthetic and analgesic phenomena met with in hysteria, and in diseases of the spinal cord, in a systematic way; and contains, therefore, as might be expected, many interesting and suggestive observations upon a class of affections in regard to the pathogenesis of which we have at present but little information.

In a brief physiological introduction, the author gives his adhesion to the opinion that the same terminal organs in the cutaneous and afferent nerves serve in common for tactile and painful impressions; and, further, that these are the same organs and channels which respond to thermal impressions.

In treating of sensation-conduction in the spinal cord, the theories advanced by Brown-Séquard, Schiff, Woroschiloff, and Wundt, are discussed; and, in order to explain the fact familiar to clinicians, that pain is more frequently abolished (analgesia) in nervous affections than the sense of touch, a hypothesis is suggested, founded on the theory that pain-exciting impressions are from habit accustomed to travel certain definite paths in the afferent regions of the spinal cord; that such impressions, when forced into a new channel owing to some obstruction, ascend through the unaccustomed paths with difficulty, and arrive at the sensorium so modified as simply to excite tactile sensations; while, since the whole of the afferent channels are habituated to their passage, no such opposition is offered to the conduction of tactile impressions.

In discussing the etiology of the affection, the opening passage is calculated to excite comment. "I would premise that an overwhelming majority of the cases of anæsthesia, using the term in its fullest sense, are of the hysterical variety. My observations on this point have led me to the conviction that analgesia—impaired sense of cutaneous pain—is the commonest phenomenon of hysteria, and its most faithful and frequent index, not excepting the globus, emotional manifestations, inframammary neuralgia, etc." If it be true that the hysterical condition can be recognised by the loss of cutaneous sensibility more certainly than by any other manifestation, the observation is to be looked upon as of considerable clinical importance; although the author, in describing in succeeding pages the modes of investigating sensibility, wisely adds a word of warning as to the necessity of much discrimination in this regard, and particularly insists upon the necessity of distinguishing between painful impressions originating in muscles and those arising from irritation of the skin.

Hysterical hemianæsthesia is spoken of as exceedingly rare, the analgesia frequently met with being either general or irregular in its distribution. Several interesting cases of the former variety of the affection are, however, mentioned.

In distinguishing hysterical anæsthesia from the organic variety, particular emphasis is laid upon the presence, as indicative of a functional origin, of analgesia affecting the skin, whilst a strong Faradic current causes pain by inducing contraction in the muscles; and, again, in hysteria it is not unusual to meet with abolished tactile sensibility, whilst thermal impressions are still appreciated. In organic anæsthesia, thermal and tactile sensibility, in their presence or absence, are generally associated. Subjective symptoms—paræsthesiæ—are, Dr. Drummond states, rare in functional cases; a statement referring, it is to be supposed, to true paræsthesiæ, and not to those peculiar morbid sensations that usually pass under that name, and which result merely

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 28TH, 1882.

THE MEDICAL ASPECTS OF THE OPIUM QUESTION.

ALTHOUGH the discussion on Sir Rutherford Alcock's paper, read before the Society of Arts, was limited to the political and commercial aspects of the opium controversy, it may be as well to consider briefly the medical aspects of the question, and to endeavour to arrive at a definite opinion as to the effects on the system of the habitual use of opium. Is opium-eating or opium-smoking necessarily and universally pernicious? If we are to believe the older writers on the subject, it is a custom as dangerous and degrading as it is possible to imagine. Until recently, much of our knowledge of the subject was obtained from non-medical writers, whose practice has been too frequently to describe the confirmed opium-debauchee plunged in the lowest depths of moral and physical exhaustion; and, having formed the premises of this argument from the exception, to proceed at once to involve the whole practice in one sweeping condemnation. But the question has of late assumed a somewhat different complexion; and it would appear, from the correspondence published in the *BRITISH MEDICAL JOURNAL*, in the course of last year, that the facts are susceptible of a different interpretation; and that, amongst those capable of forming an opinion on this vexed question, there is a growing belief that opium-taking is, after all, not such a very pernicious custom. The whole weight of trustworthy evidence—and professional evidence is alone trustworthy in such matters—is in favour of the moderate use of opium by the inhabitants of tropical climates, particularly by those who live in malarial districts, and whose diet consists chiefly of vegetables. Dr. Cullimore, for example, who lived long in China, Java, Singapore, and other places where opium is used, says that, although its continuous use might be considered by some pernicious, it is pernicious only in the sense in which Sir Wilfrid Lawson might speak of alcohol as being pernicious, or as an antitobaccoist might object to the use of the weed. Dr. James Burnes, in his *Narrative of a Visit to the Court of Scinde, and a Sketch of the History of Cutch*, gives the most convincing testimony of the comparative impunity with which opium is used in the latter country; and Crawford, in his *Dictionary of the Malay Archipelago*, expresses a strong preference for the use of opium, rather than of alcohol, as a habitual stimulant. Dr. Eatwell, who was for some years resident in China, states, as the result of personal experience, that the effects of the abuse of the drug rarely come under observation; and that, when such cases do occur, the habit has probably been induced by some painful chronic disorder, to escape from the sufferings of which the patient has fled to the great alleviator of pain. Marsden, in his well-known work on Sumatra, says that, among the Malays, the practice of opium-smoking is all but universal; the gold traders, who consume it in enormous quantities, are an active, steady, and laborious class, and are amongst the most healthy and vigorous in the island, rarely suffering in any way. Surgeon-General Moore, in a series of papers recently published in the *Indian Medical Gazette*, asserts that the anti-opiumists very greatly exaggerate the evil effects of opium; that opium in moderation is not injurious, but in some cases beneficial; and that it does less harm than

alcohol. Similar evidence reaches us from America. The New York correspondent of the *Chicago Medical Review*, in describing a night visit to the opium-dens of Chinatown, says he did not see a single person who exhibited the slightest indication that the habit had had an injurious effect; they were all, Caucasian and Mongolian, male and female, averagely healthy, and some of them were the picture of health. He adds: "There evidently has been a good deal of sentimental gush about the subject; I found the opium-smoker quiet, inoffensive, and inclined to an unobtrusive sociability". Dr. Kane, the Medical Superintendent of the De Quincey Home in New York, stated that, while he had treated hundreds of opium-habitues, who had used morphia hypodermically or by mouth, he had had occasion to treat but a single opium-smoker. Sir George Birdwood, in a recent letter to the *Times*, says: "I hold opium-smoking to be a strictly harmless indulgence, like any other smoking, and the essence of its pleasure to be, not in the opium itself so much as in the smoking of it. If something else were put into the pipe instead of opium, that something else would gradually become just as popular of opium, although it might not incidentally prove so beneficial. It was in this way that the Red Indians took to smoking willow-bark in place of tobacco, which was too costly for them".

It should be remembered that there is good reason to believe that opium-eating is common in many parts of England. The quantity of opium imported is far in excess of what would be required for strictly legitimate medical purposes. Dr. Murrell, quoting from a private communication received from a medical man near Cambridge, has shown that, in the Fen districts, the practice of opium-eating to ward off fever is habitual, that large quantities are often taken, and that there is no evidence to show that it ever produces any injurious effect. Sir George Birdwood has recently collected some remarkable evidence of the prevalence of opium-eating in this country, chiefly among the poor population about Tothill Street, and in the East End of London, affording the strongest proof possible of the impunity with which opium may be indulged in, and that it is conservative rather than destructive of morality. He mentions the case of an old woman aged 90, recently deceased, who to her last day earned her own living by manufacturing small wares in iron and tin. She began opium-eating at seventeen; and during the last nine years of her existence had been in the habit of eating daily 135 grains of opium. This, it should be noted, was Turkey opium; and the taking of Turkey opium as by the opium-eaters of Eastern Europe, or of laudanum as in this country, or of morphia as in America, is a different thing from eating or drinking Indian opium, which, from its comparative weakness in morphia, is rarely seen in Europe.

It is often supposed that the excitement produced by opium is similar to that resulting from indulgence in alcohol; but such is not the case, and they are in no way allied. If we contrast the furious madman suffering from delirium tremens with the prostrate debauchee, the victim of opium, or the violent drunkard with the dreamy sensualist intoxicated with his favourite drug, it must be admitted that the comparison is not in favour of the former.

THE WAR AGAINST SCIENCE.

THE detestation of science, which is so curious a phenomenon in the social and intellectual history of the day, is being carried on with uncompromising vigour by the antivivisectionists, who apply themselves with quite praiseworthy zeal to the perusal of our pages. We trust that, from time to time, they are rewarded by finding there much matter for edification. It is but natural that, in reading the *BRITISH MEDICAL JOURNAL*, and no doubt other medical journals, as these seekers after knowledge appear to do with minute and anxious care, for the purpose from time to time of framing indictments against medical science and against the medical profession, they find materials which they are able to use for that purpose. They have fallen foul, during the last fortnight, of Mr. Jonathan Hutchinson, *à propos* of a lecture published in the *JOURNAL* on the subject of the treatment of pemphig-

the districts that have established small-pox and fever hospitals, and "has taken account of such evidence as has been forthcoming about the advantages of these hospitals in preventing the extension of disease, and about the injury to health supposed to have been done by the hospitals to the inhabitants of adjacent houses". The results of Dr. Thorne's investigations are not even hinted at; but it may be supposed that his researches will be at least laid before the Royal Commission on Fever and Small-pox Hospitals, and that they will in this way be sooner or later available for the public.

The auxiliary scientific investigations undertaken by the board have heretofore been more of an abstract and not immediately profitable kind, though there are signs that Dr. Buchanan appreciates the necessity and importance of lending the best scientific aid to practical and every-day questions that urgently press for solution. Thus, in addition to Dr. Klein's researches into the minute anatomy of the lymphatic system, and to Dr. Thudichum's investigations into the chemical constitution of the brain, a beginning was made in 1880 of an inquiry, the value of which it is impossible to overestimate. The significance to be attached to current methods of chemical analysis of potable waters has long been matter for dispute, and the attempts of chemists to dogmatise on the purity or innocence of waters from certain of their chemical constituents, without knowledge of their physical surroundings, have sadly needed repression. This will, it is to be hoped, be furthered by the results of an investigation now being made in the medical department, as to the characters of samples of water purposely polluted with one and another material, but especially with the stools of enteric fever patients. This most interesting inquiry is in the hands of Dr. Cory, who, although not yet in a position to report on the whole results of it, has "already learned enough to show that these examinations were greatly needed, in correction of judgments commonly pronounced about the wholesomeness and unwholesomeness of samples of water that have been the subject of analysis". These significant words are probably the precursors of much that will astonish and confound the apostles of water-analysis; and it is on every ground earnestly to be hoped that, in view of the immense interests involved in the inquiry, its results may be made known as soon as completed, in anticipation of the probable appearance of Dr. Cory's finished report a year hence, in the next blue-book of the Medical Department.

We are glad to announce that Sir James Paget has returned to town in excellent health, and is actively pursuing his professional duties.

THE Conseil Municipal of Paris has voted the suppression of the *aumôniers* (officiating priest or chaplain) in all the Paris hospitals. It remains to be seen if the Minister for Home Affairs will confirm the vote.

THE statements which have been current as to the serious illness of General Garibaldi are founded on error; but we regret to say that he is reported to us as being still a great sufferer from rheumatism, and very thin and wasted. Reports from Naples state that he sleeps well, and that a consultation of the principal physicians of the city was to be held on his case.

At an inquest held at the prison at Maidstone this week, touching the death of two prisoners, it transpired that an epidemic of small-pox of a virulent nature had occurred within the prison walls. A government inspector has visited the gaol, and the authorities have taken the necessary steps to arrest, by revaccination, the extension of the disease.

AN inquest was held this week on the body of James Whitehead, who escaped from the Westhulme Hospital whilst suffering from confluent small-pox, and was refused admission into his father's house. The jury returned a verdict to the effect that greater supervision should be exercised in the management of Westhulme Hospital, and praised the conduct of Elijah Stott, who, when the police refused to move in the matter, took the deceased to the hospital in his cart.

A MEETING of the St. George's (Hanover Square) and Westminster Committee of the Charity Organisation Society will be held, by kind permission of Canon and Mrs. Farrar, at 17, Dean's Yard, Westminster, on Tuesday, January 31st. Mr. Johnston, of the Hastings Sanitary Aid Association, will on this occasion describe the work accomplished for the prevention of the spread of infection and its results, with a view to introducing the same system into Westminster. The chair will be taken by the Rev. Canon Farrar at 5 p.m.

MR. HOLLOWAY'S Sanatorium near Windsor, on which he has already spent £300,000, will probably be opened in May next. The institution will, it is stated, be endowed with £50,000. No patient will be permitted to remain an inmate longer than twelve months, no patient will be received whose case is considered hopeless, and no patient will be admitted who cannot pay the moderate charges which will be made, Mr. Holloway's announced intention being the assistance of the great body of the middle-class.

THE meeting of the hospital authorities, for the purpose of examining Dr. Howard's ambulance, recently presented by Mr. Crossman to the London Hospital, and of carrying out Dr. Howard's proposition for organising a hospital ambulance service for the metropolis, and telephonic intercommunication between the hospitals as well as all the police-stations, will be held at the United Service Institution on February 2nd.

THE next monthly conference of the London Society for the Abolition of Compulsory Vaccination will be held in Steinway Hall, 15, Lower Seymour Street, Portman Square, Marylebone, on Friday evening, February 3, at 7.30 o'clock, when the chair will be occupied by Dr. Andrew Clark, and a paper read by Dr. W. B. Carpenter, C.B., entitled, "The Increase of Small-pox Mortality in London during the Year 1880, without any corresponding Increase in other Parts of the Kingdom, a Reason—not for a Repeal of the Compulsory Vaccination Act, but for increasing the Efficiency of its Operation". Medical men holding different views on this vexed question have been invited.

HER Royal Highness the Princess Louise was present at a Christmas-tree entertainment given at the Victoria Hospital for Children on the 18th instant. The Princess kindly offered to distribute the gifts from the tree with her own hands, which she accordingly did, going round the various wards for the purpose, to the great delight of the little inmates of the hospital. The trees and their burdens of gifts were numerous and beautiful; one, in particular, named the nurses' tree, with its beautiful load, was presented by Mr. W. S. Gilbert, the well known dramatist. Mr. Grossmith kindly delighted the poor little patients with his amusing entertainment "A Visit to the Pantomime", which elicited shrieks of laughter.

VISIT OF THE EMPRESS EUGÉNIE AND PRINCESS BEATRICE TO NETLEY.

THE Empress Eugénie, accompanied by the Princess Beatrice, honoured the Royal Victoria Hospital with a long visit on Tuesday morning, the 24th instant. They crossed from Osborne in Her Majesty's yacht *Alberta*, and reached Netley shortly after eleven o'clock. The day was generally bright and sunny; but on Southampton Water, and almost confined to its limits, there was a sufficiently thick mist to cause the speed of the yacht to be considerably slackened. The Empress, with Princess Beatrice, and their respective suites, went through all the wards, and visited the nurses' quarters, the quarters for sick officers, and all the other principal parts of the building. The Empress's manner was observed to be particularly sympathetic when addressing some of the patients in the wards, as well as a wounded officer, who had received their injuries in engagements in South Africa. It was between one and two o'clock when the distinguished visitors left to return to Osborne.

a drug, comes under the proper restriction of the Poisons Act, is free from such restrictions when bearing the patent medicine stamp. The Director of Public Prosecutions has put this particular case to the legal test by prosecuting the vendors of Hunter's solution of chloral-hydrate, and a magistrate's decision has been obtained in favour of the view that chloral-hydrate must be considered as a poison under any circumstances, and that the Government stamp as a patent medicine does not relieve it from that character. The case is one of great importance; and, on the application of Mr. Besley, a case has been granted for the opinion of a higher court. We are very glad to see the authorities moving in this matter; for it is well known that a large number of narcotic poisons are sold as soothing or sedative cordials and medicines without being labelled as poisons.

BUTTERINE AND SOAPSTONE.

THE extent to which the manufacture of butterine has now reached may be estimated from the fact, that recent statistics, published in the United States by Mr. Nimmo, estimates the export of oleo-margarine, for the year ending June 30th, 1880, at nearly nineteen millions of pounds; and this certainly is not an under-statement—inasmuch as there is reason to suspect that a good deal of butterine is exported under the milder name of butter. About fifteen millions of pounds of this oleo-margarine went in 1880 to Holland, there to be converted into butterine, and the majority of it to be re-exported to this country. Just, however, as even parasites are infested by other parasites, so oleo-margarine, which is used to adulterate butter, is itself largely adulterated. It appears "an ingenious American has recently sought to place butter, as he calls it, on a soapstone basis, by which is implied that finely ground soapstone, added to the fat, will, in his opinion, make a marketable commodity". A writer in *Nature*, commenting on this device, says: "We are told, on high authority, that, if we ask for bread, we are not to be offered 'a stone'; neither should we be when we ask for butter."

WORKMEN'S CONVALESCENT HOMES.

AT a conference of delegates and collectors of the Hospital Saturday Fund, held this week, Mr. Samuel Morley, M.P., in the chair, the question was again discussed, of favouring the establishment for working men of one or two convalescent homes by the seaside or elsewhere, for the benefit of sick members of their class. Mr. Morley urged the utility of the work, but wisely observed that, if it were to be done at all in the name of the working man, it should be done by the working man, and not for him; and, if the meeting should decide upon sanctioning the proposal, strong co-operation would be needed. During the past few years, substantial progress has been made by the artisan class in the metropolis, and they have the power, if they be so disposed, to carry out such a work as this well. Ultimately, a resolution was carried, on the motion of Mr. Hamilton Hoare, pressing upon the collectors of the Hospital Saturday Fund the necessity for establishing such an institution for convalescents, and resolving to use every effort for the purpose of securing the funds necessary for carrying it into effect. It is very significant that, by way of starting the subscription, Mr. Hoare, an energetic and benevolent banker, promised to give twenty guineas; and offered fifty guineas, if any other gentleman would give a similar sum. This was rather a curious commentary upon the suggestion of Mr. Morley that, if the work were to be done at all, it should be done by the working men themselves, and not by bankers. The working classes are, we fully believe, quite prepared to undertake work of this sort by themselves and for themselves; and every effort should be made to let the working man see that the movement which is carried on in the name of the working classes is not too much nursed by their benevolent friends; but that they will be left to their resources, so that the smallness or greatness of what they do may show on the face of it. It is not fair to the working classes themselves, and it does not encourage that manly spirit of independence which it is desirable should be encouraged in them, that collections made in their name, and announced as workmen's funds, should include large contributions

by charitable persons who do not belong to the working classes. If any such auxiliary fund be needed, it should be separated. The present system of collecting in the streets, in the Stock Exchange, and from all willing to give various sums of money to a workman's fund, is deceptive, and not quite fair to the working classes themselves.

THE LATE MR. SOUTH.

THE following resolution was unanimously adopted at the last meeting of the Council of the Royal College of Surgeons: "That the Council do hereby express their sincere condolence with Mrs. South and her family in the loss they have sustained by the death of Mr. John Flint South, and do also hereby record their appreciation of the services rendered by Mr. South to the College as a member of the Council and of the Court of Examiners, and during the two periods of his holding office as President of the College."

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

THE following members are recommended by the present Council as officers and councillors for the year 1882. *President*: S. L. Rymer, Esq. *Vice-Presidents* (resident): J. Smith Turner, Esq.; C. S. Tomes, Esq.; H. Moon, Esq. (Non-resident): J. E. Rose, Esq. (Liverpool); Walter Campbell, Esq. (Dundee); William Doherty, Esq. (Dublin). *Treasurer*: J. Parkinson, Esq. *Librarian*: F. Weiss, Esq. *Curator*: S. J. Hutchinson, Esq. *Honorary Secretaries*: J. H. Mummery, Esq. (Foreign Correspondence): F. Canton, Esq. (Council); T. F. Ken Underwood, Esq. (Society). *Councillors* (resident): T. Chart White, Esq.; G. Wallis, Esq.; W. F. Henry, Esq.; A. Coleman, Esq.; J. Stocken, Esq.; J. Walker, M.D.; I. Lyons, Esq.; G. A. Ibbetson, Esq.; A. Gibbings, Esq. (Non-resident): T. J. Browne-Mason, Esq. (Exeter); W. Williamson, Esq. (Aberdeen); J. E. Palmer, Esq. (Peterboro'); W. Fothergill, Esq. (Darlington); A. Jepson, Esq. (Leamington); M. Magors, Esq. (Penzance).

A CASE OF EXHUMATION.

A CORONER'S inquiry has recently been held at Waddesdon, in Bucks, as to the death, from alleged medical maltreatment, of a child, two and a-half years of age. The child had been suffering from whooping cough and bronchitis, for which it was attended by a Mr. Williams, who appears to be a duly qualified, but unregistered medical practitioner. It died on October 22nd last, after taking three doses of a mixture sent by Mr. Williams, each dose being one teaspoonful. There was evidence to show that this medicine caused the child much pain. For some reason, which is not quite clear, Mr. Williams refused to give a death certificate, and the child was buried on the 26th October, unregistered; the vicar of the parish, in accordance with the Statute, reporting the fact to the registrar. Three days later another practitioner, Mr. Keene, was called in to attend another child of the family; and he, on being shown the medicine administered to the deceased child, expressed an opinion to the mother that the child had been poisoned; and he also subsequently told a police-constable that no doubt the child had died through poisoning. It would have been well if an inquest could have been then held; but the coroner does not appear to have seen his way to order an exhumation. Eventually, by the intervention of Mr. Keene, an order was obtained from the Home Secretary, and the body was exhumed. Its condition was, however, then such as to preclude the possibility of making a satisfactory necropsy. The medicine was analysed by Mr. Wanklyn, the county analyst, and was found to contain 1.6 per cent. of caustic ammonia; or each teaspoonful dose contained ammonia nearly equivalent to 9 minims of liquor ammoniac P.B. He was of opinion that the medicine was a very dangerous one for a child, and might kill it in a few minutes. Mr. Ceely, surgeon, had no doubt that the medicine would be deleterious, but whether it would have a poisonous effect he was not prepared to say. The symptoms which the child was stated to have manifested were consistent with death from whooping-cough and bronchitis; and he thought the quantity of prussic acid which had been previously

The Court took into their serious consideration the state of the casualty department. There have been, during the past fifteen years, constant complaints from the casualty medical officers, and from others within and without the hospital, that the department in question is grossly abused, so that the surgery is filled every morning with patients, a large proportion of whom are, for divers reasons, unqualified for relief. After due deliberation on various propositions which have been made to remedy the evil, it was decided at this meeting that an officer should be appointed, whose duty will be to inquire into the means and circumstances of patients applying for relief; power was also conferred on the medical officers on duty in the department to refuse advice and treatment to cases which, in their opinion, are of so trivial a nature as not to require hospital relief. The governors of St. Bartholomew's Hospital believe that, should these powers be judiciously exercised, the casualty department will soon be limited to a reasonable number of patients, no longer so numerous as to render proper attention to them impracticable.

THE SALE OF POISONS.

A PENDING trial has attracted much attention and elicited much comment in connection with the undoubtedly great facilities which the present law holds out for the commission of crime. An effort will perhaps be made in the ensuing session of Parliament to amend the law as to the sale of poisons by making it more stringent; but we may be sure that the chemists and druggists, and the pharmaceutical chemists, will strenuously resist any alteration which would tend to restrict their retail trade in poisons. So long as medical men have in their repertory of drugs such potent agents for good or for evil as strychnia and aconitia, it will be impossible to prevent such misuse of them as was exercised by Palmer and Pritchard. Any conditions prescribed by the Legislature can form but a frail safeguard to the public, if a member of our profession determine to poison a fellow-creature. In the case of aconitia and some other of the rare alkaloids, their legitimate use is at present confined to the medical practitioner and the scientist, and rigid precautions in this direction might safely be enforced. The most exact records of the sale, weight, and delivery of such substances should be insisted upon; though medical men engaged in the treatment of disease must, of course, not be restrained in freely obtaining such remedies where needed for the alleviation of human suffering. It is the abatement of the almost unrestricted, or but thinly veiled, sale of ordinary poisons to the lower orders which is most needed.

THE CASE OF CAROLINE TOMPSETT.

A MIDWIFE charged with manslaughter, by conveying puerperal fever from one patient to another, was acquitted last week at Maidstone. She had, it appeared, recently attended several patients who had the puerperal fever, so-called, and had been cautioned by Mr. Stamford of Tonbridge, and advised to disinfect herself. She continued attending fresh labours until one of her patients died. The judge left the jury to decide whether the prisoner had knowledge that the other woman whom she had recently attended had been suffering from a dangerous and infectious fever, and whether, if she had such knowledge, and had not taken proper precautions, she had not been guilty of criminal carelessness in attending the deceased as she had done. It was, he said, difficult, indeed impossible, to lay down a definition of culpable or criminal negligence applicable to every case. The acquittal was in accordance with the more recent knowledge on the subject, namely, that if due precautions be resorted to, such as washing the hands in carbolic solution and taking open air exercise, a "*bain d'air*", to use Professor Tarnier's words, obstetric practice may safely be continued by a midwife or practitioner who is attending a case of puerperal fever. The antiquated notion that puerperal fever results from a definite zymotic poison, and is an entity like typhoid fever or scarlatina, is rapidly being dispelled by the clinical experience daily gained in antiseptics, as well as by a more accurate knowledge of the pathological conditions which distinguish the various forms of puerperal lesions hitherto classed under the name of puerperal fever. When "puerperal fever" is conveyed

from one patient to another, it is by dirty hands, and not by an atmosphere of germs. It is, therefore, especially important that those who practise midwifery should keep their finger-nails and hands perfectly clean. If this be done, we believe there can be little danger of contagion.

WRITERS' CRAMP.

THE treatment of functional spasmodic affections in general is so very unsatisfactory, that we should gladly welcome any substantial addition to our therapeutic knowledge from any quarter. M. Wolff, a German teacher of writing, has earned for himself a considerable reputation by his skill in the treatment of this class of affections; and his success is attested by such authorities as Nussbaum, Bamberger, Benedikt, Billroth, and Esmarch. Hearing of the beneficial results of his system, M. Charcot invited him to Paris, and placed under his care two patients suffering from writers' cramp, who had been treated by himself and M. Vigouroux for some months without any improvement. M. Vigouroux has published the cases (*Le Progrès Médical*, 1882, No. 3), and mentions that, after being handed over to M. Wolff, the first was cured in fifteen, and the second in thirteen days. M. Wolff's system consists in a combination of gymnastics and massage. He makes his patients execute movements in all directions with the affected hand for half an hour to an hour and a half at a time, three or four times a day; and, in addition, the muscles involved are stretched more or less forcibly three or four hundred times daily. He also uses massage and friction, and attaches considerable importance to percussing the affected muscles. The most essential part is the extension of the spasmodic muscles. He thinks, if no improvement is apparent after five or six sittings, the case should be abandoned. The method is worth imitating, though, as M. Vigouroux remarks, while M. Wolff generously explains his procedure, he cannot give us, at the same time, his experience, his practical skill, or that medical instinct which not only enabled him to devise his method, but guides him in its application.

HOME TREATMENT OF THE SICK POOR.

THE authorities of the Assistance Publique in Paris, which corresponds to our Poor-law organisation, are using every effort to increase the help to sick persons at their own houses. The insufficiency of the number of beds at the hospitals has been the cause of the creation of this service for those who cannot be received into them. The sum allowed is 253 francs *per annum* for men, and 195 francs *per annum* for women. This sum is payable monthly; that is to say, 24 francs during the winter months, and 19 francs during the summer months; and for women, 19 francs during the early months, and 15 francs during the later months of the year. This hospital assistance is placed at the disposal of the *bureau de bienfaisance*, for the benefit of the poor population helped through their agency. The director of the Assistance Publique ratifies the admissions. The conditions are: 1. That the recipient be above seventy years of age; 2. That he live as much as possible with his family; 3. That he be in the possession of furniture; 4. That he have been inscribed for a year at the *bureau de bienfaisance*; 5. That he have lived ten years in Paris. A couple may be admitted to this assistance, but they must show that they have been married ten years. The poor admitted to the hospital assistance cannot participate in any other charitable allowance than treatment at home in cases of disease, and an allowance of drugs, baths, and bandages.

COURTS OF JUSTICE AND INFECTIOUS DISEASES.

THE custom of placing a piece of rue before the judge, which has so long survived in courts of justice, as a relic of the times when the judges' tables were strewn with rue as a prophylactic against fever, reminds us of the days when prisoners were often brought up suffering from the contagious diseases of the day, and when infection spread from them to witnesses, jurors, and officers of our courts of justice. Since then, the secrets of infection have been studied, and largely unveiled by medical research, and the methods by which it is spread in each kind of disease have been investigated. The medical profession,

the normal period of sexual life. Medical men know this well enough, but the quotation given, and the one next to be given, show that it is recognised by sincerely religious men outside our profession. In a sermon delivered on Christmas Day, Mr. Spurgeon, as reported (*Pall Mall Gazette*, December 27th), said, "Let us not forget, too, that excess of spirituality is, by a strange but certain law, placed next door to sensuality". We suppose that what Mr. Spurgeon calls "excess of spirituality" is the same thing as that which Mr. Wilson calls religiosity. The following quotation shows that the doctrine of the association of religiosity and animalism is a very old one. In Robertson's *Charles II.*, vol. iii., book 5, p. 58, tenth edition, 1800, we find:—"Having now attained the height and power, Boccold began to discover passions, which he had hitherto restrained, or indulged only in secret. As the excesses of enthusiasm have been observed in every age to lead to sensual gratifications, the same constitution that is perceptible of the former being remarkably prone to the latter. He instructed the prophets and teachers to harangue the people for several days concerning the lawfulness, and even necessity, of taking more wives than one, which they asserted to be one of the privileges granted by God to the saints."

SCOTLAND.

THE Duke of Edinburgh proceeded to Thurso on Saturday last, and performed the ceremony of laying the foundation-stone of the Dunbar Hospital.

COMBE LECTURES IN THE NORTH OF SCOTLAND AND IN ABERDEEN.

DR. STIRLING resumed this course in Arbroath last week, and lectured upon the physiology of the blood-vessels and the bearing of such knowledge on every-day life. Experiments were shown to illustrate how the pulse disappears in the capillaries, and many interesting phenomena in connection with the influence of the nervous system on the small blood-vessels were illustrated by a reference to the physiology of blushing. In Aberdeen, the large hall was filled and densely packed with a very large audience. The lecturer, after describing in a general way the bones of the limbs, referred to the artificial deformities to which the feet and waist are subjected in obedience to the inexorable demands of fashion. These practices met with a merciless and scathing denunciation. The lecturer enforced his remarks with regard to the feet by showing a cast of a typical foot, and comparing it with casts of feet deformed through wearing narrow-pointed high-heel boots, and also comparing it with the present fashionable lasts. The results of tight-lacing were illustrated by comparing a statue of the Venus of Milo, which was put on the platform, with a fashionable dressmaker's block on which corsets are moulded. The lecture was brought to a close with a short description of the muscular system.

THE GLASGOW PHILOSOPHICAL SOCIETY.

AT the fortnightly meeting of the above Society, held on the 18th instant, Professor McKendrick and Dr. J. McGregor Robertson, Muirhead Demonstrator of Physiology in the University, gave an account of the present state of our knowledge of animal electricity, illustrating the subject with experimental demonstrations. These latter were conducted by Professor McKendrick, while Dr. Robertson read the paper. The first part of this was taken up with pointing out how, as far back as 1786, Galvani imagined he had discovered inherent electricity in the muscular tissue of frogs; and then there was traced the development of the theory of a muscle-current by Volta and others. Dr. Robertson also dwelt at some length on the investigations of Du Bois Reymond and of Hermann of Zürich; and gave details of the controversy between these two physiologists on the subject. The experiments performed during the reading of the paper worked well, and were much appreciated. They showed clearly that the electrical change which happened in the muscle, on stimulating the nerve going to the muscle, occurred

before the muscle actually moved—in other words, that the change preceded contraction of the muscle. Before concluding the paper, Dr. Robertson pointed out to what a great extent electricity was, in quite normal circumstances, developed in the tissues. It was indicated by Professor McKendrick that other contributions on this subject would probably follow.

OUTBREAK OF TYPHOID FEVER IN EDINBURGH.

IT is only a fortnight since the immunity of the southern suburbs of Edinburgh from fever was noticed in the *JOURNAL*. During the last ten days, however, this has been rudely disturbed by the occurrence of a number of cases of typhoid fever in the Morningside, Grange, and Merchiston districts. Since the beginning of the month, about thirty cases have been notified from the southern districts, and all occurring in villas which were well drained. In the Pleasance and St. Leonard's district, thirty-one cases have been notified, of which two have already died. The milk-supply was investigated by the medical officer of health, who believed he had found the source of the infection in a temporary pollution of the Braid Burn, which has now been removed. Altogether, three deaths have occurred.—In the parish of Sleat, Isle of Skye, an epidemic of measles prevails, and has led to the closing of several public schools.

EDINBURGH EYE INFIRMARY.

THE subscribers to the Edinburgh Eye Infirmary held their annual meeting last week. It was reported that, during the year, 954 cases had been treated at the infirmary; of these, about a fifth came from the country. Since its institution, 26,130 cases have been treated at the institution, of whom 397 had been treated as indoor patients. The income showed a considerable balance over the expenditure.

HEALTH OF GLASGOW.

THE report of the medical officer for the fortnight ending January 7th shows that the number of deaths registered was 531, representing a death-rate of 27 per 1,000 living. In the corresponding fortnight of last year, the death-rate was 2 per 1,000 higher, owing to the greater number of deaths from pulmonary and general causes. There were 169 deaths in the present fortnight from pulmonary diseases, representing a death-rate of 8.5 per 1,000, and constituting 32 per cent. of the total deaths. The deaths from fever numbered 10—viz., 5 from enteric fever, three from typhus, and 2 undefined. The number of deaths from infectious diseases of children was 62—viz., 28 from whooping-cough, 20 from measles, and 14 from scarlet fever. There were 41 cases of fever registered, of which 31 were enteric, 9 typhus, and 1 undefined. There were also 138 cases of measles, 55 of scarlet fever, 40 of whooping-cough, and 15 of diphtheria registered, of which 18 were removed to hospital, and the remainder supervised at home. There are at present in the hospitals, Belvidere, 113 cases of scarlet fever, 86 of enteric fever, 34 of measles, 17 of typhus, and 1 of whooping-cough—in all, 251, as compared with 294 at the corresponding period of last year. In a supplementary report, Dr. Russell shows that the deaths in the city of Glasgow during last year were 12,901, and that, simply comparing the number of deaths in previous years, without bringing them to any standard of population, this is the lowest, with one exception, since 1862.

HEALTH OF THE PRINCIPAL SCOTCH TOWNS.

THE report of the Registrar-General for the month of December shows that there were 2,315 deaths registered in the eight principal Scotch towns, 1,180 of these were of males, and 1,135 of females; after making a proportionate allowance for estimated increase of population, this is 686 under the average for the same month during the preceding ten years. The respective mortalities were, per thousand of the population: Edinburgh, 20; Dundee and Aberdeen, 22; Glasgow, Paisley and Leith, 24; Greenock 25, and Perth 27. Thirty-nine per cent. of the entire mortality was of children under five years of age, and the respective percentages were: Perth, 27; Aberdeen, 28; Paisley, 29; Edin-

with the aid of Mr. Herbert Gladstone, who was present, to take the matter in hand and introduce a bill thereon early in the session. The bill would seek to transfer to the Local Government Board all the powers now vested in boards of guardians as to superannuation allowances and retiring gratuities, and it would include within its scope all union officers, medical and non-medical. The Bill would place these pensions upon a general rate contributed by all the unions in Ireland, and he believed that an extremely small tax would be sufficient for the purpose. Lastly, the Bill would adopt the scale and regulations as to age, etc., now in force for the Civil Service. This announcement is a most satisfactory one; and the committee of council of the Irish Medical Association deserve the warmest thanks of the Irish Poor-law Medical Officers, and of the profession generally, for the zeal with which they have so long laboured for their good.

REMOVAL OF THE UTERUS.

DR. ATTHILL, Master of the Rotunda Hospital, removed the greater portion of the uterus last week, by a modified Porro's operation. The patient had suffered intensely for a long time previously. Malignant disease of the fundus of the uterus was diagnosed. The nature of the proposed operation and its risks were explained to the patient, who readily acceded to its being performed as a possible means of relieving her from her sufferings. She unfortunately succumbed thirty hours after the operation. Microscopical examination of the diseased portion of the uterus showed it to be an epithelioma. The cervix had not been encroached upon by the new growth, but a small portion of the latter had been left in the stump. There was little or no hæmorrhage. Death was probably due to collapse, but there was *post mortem* evidence of acute septic (?) peritonitis. The specimen was exhibited at the last meeting of the Pathological Society of Dublin.

HEALTH OF DUBLIN.

ACCORDING to Dr. Cameron's last report, the state of the public health in Dublin, in December, was very unsatisfactory, especially as compared with the summer and autumn months, which were exceedingly healthy. The high death-rate of the month (37.75 per 1,000 persons living within the municipal area) was caused nearly altogether by two causes—an epidemic of measles and a large number of cases of bronchitis. 101 deaths out of a total of 120 deaths, caused by the seven principal zymotic diseases, were the result of measles. If the report be correct, it is unfortunate during such a fatal epidemic, and with typhus fever also extremely prevalent, that the solitary disinfecting chamber of the corporation should not have been for three or more weeks past in working order. Dr. Cameron states that he has reason to believe that the epidemic is declining. But according to the Registrar-General's returns for the first week of the present year, thirty-eight deaths from the disease were registered during the week. Forty new cases were admitted into the principal hospitals during the same period, being eleven over the admissions for the preceding week, and leaving eighty-two cases under treatment in these hospitals alone on the 7th instant. On this date also, there were thirty-six cases of typhus fever in the same hospitals.

THE IRISH REGISTRAR-GENERAL'S RETURNS.

DR. GRIMSHAW, with that spirit of progress which has characterised the administration of his department since his accession to its charge, has, in accordance with the advance which has taken place in medical science and nomenclature, slightly modified the classification hitherto in use for statistical purposes. This modification, which comes into force in the first weekly return of births and deaths for the current year, will not, however, materially alter the relation of the various groups of diseases to one another, and for all practical purposes the numbers tabulated under the new system are fairly comparable with those included under similar denominations in the classification of Dr. Farr, hitherto made use of in the returns published by the General Register Office. Instead of the five classes of Dr. Farr, Dr. Grimshaw now groups the cause of death under eight classes, viz.: 1, Zymotic diseases;

2, Parasitic diseases; 3, Diathetic diseases; 4, Constitutional diseases; 5, Developmental; 6, Local; 7, Deaths from violence; and 8, Deaths from ill-defined and unspecified causes. Quinsy and croup are removed from the zymotic to the local group; rheumatism also from the zymotic group to that of the constitutional diseases; and similar changes, which need not be further particularised, are adopted, which will help to make the registration of deaths in Ireland more scientific and more accurate than before.

DR. ANDREW CLARK ON ALCOHOL.

IN addressing a meeting convened under the auspices of the City of London Total Abstinents' Union, at Messrs. J. and R. Morley's warehouse, Wood Street, on Friday, the 6th instant, Dr. Andrew Clark related the result of his experience, extending over a quarter of a century, of the physiological effects of alcohol on the human system. He admitted that there were many difficulties in the process of investigating those effects. Apart from the fact that men were sometimes apt to be prejudiced in favour of total abstinence from mere feeling and party spirit, a great difficulty that stood in the way of achieving trustworthy evidence on the question was the slowness with which the evil consequences of alcoholic poison were made manifest. Very often, under the appearance of health and brightness of spirits, disease was slowly making its way in the deeper parts of the body of a man, who seemed to be indulging in what was ordinarily considered a moderate quantity of alcohol daily; and, sooner or later, the man of apparently robust health and exuberant animal spirits was cast down by some disease of the heart or kidneys, or some of the other ailments that afflict men of middle life, because he had not been careful in the use of alcoholic drinks. There were various methods of investigating the effects of alcohol. In the first place, there was personal experience; and Dr. Clark thought it was the duty of every man to himself, by a careful experiment over a sufficient period—say, of six months—to learn what effect it had upon him. Another very valuable method of inquiry was that which had been performed by the late celebrated Dr. Parkes of Netley, of ascertaining the results from a number of men placed under precisely similar conditions, as to food, air, and lodging, the one half of them receiving a certain quantity of alcohol with their meals, and the other not. The result of Dr. Parkes' experiment was decidedly against the use of alcohol. A third method—not a bad one—was that of studying the histories of great naval and military expeditions in which alcoholic drinks were freely used, or in which they were not used at all, or very sparingly. One of the most valuable results of this method of investigation—as borne out by the history of the Kaffir war in South Africa, the Red River expedition, and the various Arctic voyages—was to show that it was invariably the case that the greatest amount of work and the least amount of sickness were associated either with an entire abstinence from alcohol, or with the administration of only a minute quantity of it. The comparison of one nation with another he distrusted, for the reason that in such cases we had to deal with difference of race, difference of climate, habits, etc., which considerably qualified the accuracy of the results obtained. Another source of information on the subject was to be found in the experience of medical men. They had especial experience on this matter. It was their interest to find out what was the relation between alcohol, health, work, and disease, because, according to the accuracy of their finding, would be their power to heal their patients; and, although doctors were sometimes weak, and failed in their duty, yet, in the main, their hearty desire was to benefit those who sought their aid. In one or other of all these ways, either personally in private practice, and as a hospital physician, or by reliable trustworthy accounts, or by listening to the careful experience of others, he had formed certain conclusions. The first thing that he would say, in summing up the result of his observations, was, that alcohol should never be given to the young. Secondly, every adult man who found himself, after trial, to be better without the use of alcohol, should never resume it; for he would work better, enjoy life more, have a greater exemption from disease, and probably live longer, and be better in all the relations of life. Thirdly, if a man did feel himself the better for a little alcohol, in one form or another, and it enabled him to do that which he could not do without it, and did not sensibly to himself injure his health, then he (Dr. Clark) would say to such an one that he could take it, only with the utmost regard to quantity and time. As to quantity, he would allow him certainly not more than was contained in half a pint of beer a day; and as to time, he should say that even that quantity could be taken with safety only at the greater meals of the day, that was to say, at dinner and supper. Next, if alcohol were to be taken, it must be taken, not only under these conditions and

CORRESPONDENCE.

ON THE RELATIONS OF SMALL-POX AND COW-POX.

SIR,—In perusing Mr. Hodgson's paper on the above subject, read in the Public Health Section at the last meeting of the British Medical Association, and published in the *BRITISH MEDICAL JOURNAL* for November 26th, I observe that he makes special allusion to my views as set forth in a pamphlet published not long ago (*Human and Animal Variolæ*), and maintains that I am in error, while the results of the experiments and observations of Ceely and Badcock prove that cow-pox is only modified small-pox. I have no desire to go over the ground occupied by the contents of the pamphlet just mentioned, but Mr. Hodgson will find arguments there which I fancy he will not be able to disprove, and which are conclusive that the two maladies are distinct, and are not convertible one into the other. I believe the opinion I entertain is that now held by the majority of pathologists on the Continent who have paid any attention to the subject, and are acquainted with comparative pathology; and, so far as I can understand, not only is every argument in favour of that opinion, but also scores, if not hundreds, of experiments. The Lyons Commission, composed of the ablest scientists—among them Chauveau—which France contained, and afforded every facility, could not transform small-pox into cow-pox. The Italian Commission laboured even longer, and perhaps more extensively, than the French one, and yet could not once succeed in what Mr. Badcock is reported to have done with comparative frequency, and Mr. Ceely on two occasions. The Belgian Commission has had no better success; and, if Mr. Hodgson will turn to the ninth annual report of the Local Government Board (supplement containing the report of the medical officer) for 1879-80, he will there find a detailed list of experiments on thirty-one cows, performed by Dr. Klein, under the supervision of Dr. J. Burdon Sanderson and Mr. Ceely himself, and all of a negative character. Every recent attempt to produce cow-pox by inoculating bovine with small-pox matter has resulted in failure, notwithstanding every care and attention, and the multitudes of animals operated on.

Seeing that the gravest doubts are thrown—and not unreasonably—on Mr. Badcock's experiments and assertions, surely, if for no other object, that gentleman might exonerate himself by once more doing what he is reported to have already done so often. If it be the fact that humanised vaccine lymph has become deteriorated, and does not afford the protection it used to do, surely anyone who could produce a new and potent supply would be regarded as a benefactor. I am certain Mr. Badcock would receive every assistance in this direction, and I am indeed greatly astonished he has not volunteered to repeat his experiments, in order not only to silence those who assert he cannot produce vaccine by the variolisation of cows, and has never done so, but with the higher object in view of furnishing efficient protective material. If the transformation could be effected at one time, surely it could now. Small-pox is as virulent at present as in 1840, and cattle are, we may suppose, quite as susceptible. Until Mr. Badcock or someone else demonstrates publicly and unmistakably that inoculation with small-pox virus will produce vaccine, I shall retain the opinion I have always held, that it cannot be done, and has never been done.

Cow-pox and small-pox are diseases of a very different character; and to maintain that the latter—a generally eruptive, very fatal, and most infectious disorder—can be converted into the former—a mild, locally eruptive, and benignant malady, with a distinct eruption of its own—by only passing the virus of the latter once through the cow, the transformation being so permanent and complete, that it never produces small-pox again when carried back to its native soil, is as extraordinary as it would be to assert that carrot-seed sown in the ground would produce a crop of turnips. The experiments of Pasteur and others entirely negative the notion that they can be made to lose their identity, and become something quite different in action and results. These may be modified, but can never be absolutely and permanently changed. According to Mr. Hodgson, and those who think with him, small-pox passed only once through the cow is never small-pox again, no matter into how many generations of human beings it may be grafted when retransplanted from the cow. A few minutes' reflection will, I think, expose the hollowness of the arguments upon which the believers in the absolute transformation of the small-pox virus rely. Let me ask Mr. Hodgson to peruse my arguments and facts, and explain how it is that while, according to Ceely and Badcock, it is extremely difficult to produce vaccine from small-pox—according to scores of more experienced experimentalists impossible—yet that there is no difficulty whatever in producing vaccinia from humanised vaccine lymph.

I am well aware that the generally received opinion among medical men in England is, that vaccine is merely human small-pox modified by the system of the cow; but this opinion is only based on the results of the experiments of Ceely and Badcock, and one or two others perhaps who experimented earlier, and has been handed down from one to another, and transferred from text-book to text-book, without inquiry. Comparative pathology has received but little attention in this country, and therefore it is that most erroneous notions prevail with regard to the disorders of animals, *i.e.*, that the sheep is the only creature which is affected with small-pox, vaccine being derived from human small-pox. Until students receive some instruction in this very important branch of medical science, their education must remain incomplete.

Mr. Hodgson ventures to point out what he designates an unfortunate argument employed by me, where I show in my pamphlet, and for the first time, that the supposed outbreak of cow-pox in a small herd of cattle in a paddock, due, according to Mr. Ceely, to their smelling small-pox tainted clothes, was not that malady at all, but the foot-and-mouth disease, then extremely prevalent. If Mr. Hodgson will peruse Mr. Ceely's report in the *Transactions of the Provincial Medical and Surgical Association*, he will find that the evidence was only hearsay. Mr. Pollard, a farmer, expressed his conviction "that his cows had been infected from human small-pox effluvia, to which he considered they had been exposed" (p. 211). But Mr. Ceely himself doubts the infection of the cows from this source; for, while admitting that such effluvia might be "quite adequate to the propagation of the disease among human beings, had they been exposed," he adds, "but whether sufficient to excite the vaccine in cows I really cannot pretend to say, having failed myself in attempts to infect two or three such animals at a time, with means not less potent, and under a closer atmosphere." The cattle—eight milch cows and two heifers—were not seen by Mr. Ceely while they were affected, and he was astonished and baffled at the simultaneousness of the outbreak; the whole of the cows being attacked within three days (pointing to foot-and-mouth disease), and the symptoms being undoubtedly those of foot-and-mouth disease. Mr. Ceely himself remarks on the great difference in the symptoms described from those of cow-pox (pp. 226, 233). If the two persons said to have received vaccine from the cows were really affected with that disease, then it is just possible one of the animals may have had it. We may be certain, however, that the infection was not conveyed to it from the tainted clothes and bed-flocks.

I will not intrude further upon your space in the discussion of this subject, but would merely suggest that it is for those who assert that vaccine can be produced in the bovine species by the inoculation of small-pox matter, to demonstrate this in a conclusive manner. There is every opportunity; and, if they be successful, then I will gladly acknowledge I have been wrong. At present, everything except the experiments of Ceely and Badcock negative the assertion; while the former has failed quite recently, notwithstanding the great facilities afforded him. It would not be very hazardous to predict similar failure to Mr. Badcock, if he made the same attempt now-a-days. At any rate, it is almost a duty he owes to his species, and certainly it would be a great service to pathology, if he could repeat the success he is said to have achieved so many years ago.—I am, etc.,

GEORGE FLEMING, F.R.C.V.S.

St. John's, December 10th, 1881.

DENTAL HOSPITAL OF LONDON.—A *conversazione* was held on January 18th, at 40, Leicester Square, by the Students' Society of the above-named hospital, under the presidentship of Mr. R. H. Woodhouse. The whole hospital building, and the Museum of the Odontological Society were thrown open, and the rooms were decorated with pictures, flowers and flags. The president received the guests as they arrived in the lecture-room, where arrangements had been made for a musical entertainment of vocal and instrumental music. The large stopping-room was devoted to the display of dental apparatus, exhibited by the dental dépôts, comprising the most approved operating-chairs, engines, electric mallets, gold instruments, etc. One of the most interesting novelties was a new battery for the electric mallet, shown by Mr. Nehmer, brother of the inventor. It is alleged that, by substituting platinum for carbon, in the cell, the constant care requisite for the battery now in use is obviated. Mr. Coffin contributed a large number of marked cases of dental irregularities that he had treated successfully by means of an ingenious regulating plate, which is now associated with his name. The library and council-room were occupied with microscopes. Refreshments were served on the ground floor throughout the evening. At eleven o'clock a very interesting and successful *soirée* was brought to a close.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Wolverhampton Town Council have determined upon the erection of a public mortuary. A similar building is, we understand, to be provided for Aldershot.

IN consequence of a slight outbreak of small-pox at Stamford, the town council have determined upon the erection of wooden buildings, to be used as temporary hospitals, in a field at the outskirts of the town.

AN epidemic of scarlet fever has been prevailing in the Fradswell and Chartley Districts of the Stafford Union. The cases, twelve in number, are now convalescent, the fever having been of a mild character.

IN consequence of the spread of measles in the local board district of Morley, the health-officer, who reports that the cases are very numerous, has recommended the closing of the schools for a month. Scarlet fever and small-pox are prevalent in the adjoining townships.

THE St. Saviour's Board of Works have resolved to petition the Home Secretary, praying that the notification of infectious diseases may be made compulsory, restricting notification to the following diseases, viz., small-pox, scarlet fever, typhus fever, typhoid fever, and cholera. It would be well if other sanitary authorities would join in making a strong appeal to the Government to take up this question, which is rapidly becoming more and more within the range of practical politics. The duty of notification should, however, be thrown upon the householder, or person in charge of the case, and not upon the medical man.

SMALL-POX AT LIVERSEDGE.—The outbreak of small-pox at Liversedge appears to be more serious than at first supposed. At the last meeting of the local board, the health-officer stated that thirteen cases of the disease had broken out in the township, ten of which had been removed to the hospital, and were doing well. Three of the cases had not been vaccinated, and they were of the worst kind. Probably the worst case of small-pox had to be removed to the Fever Hospital at Bradford, upon a magistrate's order. Though there were six or seven members of the same family using the room in which the patient was lying as a sleeping apartment, they refused to have the patient removed until compelled to do so.

A RECENT POOR-LAW MEDICAL INQUIRY.

THE Local Government Board having called on the district medical officer of a country union (whom we will name Mr. Enoch) to resign his appointment in virtue of the evidence taken by their inspectors, Mr. Wodehouse and Dr. Mouat, at a Poor-law inquiry, held at the workhouse, as to certain alleged irregular proceedings on the part of the said officer; and the case being one of much interest to all Poor-law medical officers, we propose to give an epitome of the same for the information of such officers.

It would appear that, on July 7th, 1881, Mr. Enoch was requested to attend one Charlotte M., but without an order. He was not at home, and the woman was seen by his *locum tenens*, who reported that the placenta was adherent, and that there had been much flooding. On the 8th, the following day, Mr. Enoch received a message intimating that the woman was still losing a little, whereupon he prescribed ergot, iron, and digitalis, and visited her at 2.30 P.M. on that day. He found her in a sad condition, looking as if she had lost much blood. She was cold, cedematous, the conjunctivæ bloodless, with frequent sighing, yawning, and fainting, and complaining of great pain over the abdomen, with retching and vomiting, hicough; pulse quick, thready, jerking, and irregular. The abdomen was tympanitic; she was very filthy, not having been properly attended to. Mr. Enoch diagnosed that she was labouring under peritonitis. Milk, brandy, and beef-tea were ordered, with turpentine stupes. Mr. Enoch also directed that the friends should send for some pills, containing opium (one grain each), to be given at intervals of two hours; he also intimated that he would send a powder, with which a lotion should be made, to be used also as an injection, namely, crystallised permanganate of potash. When the messenger arrived, he gave some verbal instructions as regards the use of the permanganate, but, unfortunately, omitted to send the pills. On the messenger, a girl of 16 or 17, returning for the same, he gave two powders instead, again without any written instructions. On the 9th, he received a pressing message to go and see the woman, who was

suffering from retention, probably suppression, of urine. On his arrival he learned that she had not taken the powders, but that she had just swallowed, instead, the permanganate of potash. On inquiry, he found that, besides her other symptoms, there was pain at the back of the throat, but the vomiting, previously urgent, had ceased. He passed a catheter, but drew off only a few drops of urine. She still remained unwashed, and not properly attended to. He proceeded to administer a mustard emetic, and, on leaving, left instructions to give another emetic if vomiting did not come on. In from half to three-quarters of an hour, he returned; and finding that no sickness had taken place, ordered that one of the powders should be given, and repeated every two hours; and on finally leaving, directed that they were to let him know how the case progressed. On the 10th, at 5 P.M., he learned that she was faint, and had to be constantly fanned, and was worse; he did not, however, go to see her. At 11 A.M. on the next day, an order was sent by the relieving officer, requiring his attendance. On his way to see the case, about 2 P.M., he was informed that the woman had died at 12.15 to 12.30 P.M. Mr. Enoch saw the body, and advised speedy burial; he also gave a certificate thus worded: "Child-birth, four days; peritonitis, three days". The husband wanted a *post mortem* examination, to which Mr. Enoch assented. Subsequently, the husband altered his mind, but again expressed a similar desire on the evening of the same day, to again (as it is said) alter his mind a second time. About a month afterwards, the guardians took up the matter, and the case was referred to the coroner, who replied that he had inquired into the particulars of the occurrence, and did not deem his interference necessary. Ultimately, on November 8th, the Local Government Board deputed Mr. Wodehouse and Dr. Mouat to institute an official inquiry.

In the letter of the central department, calling on Mr. Enoch to resign, it is stated "that the board have been reluctantly forced to the conclusion that Charlotte M.'s death had resulted not from puerperal peritonitis, as certified by you, but in all human probability from the effects upon one in her weak state of health of a large quantity of permanganate of potash, which was intended for outward use, but which, owing to your omission to send with it proper instructions, was administered internally. Although your carelessness in omitting to send written instructions on the medicines was undoubtedly very serious, the board regard it as of minor importance beside your very grave misconduct in certifying that the death was due to childbirth, followed by peritonitis, and recommending the speedy burial of the body without due examination, sought by the husband. They consider, also, that you showed an entire disregard of duty, and a reprehensible indifference to the results of your carelessness, when, after having ordered the administration of an emetic, you left without awaiting the results—without, in fact, any real effort to rescue the patient from danger, in which she was placed through the unfortunate effects of your own omission. The board consider that they would be wanting in their public duty if they allowed the sick poor to remain any longer under your charge, and they therefore require you to place your resignation in the hands of the guardians at their next meeting; such resignation to take immediate effect."

To those who have followed the story we have detailed, it cannot appear surprising that the department should have expressed itself strongly; but we are not altogether agreed with it in the conclusions at which it has arrived. We are of opinion that the woman did die from puerperal peritonitis of a low type, not an unlikely contingency, having regard to the *post partum* neglect in the dog days, and the probable blood-poisoning, due to a partially dislodged placenta; and we feel we must demur, therefore, to the opinion of the department, as to the alleged injury done by the swallowing of the permanganate. The case, however, is a very sad one, and it is much to be regretted that Mr. Enoch should, on his own showing, have exposed himself to such a severe rebuke. We trust it will be to him a lesson from which he will learn much; and we also hope that Poor-law medical officers generally will see that, though the department is, in our judgment, reprehensibly indifferent as to the provisions made by boards of guardians for the efficient treatment of the sick poor, they can and they do bring down a heavy hand on any parish doctor who is shown to be guilty of the *laches* exhibited in this case.

SCHOOL CERTIFICATES.

M. O. H. writes: My School-board asked me to give them two certificates to certify that we had an epidemic of scarlet fever, and that, in consequence, several children had been kept away from school. In consequence of these certificates, the School-board obtained grants for absent children to the amount of about £4 ros. for each school. One of the schools was situate in my district, but the other was situated in the district of another medical officer of health. The children who were kept from school all lived in my district. They came to me for the certificates because I was the medical officer of health. Ought I to charge for these certificates?

NEW METHOD OF PREPARING THE SPINAL CORD FOR MICROSCOPIC SECTIONS. — Debove recommends, in the *Archives de Neurologie*, the following method of hardening the spinal cord for microscopic sections. Place the cord in a 4 per cent. solution of bichromate of ammonia for three weeks, then in a solution of phenic gum for three days, and for three days more in alcohol. Sections may then be cut with great facility. They should be placed in water to prevent curling. They are then immersed in a saturated solution of picric acid for twenty-four hours, and colored with carmine for about twenty minutes, the picric acid acting as a mordant.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.
FRIDAY.....	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.
GUY'S.—	Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.
KING'S COLLEGE.—	Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear Th., 2; Skin, Th., 2; Throat, Th., 3; Dental, Tu. F., 10.
LONDON.—	Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 7.
MIDDLESEX.—	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.
ST. BARTHOLOMEW'S.—	Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 1.30; Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 1.30; Ophthalmic, Tu. F., 12.30; Dental, Tu. F., 9.
ST. GEORGE'S.—	Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; o.p., W. S., 2; Ear, Th., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 2; Th., 1.
ST. MARY'S.—	Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Ear, M. Th., 1.30; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, W. S., 1.30.
ST. THOMAS'S.—	Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Ear, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.
UNIVERSITY COLLEGE.—	Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Ear, M. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.
WESTMINSTER.—	Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1; Eye M. Th., 1.30; Ear, Th., 1.30; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

ANATOMICAL SOCIETY.	London, 8.30 P.M.—The President will read the paper on "The Anatomy of the Human Eye," by Dr. J. H. Green.
CLINICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Clinical History of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.
ENTOMOLOGICAL SOCIETY.	London, 8 P.M.—The President will read the paper on "The Entomology of the Human Eye," by Dr. J. H. Green.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C.; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL ARTICLES IN LAY PAPERS.

THERE can be no reasonable objection to articles in lay papers which point out the modes of origin of preventable diseases, or indicate the means by which immunity from them may be attained; indeed, it may be said that the publication of such information is a very essential part of the duty of a publication pretending to the position of an organ of the profession. But it is not to be supposed that such articles should contain recommendations of the means of treatment of this or that medical man. The *Illustrated Medical Journal*, which contains an article called "A good Doctor," has been criticised for this reason. At the time ago, we believe, there was a great deal of talk about the "good doctor" who was a medical education, and we do not doubt that the articles were written in good faith. But in future, if the *Illustrated Medical Journal* publishes articles of this character in this respectable and deservedly popular paper.

LIFE ASSURANCE AND MEDICAL MEN.

SIR.—I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance. I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance. I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

I have been reading in the *Illustrated Medical Journal* an article on the fee for life assurance, and I am sorry to find that the author, Mr. J. H. Green, is thinking of the fee for life assurance as a "fee for service." It is not a fee for service, it is a fee for insurance.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to advertisements, changes of address, and other business matters, should be addressed to the Manager, at the Journal Office, 161A, Strand, London, and not to the Editor.

COLORADO AS A SUMMER AND A WINTER RESIDENCE.

SIR,—I am desirous of calling the attention of the profession, through your columns, to Colorado, not only as a summer, but as a winter, residence for invalids. The climate is extremely dry and bracing; and there are few days, even in the winter, when persons in delicate health cannot spend a great part of the day out-of-doors with advantage, while in the summer, the heat is never oppressive. Here, at an altitude of 7,500 feet above sea-level, we have had a long succession of warm cloudless days, and have been able to sit out-of-doors by ten o'clock in the morning, without any feeling of chill; towards sunset, the temperature falls rapidly, and every night there is a sharp frost, but, in consequence of the small amount of moisture in the atmosphere, the cold is felt in a very much less degree than in England. The shade-temperature at mid-day is generally about 56° Fahr., while on Christmas Eve it reached 72° Fahr.

A careful record of the temperature was kept by a friend of mine who spent the winter of 1878-79 in a neighbouring valley at this altitude (7,500 feet); and he found that, during the whole time, from October 24th to March 17th, the mercury fell below zero only sixteen times, nine of the number being from 1° to 6° below only, and these were the lowest night-temperatures.

Up to the present time, December 30th, I have never had a great-coat on, though I am rarely in the house from morning till night. I have spent winters both in Florida and California, and found the cold there, slight as it is according to the thermometer, when compared with this, far more trying; and the beneficial results which I have seen from residence in this climate, have induced me to settle here, with the intention of receiving into my house patients who have been recommended to try the high altitude treatment for chronic lung-disease, feeling convinced that, in time, this part of the world will become the great resort in such cases.

In this particular section of the State lying between Fort Collins on the Colorado Central Railway, and North Park, we are specially favoured, in that there is a much slighter snowfall than in most other districts; this is due to the fact that the higher peaks of the mountains rise from 5,000 to 7,000 feet above us, distant some fifteen to twenty-five miles to the westward, and intercept the storms; and it is no unusual thing to see the snow falling heavily on these peaks while the sun is shining brightly here. That which falls rarely remains on the south sides of the hills for more than twenty-four hours, and generally disappears after exposure to the sun for a few hours only.

Besides the climate itself, there are many sources of amusement to be found; the magnificent scenery is always a pleasure; and the artist, the botanist, the geologist, the fisherman, and the sportsman; will all find ample opportunity for the exercise of their favourite pursuits; and, taking it altogether, it is difficult to find any part of the world so well calculated for aiding the recovery of those cases where an out-door life in pure bracing air is one of the most important adjuncts to treatment.

Statistics show a marked benefit to the majority of phthisical cases which come to Colorado, a permanent cure being not unfrequent; while there are few cases of uncomplicated asthma which are not entirely relieved by residence in these mountains. The journey from England is not a long one, as it only takes from twelve to fifteen days to get from Liverpool to Chayenne or Denver; and the expense is £25 to £35, according to the line of steamers chosen, stoppages on the road, etc.

In conclusion, I will add that I shall be glad to give any information that I can about this country and climate to any member of the profession who desires it.—I am, sir, yours faithfully,
G. ALLEN NORMAN, M.B.Oxon.
Elkhorn, Larimer Co., Colorado, December 30th, 1881.

R. O. B. (Upton).—We shall have no objection to the course proposed.

JUVENILE ODDFELLOWS.

SIR,—In reply to "Lodge Surgeon" concerning the Juvenile Oddfellows' Club, I would recommend the following as rules for guidance in admission. 1. Do not admit members under five years. 2. Examine for strumous disease, i.e., enlarged lymphatic glands and granular eyelids, and for hermia; and do not admit candidates unless they have had measles and scarlet fever. 3. A fee should be allowed for examination of each member for entrance, and it should be at least 1s. for those that pass, and 2s. 6d. for those that are refused, because the latter require more care on examination; and, further, you have to explain to the parents why they will not pass, and, in some cases, gain a grudge from them for your kindness, and they leave the surgery determined not to enter it again. Do not accept the lodge for less than 4s. a head; one mile and a half being the limit of the distance to visit a club patient; beyond that, charge at least 1s. 6d. per visit.—Yours, etc.,
FAIR PLAY.

RAPID RECURRENCE OF MEASLES.

SIR,—*Apologies* of my communication to the JOURNAL of a case of rapid recurrence of measles, I have received a postcard from Dr. Neale, which, perhaps, he will kindly permit me to answer through you. He therein draws my attention to the fact that, in the *Medical Digest*, several instances of the third and fourth attacks of measles are referred to; and also that a case is noticed in the *Lancet*, subsequent to the appearance of the first edition of the *Digest*, in which a second attack was developed within the month. In his own practice, he adds, three children in one family had a second attack within six weeks. My case, accordingly, was not so rare as I was inclined to think. Of course, I never for a moment supposed it unique, as I am quite aware "there is nothing new under the sun".—I am, etc.,
J. J. BYRNE.
Preston, January 4th, 1882.

THE use of carrier-pigeons by medical men, which has more than once been mentioned as being practised in England by one or two medical men, and specially referred to in our columns, has, it is reported, extended to America. Some of the doctors there, who have to travel considerable distances, send in their prescriptions to the chemist in serious cases by means of these birds. Carrier-pigeons are also, it is stated, occasionally used to convey periodical messages as to the progress of patients in critical cases.

PROFESSIONAL ADVERTISING.

SIR,—I found the enclosed handbill exhibited in a window this morning. Dr. (T) Marsh is described in the *Medical Directory* for 1882 as M.R.C.S.Eng. and L.S.A.Lond. Further comment is unnecessary.—Yours truly,
SURGEON.
"Dr. Marsh, Surgeon, 68, Horton Road, Bradford, opposite School of Art. Advice and medicine—morning, 8 to 10; evening, 5 to 7—one shilling. Visit and medicine, one shilling and sixpence."

REFUTATION.

DR. WILLIAM HOFFMEISTER presents his compliments to the editor of the BRITISH MEDICAL JOURNAL, and begs to forward the *Isle of Wight Herald* of the 14th inst., as it contains an article giving the real facts of the case respecting the alleged inhumanity paragraphs, so far as he himself is concerned; to which, however, Dr. William Hoffmeister wishes to add that his father, Dr. Hoffmeister, was not sent for from beginning to end.

Townsend House, Cowes, January 14th, 1882.

The following is a copy of a letter sent to the Isle of Wight board of guardians, to be read at their meeting on Thursday, January 19th, 1882.

"Townsend House, Cowes, January 12th, 1882.
"My dear sir,—With regard to the scandalous and untruthful reports made in the press, relative to Mr. Whitmarsh, at any rate as far as I am concerned, I must now call upon your board to make as public as possible the real facts of the case. I was sent for about 11 P.M. on December 23rd, 1881, to see Mr. Whitmarsh. I at once referred the messenger to Mr. Gibson, saying it was quite a mistake their sending for me, as Mr. Gibson was their family doctor. I heard absolutely nothing more of the case till the next evening, when, to my surprise, Mr. Griffin (relieving officer) called upon me with a parish order to attend Mr. Whitmarsh. I did so at once, and have given him every care and attention since. I had, therefore, nothing whatever to do with sending to the relieving officer; in fact, had I been at all aware that his own medical man had refused to attend, I would have gone at once, and done my best for the poor old man. I should never have dreamt of applying to the relieving officer in such a case. Allow me to add that, if Mr. George Watts is correctly reported, he has made a most cruel and unjustifiable attack upon your medical officer, which might have done him incalculable and life-long injury; and I now call upon him to publicly withdraw such base and groundless imputations, such as my refusing to attend Mr. Whitmarsh, 'because a bankrupt, and possibly might not be paid for my services'. If Mr. George Watts be incorrectly reported, then I call upon your board to censure the reporter of such a paragraph as appears in the *World* (January 11th, 1882), which I now inclose for your perusal. I may add that no message was ever sent to my father to attend Mr. Whitmarsh from beginning to end. Please make this letter as public as the paragraphs in question, and oblige, yours faithfully, W. HOFFMEISTER, M.D., Medical Officer Cowes District.—Rev. C. Theobald, Chairman of Isle of Wight Board of Guardians."

F.R.C.P. does not enclose his name and address. It must be forwarded, not necessarily for publication. Meantime, we may observe that, in the first instance, he should, we think, address the body in question. There is a great difference, however, between legal titles and courtesy titles; and the title of "Dr." is very largely given by courtesy to persons holding the legal status of physician, either as licentiate or as member of the Royal College of Physicians, although not possessing the degree of M.D. of an university.

THE POSITION OF THE DENTAL PROFESSION.

SIR,—Will you again allow me to correct another statement made by Mr. Stevenson in your issue of the 14th inst., wherein he says that a person registered in the *Dentists' Register*, with or without a qualification, is entitled by that Act (i.e., the *Dentists' Act*) to style himself Dental Surgeon or Surgeon Dentist. The Act does nothing of the kind. Neither of these assumed designations are mentioned in the Act; they are not touched by the Act, which forbids the unauthorised assumption of the only conferred dental title, viz., Licentiate in Dental Surgery, and the use of the word *Dentist*, either alone or in combination with any other word or words. Antecedent to the passing of the Act, the assumed titles could, without breaking the law, be used by persons who had no conferred qualifications; and the provisions of the Act could not justly be made retrospective, with the view of punishing those who used a designation which, to use the words of Lord Chief Justice Colburn, "had been sanctioned by immemorial usage". Apologising for occupying your space with such disputes, I am, obediently yours,
JAMES SMITH TURNER, Honorary Secretary British Dental Association.

SIR,—Mr. Stevenson thinks that the position of dental surgeons is lowered by the *Dentists' Act*, which has associated the names of all classes of practitioners, qualified and unqualified, in a common *Register*. The reply to this is, that professional status in no department of the medical profession depends alone on the mere possession of a superior diploma. It is necessary, for the safety of the public, that all practitioners should be qualified, and it is desirable that everyone should possess high qualifications; but, after all, the status of each is determined by the real personal and scientific value of the individual. In the medical profession we see amongst its lower grades the keepers of shops—so called "open surgeries"—little, if at all, superior in social position to the ordinary petty tradesman; and at the other extreme we find men, often with no better "qualifications", occupying the highest positions in the professional and scientific world. In the dental profession there are a large number of men holding only a dental diploma, some of whom, before a dental qualification existed, practised without a diploma at all, and yet many of these are, and have always been, in every sense of the word, accomplished and high-toned professional men. On the other hand, we have, not long ago, seen a dental surgeon holding full qualifications degrading himself and his profession by continuously advertising in the daily papers an illiterate "Practical Treatise" (at sixpence), in which the sole practical information consisted of the author's name and address, printed in a conspicuous place in its pages.—Your obedient servant,
M.R.C.S., L.D.S.

WOOD'S OPERATION FOR RADICAL CURE OF HERNIA.

SIR,—I shall feel greatly obliged if members who have performed Wood's operation for the radical cure of inguinal hernia will be so kind as to communicate to me by letter their experiences respecting the success, or otherwise, of the operation. I am collecting statistics, or I should not trouble you.—I am, yours very faithfully,
W. J. TIVY, F.R.C.S. Ed., etc.

1, Tottenham Place, Clifton, January 20th, 1882.

REGISTRATION OF QUALIFICATIONS.

SIR,—In the event of my adding the letters M.D. Heid. after my name in one of my certificates, would the same be valid in law, or would I have to add my other qualifications as F.R.C.S. Edin. and L.R.C.P. Edin. to make it so? An answer is kindly solicited.—Yours, etc.,
M.D. HEID. (EXAM.)

* * * The Births and Deaths Registration Act does not enact that the certifying medical practitioner shall add to his signature all or any of his qualifications, but, inasmuch as registrars are instructed only to accept the certificates of registered practitioners, it is eminently desirable that, in medical certificates, the signature should be followed by some qualification which is registrable by the General Medical Council. At the same time, if the registrar be assured that the practitioner is registered, he would not, we believe, be justified in refusing a certificate because the added qualification was M.D. Heidelberg.

REPORTS

TO THE
SCIENTIFIC GRANTS COMMITTEE OF THE
BRITISH MEDICAL ASSOCIATION.

THIRD CONTRIBUTION TO THE LIFE-HISTORY OF CONTAGIUM.

By PETER MURRAY BRAIDWOOD, M.D., F.R.M.S.,
AND
FRANCIS VACHER, F.R.C.S.ED.

(Continued from page 113 of last number.)

REMARKS.—Having naturally grouped our experiments as already described we shall now briefly examine the groups, and endeavour to draw some conclusions. They teach us certain lessons regarding the several septic fluids employed, the dose of the septic fluid required to produce results or death, the effects of different modes of inoculation, the date and manner of death after experimentation, the various pathological lesions found after death, the relative frequency and character of the secondary deposits and alterations in different viscera, and the results of the admixture of antiseptics with the septic fluids, as also of other treatment employed. The microscopical examination of the several septic fluids used and of the blood of some of the animals experimented on gave, however, no striking or uniform results.

GROUP A represents the first rough attempts which we made to induce septicæmia by inoculating healthy animals with lochial solution. In these three instances, the septic fluid was obtained by soaking small pellets of cotton-wool in lochia from a patient in a slightly pyrexial condition, such as most patients present on the fourth day after parturition. The saturated wool was introduced into a small valvular wound, and retained there by means of plaster till, after several days, the ulcerative process induced served for the extrusion of the foreign body. No constitutional symptoms seemed to be caused by this mode of inoculation. The lochial solution was offensive in odour, and was inserted in the same manner into each thigh of the same animal. It produced a slow, unhealthy form of ulceration, with enlargement of the contiguous inguinal glands, and the formation of very fetid, greenish, purulent fluid. The animals recovered gradually after the septic wool had been extruded; the wounds healed, and no ill-results followed.

In GROUP B the septic fluid used was lochial solution removed thirty-six hours after parturition, in Experiments 4, 5, 6, 7 and 8, while some was again removed at a later date from this patient and employed in Experiments 9 and 10. This forms the most important and extensive group of our first series of experiments. The lochia used was a slightly offensive grumous fluid, containing epithelial elements, blood- and pus-corpuscles, a few vibrios, and multitudes of highly refracting granules.

In Experiment 4, a drachm of septic fluid was injected *per vaginam*. The animal died thirty hours after experimentation, and *post mortem* examination revealed patches of congestion in the liver and in the lower lobe of the left lung.

In Experiment 5, half a drachm of the same septic fluid was injected directly into the abdominal peritoneal cavity, and the rabbit died in about fifteen hours. The necropsy revealed puncture of the bowel, inducing circumscribed peritonitis, causing death, and showed that this mode of experimentation was not advisable. No secondary visceral lesions were found.

Experiment 6 consisted of the injection *per vaginam* of a drachm of the same septic fluid combined with a drachm of an aqueous solution of carbolic acid (1 to 20).

It may be remarked here, in passing, that our lochial solutions were obtained by wiping out the vagina with small portions of cotton-wool, then syringing the passage with about two ounces of distilled water, and allowing the cotton-wool to soak in this water in a test-tube till required for experimentation, when the fluid was squeezed out of the wool to mix with that in the test-tube. To render the test-tube as pure as possible, and to prevent, as far as possible, the decomposing influence of air, the tube was first thoroughly heated in the flame of a spirit-lamp, and while cooling, as also after it received the septic fluid, its mouth was closed with cotton-wool and covered with oiled silk tied firmly on. Excepting temporary *malaise* and increase of

bodily temperature, this rabbit (Experiment 6) showed no bad symptoms, and was quite well in a few days after experimentation.

Experiments 7, 8 and 10, terminated fatally. In Experiment 7, a drachm of the same lochial solution as had been used in the three previous instances, mixed with forty drops of solution of sulphurous acid (*B. P.*) and twenty drops of distilled water, was injected *per vaginam*. This caustic antiseptic produced oedema of the vaginal orifice, and induced sloughing of all the superficial soft tissues in the lower third of the abdomen, exposing the viscera. A second comparatively small sloughing wound appeared near the umbilicus, probably from lymphatic sympathy with the other, and several superficial abscesses formed in different parts of the body at a later date.

This animal showed no characteristic constitutional symptoms of pyæmia, and died in an emaciated condition just one calendar month after experimentation. On *post mortem* examination, typical secondary deposits were found in both lungs, in the liver, and in the mesentery. These secondary lesions appeared as minute whitish spots, surrounded by a reddish zone and scattered over the surfaces of various viscera, combined in the lungs with minute superficial hæmorrhagic extravasations. Microscopical examination of these spots showed capillary thromboses, surrounded by circumscribed extravasations of blood into the tissue of the organ. No purulent fluid was detectable in any of the secondary visceral deposits produced by our experiments. It is evident from this experiment (7), that sulphurous acid does not destroy the septicity of lochia.

In Experiment 8, a drachm of the same septic lochia as was used in Experiments 4 to 7, combined with a drachm of the saturated solution of potash permanganate, was injected into the abdomen of a rabbit by puncture over the symphysis pubis. Excepting temporary slight ill-health, this animal appeared unaffected by the inoculation till the fourteenth day, when it was observed to be very ill, and showed a large abscess over the right hip. Death occurred next day, the fifteenth after experimentation. The necropsy revealed signs of recent peritonitis, secondary deposits in the liver (like those met with in Experiment 7), and a large abscess filling the right half of the pelvis. The subcutaneous abscess over the right hip, observed during life, was due probably to the rabbit's septicæmic condition, and had been excited by a slight bruise it had received.

For Experiments 9 and 10, a lochial solution was obtained from the same patient, but at a later date, viz., on the sixth day after parturition. In Experiment 9, the septic wool was inserted into a sloughing wound, but produced no ill effects. In Experiment 10, a drachm of the lochial solution was injected *per vaginam*, inducing pyrexia with increased bodily heat, secondary subcutaneous abscesses, disinclination for food, thirst, listlessness, and hurried respiration before death. This animal died on the fourth day (about 100 hours) after experimentation. *Post mortem* examination revealed signs of slight recent pelvic peritonitis, and characteristic secondary deposits scattered through the liver, through both lungs, and on the left cardiac wall.

GROUP C was arranged to observe the effect of inoculating rabbits with purulent fluid obtained, not from human beings, as this had been tried by previous investigators and found unsuccessful, but from rabbits which had died septicæmic, as shown by *post mortem* examination. In Experiment 11, half a drachm of purulent fluid obtained from rabbit (Experiment 8), combined with half a drachm of distilled water, was injected *per vaginam*. In Experiment 12 a like amount of the same mixture was injected into the abdominal cavity; and in Experiment 13 a few drops of the same septic fluid were injected into the right femoral vein of a third rabbit. This septic fluid, examined microscopically, showed pus, blood, bacteria, phosphates, and refracting granules. Animal 11 died in about twenty-four hours after inoculation, and the necropsy showed local signs of inflammation near the point of injection, but no secondary visceral deposits. Animal 12, died on the seventh day after experimentation, and exhibited pyrexia ending in convulsions. On *post mortem* examination, there were found extensive subcutaneous inflammation and deposit of lymph in the abdominal cavity, and in the abdominal wall, secondary deposits in the liver (similar to those in Group B), circumscribed hæmorrhagic extravasations in the lungs, and congestion of the cerebral meninges. Rabbit 13 died also on the seventh day after experimentation, and showed extensive suppurative inflammation and deposit of lymph subcutaneously in the lower half of the abdomen, and in the right inguinal region, with characteristic secondary deposits in the liver and right lung; and the blood was very coagulable.

Experiments 14 and 15 consisted in subcutaneous injections into a rabbit and a puppy, of twenty minims of an aqueous solution of the purulent fluid removed an hour previously from the rabbit which died from the last experiment. No distinct constitutional symptoms were thus induced, but in both instances local abscesses. In the puppy,

porcelain dialyser was used; but, being unavoidably exposed to atmospheric action, bacteria developed in the lochial solution, and intensified its lethal action.

GROUP B² includes Experiments 9 to 15 of the second series, and in all these instances purulent fluid caused the sepsis. For the rabbits 9, 10, and 11, pus from a postvesical abscess found in the victim of Experiment 1 of this series, which had died septicæmic; and for rabbits 12 to 15, pus from a subcutaneous abscess in the subject of Experiment 4, was used. Into two does (Experiments 9 and 10) were injected, *per vaginam*, fifteen minims each of purulent fluid (from rabbit 1) and distilled water. Both these rabbits died about the same time, one month after experimentation, and both showed after death secondary deposits in the liver and right lung. Rabbit (11) was a buck, which received, *per perineum*, at the same time as the preceding two does, a like amount of the same septic fluid. This animal recovered.

For the next four experiments, pus from the subcutaneous abscess found in the subject of Experiment 4, diluted with about an equal amount of distilled water, was the septic fluid used. A drachm of this mixture was inserted subcutaneously into a buck (Experiment 12) without producing any special symptoms. Fifteen minims of the same mixture, injected *per vaginam* into rabbit (Experiment 13), also had no lethal effect. Into a male rabbit (Experiment 14) was injected, *per perineum*, half a drachm each of the same purulent mixture, and liquor potasse permanganate (*B.P.*), causing death on the eleventh day after experimentation. The necropsy revealed an abscess at the point of injection, and secondary formations in the liver and scattered through both lungs. A buck (Experiment 15) received, *per perineum*, at the same time as the preceding, equal portions (half a drachm each) of the same purulent mixture, and a solution of carbolic acid (1 to 20 water). It survived only sixteen hours, and the necropsy disclosed diffuse perineal suppuration, and secondary deposits in the liver, lungs, and ileum.

Now, for some months, our researches were interrupted by the calls of general practice. When we recommenced, we employed, at first, healthy (that is, normal) fourth-day lochia, from a multiparous patient who had passed through a natural labour. These Experiments (16, 17, and 18), forming Group C², were instituted with this septic fluid, and in only one instance did death occur. Rabbit (Experiment 16) received half a drachm of the lochial solution, *per vaginam*, brought forth subsequently a litter, which lived, and herself recovered without presenting any special symptoms. Another rabbit, a male (Experiment 17), was injected, *per perineum*, with half a drachm each of lochial solution and carbolic acid solution (1 to 20 water), mixed, and survived one month and five days. After death, secondary deposits were found in the liver, in both lungs, and in the skin; while the lymphatic glands were observed greatly enlarged. The third member of this Group C² was a doe (Experiment 18), which received, *per vaginam*, three-fourths in amount of the same mixture as the last rabbit, and recovered.

The fourth (D²) and last group of this second series of experiments comprised three rabbit and a dog, which received as septic fluid fourth-day lochial solution from a patient who, immediately after or during a normal labour, showed modified small-pox. A rabbit (Experiment 19) received *per vaginam* half a drachm of this lochial solution, and died nine days later, exhibiting secondary formations in the liver. A second rabbit, at the same time (Experiment 20), received a like amount in same manner, but recovered; while a third (Experiment 21) was injected *per vaginam* with a drachm of this septic fluid, and survived, bringing forth a litter about eighteen days after experimentation. In Experiment 22, a drachm of this lochial solution was injected *supra pubem* into the pelvic cavity of a fox terrier without producing any special symptoms, and the animal in due course recovered.

REMARKS.—This being the termination of our experiments with lochial solution, forms a suitable occasion to glance over the results derived. In thirteen out of the twenty-five experiments composing Series A, and in fifteen of the twenty-two constituting Series B, lochial solution was used to induce septicæmia. Of the former, five recovered and eight died; while, of the latter, seven recovered and eight died. As regards the methods employed for using this septic fluid, it is noteworthy that, in the four instances in which it was applied subcutaneously (Series A) by means of pellets of cotton-wool saturated with the lochia, no serious septicæmic symptoms were produced; while in the four experiments (Series B) in which the lochial solution was injected subcutaneously by the ordinary method, two recovered and two died. It is further worthy of remark, that the two fatal cases received portions of the lochial solutions which had not passed through the dialyser. This fluid, examined microscopically, showed actively moving bacteria, so that it may be regarded to have acted locally, like any other irritant organic fluid in which micrococcus organisms are found, and in addition to have induced the septicæmic condition characterised by

secondary visceral formations, such as are invariably met with after death by injection *per vaginam*.

In four instances (Series A) the lochial solution was administered in drachm doses *per vaginam*, and only one of these recovered (Experiment 6, in which carbolic acid solution had been added to the septic fluid); while three others (Series A) received in like manner half-drachm doses, and all died. Further, rabbits 4 and 10, which received each a drachm dose, succumbed rapidly; while rabbits 20 and 21, having each had a half-drachm dose, lived for a week after experimentation. The lochial solution used in the former four experiments had a bad odour, showing that putrefaction had set in; but microscopical examination revealed no micrococcus forms; while the lochial solution injected in the latter three instances presented all the characters of freshly removed normal lochia. Of these seven animals, one (rabbit 6) received a mixture of an aqueous solution of carbolic acid and the septic fluid, and recovered; rabbit 7 was injected (also *per vaginam*) with a mixture of solution of sulphurous acid (*B.P.*) forty minims, distilled water twenty minims, and a drachm of lochial solution, and died in a month thereafter; while rabbit 22 was inoculated with half a drachm each of the lochial solution and an aqueous solution of cupralum, and succumbed in twelve hours.

As regards Series B, in six instances the dose used *per vaginam* was half a drachm, and two of the animals recovered; in two experiments, the subjects being male rabbits, inoculation of a like amount of septic fluid was made *per perineum*, but with the same object, viz., to bring the septic solution into contact with the pelvic peritoneal cavity, and both died. Further, one of these animals (Experiment 17) received *per vaginam* half a drachm each of lochial solution and of an aqueous solution of carbolic acid, and died in one month and five days after experimentation. In one instance (Experiment 18) forty-five minims of this last mixture was injected *per vaginam*, and the rabbit recovered; while another rabbit (Experiment 21), which received similarly a drachm of lochial solution from a variolous patient, also recovered. These curious exceptions do not, however, appear to us sufficiently weighty to require us to lay aside as illegitimate the following conclusions. *a.* Normal human lochial discharge of the fourth day after delivery is septic to rabbits. *b.* It invariably induces in them septicæmia, as proved by *post mortem* examination. *c.* The fatal dose of the aqueous solution we employed, the method for preparing it having been already described, is from half a drachm to a drachm, according to the size of the animal operated on. *d.* When allowed to putrefy, it induces local suppuration, like other irritant putrid organic fluids, as well as its own special characteristic visceral formations. *e.* No special constitutional symptoms indicate the important systemic changes which are going on. *f.* The surest method of inducing the constitutional alterations termed septicæmia by inoculation with lochial solution is to bring it into contact with the pelvic peritoneal cavity, by injection *per vaginam* or *per perineum*. *g.* Antiseptic solutions mixed with the septic lochial fluid do not appear to modify its lethal influence. *h.* Micrococcus organisms are not present in, nor are they necessary for, the septic potency of the septic fluid.

Series C comprises seven experiments, which may for convenience sake be subdivided into two groups, and were carried out some time after the preceding, when opportunity offered. Group A³ includes five experiments, of which three consisted in the injection into rabbits *per vaginam* of purulent fluid from the abdominal peritoneal cavity of a patient; and, in the remaining two instances, rabbits received the same fluid by subcutaneous injection. Group B³ comprises two inoculations, one *per vaginam* and the other hypodermically, of sanguineous serum from the abdominal peritoneal cavity of a patient suffering from diffused carcinoma of the abdominal viscera. These experiments were instituted with the object of ascertaining (if possible) whether or not the lethal action of our typical and novel septic fluid (solution of human lochia) was due to its being derived from a serous or a mucous surface, or to its commixture with the fluid elements of pus. The peritonitic purulent fluid injected into the subjects of Group A³ had a very offensive odour, and exhibited microscopically actively moving bacteria, as well as organisms (vibriones, etc.), indicative of putrefactive changes. It will be noted that all the members of this group succumbed in from eight to fourteen days after experimentation. Further, it is striking to observe that the septicæmic condition thus induced was characterised chiefly by inflammation, subcutaneous or of the connective tissue. There were found, too, in nearly all the subjects of these experiments, secondary deposits in the liver, infarcts in one or both lungs, and, in one instance, secondary formations in the cardiac wall. As might naturally be expected, the subjects of subcutaneous inoculation exhibited most markedly the characteristic secondary products of inflammations of connective tissue, even at a distance from the site of puncture. Moreover, there is remarkable uniformity to be noted in the data of appearance of the septic-

As the law at present stands, there is no power to inflict fine or punishment on unlicensed practitioners. They cannot sue for fees for medical attendance; but of so little practical value is this power, that the fellows of the Colleges of Physicians have voluntarily contracted themselves out of it. They cannot hold public appointments, nor can they sign death-certificates or certain other documents, or assume medical titles that they do not legally possess. In all other respects, they are as free to practise medicine in all its branches as the most highly qualified men in the kingdom. When the Act of 1858 was passed—the Act that at present regulates the profession—Parliament deliberately refused to place any other restrictions on unlicensed practitioners. Our modern reformers, however, seek very much more; and consequently, in their Bill introduced during the last session of Parliament, asked for power to inflict a penalty of £20 for each offence on any person not registered under this Act who should for gain engage in the medical treatment of diseases. This Bill is said to have been prepared by a kind of “cabinet of all the talents”. It has been approved of by the Association of which we are a Branch, and by all the leading medical reformers of the day, or at least by the most prominent of them. All experience, however, proves that such powers, even if granted, could not be enforced. Indeed, the only effect the enactment of such a Bill could have, would be to give an impulse and importance to unlicensed practitioners by making heroes and martyrs of them. It is well known that an unlicensed practitioner in this city has, for years past, found it to be for his interest to represent himself as a persecuted and injured benefactor of the human race. He cannot take payment, he pretends, for his advice, or charge for his medicine, but he will sell you a piece of straw, and give his advice and medicine for nothing. The reformers of the year of our Lord 1511 had power given to them, by an Act of Henry VIII, to inflict a fine of £5 per month on all unlicensed practitioners; and, in addition to this, it was further enacted, in the first year of Mary's reign, “that all gaolers must receive and hold all offenders and transgressors in the said faculty committed to their charge by the President and College”. But notwithstanding these arbitrary powers of both fine and imprisonment, the unlicensed practitioners fought them and beat them. The guild of grocers sold drugs; then began to practise; then called themselves pharmacoplists; and finally, notwithstanding squibs and pasquinades, poems, imprisonments and fines, and many actions-at-law (some of them, indeed, causing nearly as much popular excitement as the trial of the seven bishops or other great State trials), became the great medical practitioners of England, and were incorporated as such in 1815 under the title of the Society of Apothecaries. Thus did the reformers of 1511 fail. From whatever cause it may have arisen, they did not supply the public with such medical attendants as they required, and the public created a new supply. So long as human nature is what it is, unlicensed practitioners of the healing art for love or gain cannot be suppressed. The reformers of 1511 failed, as must those of 1882 also fail, if, by making their standard too high, they limit the supply of practitioners below what the public require. Large classes of society would be unable to command, or, perhaps, to appreciate, the services of very expensively educated practitioners, and would seek the services of others. Again the demand would call forth a supply, and, just as when the physicians failed to meet the public want, the grocers, druggists, and pharmacoplists, were brought forward; so a new class of practitioners would arise, notwithstanding the penal clauses of the proposed Act.

But an uniform standard is unattainable for other reasons. It is, in fact, impracticable. At first, it was proposed to have one examining body for the whole kingdom; then one for each division. Even if it were possible to have all candidates examined by the same set of examiners, who could guarantee differences would not be made from national prejudice, favouritism, or other causes? And, in like manner, if there were three sets of examiners, one for each kingdom, what guard would we have that competition would not arise—that attempts would not be made to attract candidates by easy examination and consequent lowering of the scale by one or other of the conjoint bodies? But, even if the establishment of a high and uniform standard were practicable, it would not be desirable, for it would produce stagnation and retard progress by putting an end to all competition. It would not be difficult to show that the competition of the several licensing bodies, even under the present unfortunate condition of its existence, has been the source of almost every important improvement in the medical education of these countries. It has been shown by Dr. Lyon Playfair that the evil effects of uniformity have manifested themselves, by checking competition wherever it has been established. In France, before the great Revolution, there were twenty-three universities, each with a separate autonomy. These Napoleon I conjoined into the University of Paris, making it the single university for France; and the result has been, in the opinion of all the most eminent Frenchmen,

to produce a sterility of intellect that, more than any other cause, has led to the humiliation of France as a nation. Indeed, the unanimity with which the most eminent men of all grades and professions—politicians, lawyers, ecclesiastics, physicians—scribe, the intellectual paralysis of the nation to the centralisation of administration and examination by the University of France, is surprising. Uniform standards of education have been fatal to intellectual progress wherever they have been tried. It was the observation of this that made Germany abandon its old centralised system of State examination. Germany is the typical country of universities, for it counts twenty-four of them, containing 20,000 matriculated students; and its principle now is to give each university a separate autonomy and the utmost liberty of teaching and examination. With this view, the examinations are now carried on at the several universities by the professors, assisted partly by assessors appointed by the State; and thus competition is fostered among them, as to which shall maintain the highest character and best provide for the advancement of learning and culture of thought.

Important as are the lessons to be learned from these experiences in the Old World, not less valuable are those to be learned from the New. The progress in art, literature, and science, that has been so marked a feature in the recent history of the United States of America, has only been surpassed by that made in medicine. Instead of depending, as formerly, on reprints of imported books for their literature, the citizens of the United States have raised a literature of their own, and their medical and other works are now taking the highest places in all European schools. Their industry, fertility of invention, boldness of action, practicality, and perseverance in patient scientific investigation, have enabled the medical men of America to advance our knowledge of the healing art by rapid strides. With them, there has been none of the paralysis so deplored in some of the older schools as affecting all scientific pursuits, including medicine, and which has been so clearly traced to the attempt to reduce intellectual operations to the uniformity that constitutes the perfection of a military drill. Their institutions enjoy freedom of action, and they are determined to maintain it. In 1861, there were thirty-seven medical schools or colleges in the United States, each separate and independent of the other, and each having the power to confer medical degrees. Very possibly there may now be more, for the power to confer degrees is granted to all organised bodies seeking it. They allow the law of supply and demand to regulate the growth, and exclude all interference, governmental or other, that might hinder free development and successful progress.

The same lesson is to be learned nearer home. The pre-eminent of Scotland for widely diffused and thoroughly sound education, both general and professional, is recognised the whole world over. As a school of medicine, the University of Edinburgh has long held a position unapproached by any other. That this is due to the healthful competition of the four universities with one another, is well known and fully appreciated by the Scotch people, and they are consequently determined opponents to all conjoint schemes and uniform standards. Feeling the benefit of free competition, they guard and protect the freedom even of institutions that are satisfied with standards of a lower class than the universities aim at. In 1863, when some reformers, anxious to introduce the uniformity of the drill-sergeant, wished to unite the four universities into one conjoint examining board, and procured a Royal Commission for the purpose, the evidence presented to the Commissioners obliged them to report that such a measure “would not be expedient”.

It is unfortunate that the Royal Commission, whose report we now await, sat with closed doors; and that we have had no knowledge afforded us of their proceedings, or of the tendency of the evidence laid before them by the selected witnesses for whom they called; but, if rumour speak truly, we are to have a modified conjoint scheme proposed, which will embody and concentrate, possibly magnify, all the evils such a system could produce. It is, therefore, the more important that we should be prepared to examine and discuss any proposition to establish a uniform standard of education and conjoint scheme of examinations with all the light that experience and reflection can bring to bear on the subject. Are we prepared (we must ask ourselves) to adopt in any form a system that has been found so injurious in France that the reformers there are obliged to put forward as their programme a demand, to use the words of M. Lorraine, one of the Professors in the Faculty of Medicine, for “the destruction of the University of France and the creation of separate universities”: a system that has been tried in Germany, and been given up, as calculated to produce a paralysis of intellect. “When the Government takes graduation in hand,” says Lyon Playfair, “and stamps our intellects, as it does its sovereigns, with one uniform die, the power at its disposal will be immense; but, as in France, the intellects will in time be crushed under the stroke, and then will not be worth the coining.” We must consider whether

the absorbing demands imposed by the hæmorrhoids. Her nervous system was demoralised by the concentration of her thoughts on her trouble; and the habits of her life had to be regulated by the exigencies of her ailment, until finally she felt compelled to submit to any plan of treatment that could afford her a prospect of relief.

After it had been decided to excise the hæmorrhoids, a day in the following week was fixed for the operation, and in the meantime the patient was very carefully prepared by diet, aperients, and rest. The operation was conducted under chloroform, with the patient in the lithotomy position. As a preliminary measure, the functions of the sphincter were suspended by forcible dilatation. Two thumbs were introduced into the rectum, and the circumference steadily kneaded in every direction until all resistance was overcome, and the sphincter rendered absolutely passive. The patulous condition of the rectum thus obtained enabled the whole mass of piles to be protruded through the anus, by introducing two fingers into the vagina and depressing the recto-vaginal wall. The hæmorrhoids in size and appearance resembled an average ripe tomato, and were mapped on the surface into four irregular and unequal lobes.

The lobes were next divided into four segments by longitudinal sections in the axis of the bowel, and in the furrows marking the intervals between the several lobes. This was accomplished without the loss of any blood. Each portion was then secured in succession by ring-forceps, and dissected with scissors; first, transversely from the anal margin, and then the dissection was continued upwards in the cellular plane to the highest limit of the hæmorrhoidal growths, in this case about an inch and a half. Each segment was thus converted into a quadrilateral wedged-shape mass, the base below consisting of the hæmorrhoids, and the apex above of the healthy mucous membrane of the bowel. The mucous membrane at the highest point was next transversely divided, leaving the hæmorrhoids simply attached by loose cellular tissue, and the vessels proceeding from above and supplying the mass below. The forceps containing the hæmorrhoids were then twisted until a connection was severed and the hæmorrhoids removed. The divided surface of mucous membrane was next drawn down, and attached by several fine silk sutures to the denuded border at the verge of the anus.

The other portions having been treated in the same manner, the operation was completed. The sections throughout were made by scissors. The loss of blood during the operation did not exceed a couple of ounces. The patient made a complete recovery, and regained the full capacity to discharge her domestic duties and social engagements.

Another case was operated upon with Mr. Sutcliffe, of Stretford Road.

The patient was a young lady, twenty-five years of age, whose health and strength had been alarmingly reduced through nine years' pain, mental distress, and hæmorrhage occasioned by internal hæmorrhoids. Such, indeed, was her anæmic condition, that, had I felt less confidence in the small amount of blood likely to be lost, I certainly should have hesitated before undertaking the operation. The piles were unusually large and exceedingly vascular, jets of arterial blood projecting from minute orifices in the tumour upon the application of the slightest pressure. The operation was conducted on the same lines as the previous case, and with equally satisfactory results. The loss of blood during the operation was so slight, that only one sponge was used. Immediately after the patient was returned to her bed, a two-grain belladonna suppository was introduced into the rectum, and a quarter of a grain of morphia administered subcutaneously. The patient suffered no pain whatever after the operation, and her convalescence was complete in a couple of weeks, and remains permanent.

Another example affording considerable interest, and associated with features of unusual character, occurred in the case of a married lady on whom I operated in the summer of 1879. The hæmorrhoids would appear to have originated from the pressure exercised by a retroverted uterus. The position of the uterus not only interfered with the circulation in the rectal vessels, but also, by impinging on the sacrum, acted as a kind of valve and intercepted the descent of feces. The use of aperients only increased her difficulties, by causing increased straining and a firmer impaction of the uterus. She also suffered from excessive and occasionally alarming loss of blood. Ten years of suffering, with intervals of relief during the latter stages of three pregnancies, were endured by this patient before she would submit to any operation. In order to convey an idea of the ignominy to which humanity may be reduced by hæmorrhoids, I may mention that this lady, who possessed feelings of the greatest refinement, admitted that during the last five years she had been forced by experience to adopt the revolting expedient of relieving her bowels by the use of her fingers. The retroversion was corrected by a suitable pessary, and the hæmorrhoids were operated upon in the same manner as the other cases. An attack of cystitis su-

pervened, and complicated what would have otherwise been an excellent recovery. The bladder-symptoms, however, speedily responded to simple remedies, and the patient left town for her home in fourteen days after the operation. Since that time there has been a relapse of the uterine troubles, but, so far as the hæmorrhoids are concerned, the cure has been entirely successful.

These three cases may be taken as representing a large number on which I have operated, in hospital and in private practice, during the last five years, and all have been followed by uninterrupted recoveries and admirable results; no cases have been complicated by secondary hæmorrhage or any constitutional ill effects.

The amount of pain following the operations has not been uniform. In some cases there has been an absolute freedom, whereas in others pain has been complained of during the first few hours after the operation. The number of instances and the amount of pain, has, however, gradually diminished as experience has been gained in the manner of conducting the operation and in the treatment subsequently adopted.

There are points in connection with the operation which will perhaps admit of further explanation.

The operation is based in the first place upon the anatomical foundation, long since demonstrated by Quain, that the arteries in the lower part of the rectum descend from above, running vertically in parallel lines towards the end of the gut in the cellular tissue between the mucous membrane and the muscles. It is from this arrangement of the vessels that the surgeon is enabled to leave the torsion of the arteries to such a late stage of the operation.

The dominant influence of the sphincter, as a factor in the causation of hæmorrhoids, is found equally potent as an agent during the after-treatment; and unless its influence be totally compromised by forcible distension, secondary hæmorrhage may be concealed within the rectum, and much subsequent suffering endured from spasmodic contractions. With the sphincter dilated, however, secondary hæmorrhage ceases to be a consideration of importance; and if during the operation collateral arteries be divided and bleed freely, they are treated on ordinary principles and twisted without difficulty.

In the healthy rectum, the mucous membrane is loosely connected with the adjacent muscle and readily detached, but in this operation it is one of the objects, and a main feature in the cure, to obtain adhesion between the mucous membrane and the muscular coat of the bowel, in order to counteract for the future the tendency to hæmorrhoidal stasis by giving a substantial support to the vessels; and this is gained by uniting the healthy mucous membrane from above to the verge of the anus—an advantage which cannot be overestimated. It closes what would otherwise be an open wound in one of the most undesirable localities of the body, and, by protecting the raw surface from the irritating influences of passing feces, prevents a considerable amount of after-suffering, and admits the only possible chance of immediate repair.

A contingency that will at once suggest itself to the minds of those who read this description is the risk of stricture likely to follow the cicatrix resulting from this plan of operation. I may mention that, wherever it is feasible, with strict regard to removing every evidence of any hæmorrhoidal growth, I invariably leave longitudinal strips of mucous membrane continuous with the skin; but in severe cases, requiring the removal of the entire circumference, I have no fear of the bowel being inconveniently contracted when mucous membrane alone is sacrificed; and believe that undue contractions only take place when annular cicatrix is formed at the expense of integument. I have taken great pains to ascertain that this fear is groundless, and I have watched most of my cases for a sufficient length of time to relieve my mind from any further anxiety on this point; at the same time, I fully realise that the progress of such contractions is slow.

The preparation of the patient, previously to operation, requires a considerable amount of forethought and personal supervision.

The patient must be induced to remain recumbent for at least three days previously to operation. An immense gain is secured by this—the hæmorrhoids are reduced to their least possible dimensions; whereas, if the patient be allowed to go about as usual, he frequently exerts himself in making unusual arrangements in anticipation of the operation, and by such means increases the vascularity of the hæmorrhoids, and consequently adds unnecessarily to the difficulty and the extent of the operation. It would be obviously unscientific to operate upon piles during an "acute attack"; and it is equally evident that, the more the circulation can be reduced to a quiescent condition, the less will be the bulk of tissue requiring removal.

The diet must also be regulated by strict rules. In ordinary cases fluid farinaceous food should alone be taken, and, unless specially indicated, all stimulants should be interdicted.

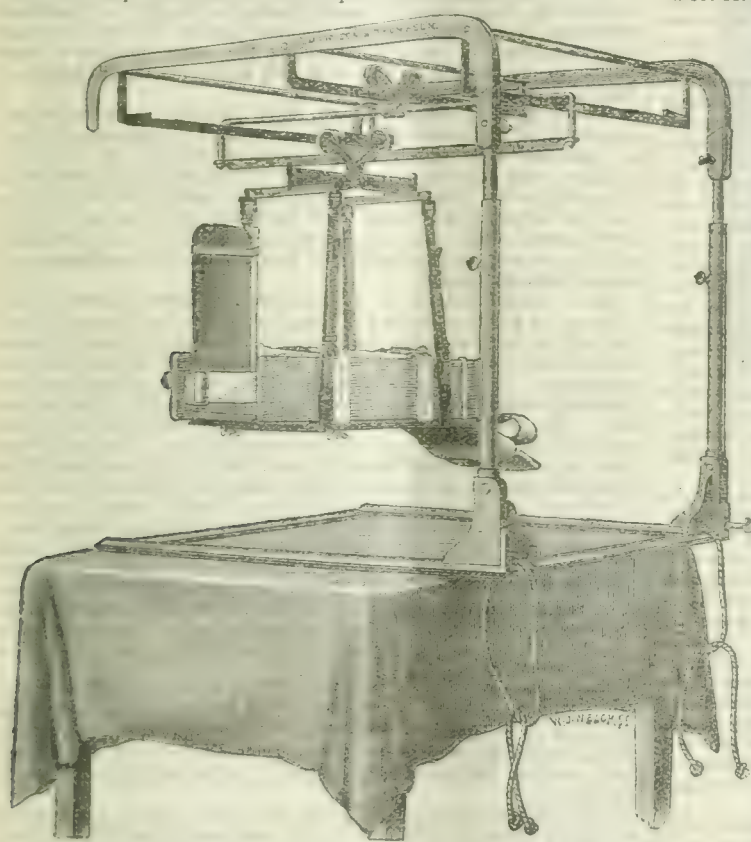
Suitable aperients must be prescribed, and the character of the

THE VALUE OF SUSPENSION IN SURGERY.*

By HENRY GREENWAY, M.R.C.S., Plymouth.

THE value of suspension in the treatment of fractures and certain other injuries and diseases of the extremities may be described in a few words—viz., the prevention of motion in the part suspended, the affording comfort to the patient, and thereby aiding in the reparative process; for it is well known that whatever adds to the pain and discomfort of such patient is a hindrance to Nature's efforts to cure. To gain these ends, everything will depend on the manner in which the suspension is carried out.

The idea of slinging an injured limb was, I believe, first put into practice in this country by Mr. Luke, and in the simplest manner possible, by merely placing the limb in a couple of loops of broad webbing attached to the top of an ordinary cradle. Up to a very late period, this plan was adopted more with a view to afford relief to a bedridden patient than to form a part of the treatment.



In 1850, whilst a student in London, I devised a jointed iron frame, having two longitudinal rails on the top, from which hung four leather straps for suspending my "grasping-splint"; but it had no other recommendation beyond the power of simply suspending, and portability. About the same time, Mr. Salter introduced to the notice of the profession a "leg-sling", which not only suspended the limb, but afforded longitudinal motion, and, by means of a swivel, allowed the body to lie somewhat diagonally on the bed. This longitudinal movement, although a great gain, is comparatively seldom brought into play; and the swivel can only be acted on by moving the whole body on its short axis, an act not frequently performed, and only possible to a slight extent, on account of the narrowness of the framework from which the sling is hung. In 1864, I instructed Messrs. Weiss to make an apparatus whereby I hoped to gain every movement that could be desired. These instructions were carried out; but my success was

only partial. After making a number of experiments to accomplish my purpose, I was able to bring before the profession an invention whereby a patient would be enabled to move his injured limb about the bed with nearly the same freedom as he would his sound one (see *Lancet*, February 24th, 1866). This apparatus I have since improved in certain matters of detail, and it is now described in the catalogues of some of our instrument-makers as my "unilateral limb-suspender". I have also added to it a convertible splint for upper or lower extremity. Other surgeons have suspended limbs after their own fashion; but I am informed the appliances are all of an unpretending character. My apparatus consists of a base about two feet square; two shifting telescope-pillars, terminating above in an overhanging top, to which is attached traversing gear—namely, a central longitudinal rail and trucks (the only parts common to the sling known as "Salter's"); two side rails, also placed longitudinally; a transverse rail and trucks; and a swivel-bar, with shifting yokes for receiving straps which suspend a splint-holder. At the outer angles of the base, contrivances are fixed whereby the pillars are supported, and any inclination of the top can be corrected. For the sake of portability, the pillars can be folded underneath the top, by removing a set-screw. (See engraving.)

To apply the suspender, the base is placed in the required position underneath the mattress from the side of the bed and its outer side is tied with cords to the bedstead. A back-splint, fixed to the holder, and padded, is placed underneath the fractured limb; and the latter having been attended to, the other portions of the apparatus are placed in position by dropping the pillars on to their supports at the edge of the bed, the traversing-gear overhanging the limb. The splinted limb is then slung by means of the straps and yokes from the swivel-bar. In the event of the limb not being properly balanced when the yokes are placed at the ends of the swivel-bar, the yoke at the depressed end should be moved to a notch nearer the swivel. The equilibrium will thus be obtained as in a steelyard. If the base of the apparatus were placed on a bedstead which dipped in the middle, the pillars would naturally incline inwards, and the top would cease to be horizontal. This evil is overcome by laying hold of the upper ends of the pillars and pulling outwards (their supports being hinged at the base) until they are perpendicular. By now turning a screw at the foot of each pillar to the required extent, their upright position will be maintained. If, during the treatment of the limb, the surgeon may require to remove the suspender from the bed, he has simply to slide the yokes off the swivel-bar, and then lift the pillars off the base, the latter remaining undisturbed. In certain rare instances, where the patient is lying on a thin mattress, the apparatus—even at its shortest—may be considered too lofty. This objection is done away with by placing an extra mattress on the bedstead. Where the opposite condition obtains, then the pillars can be lengthened by means of the telescope arrangement. A little oil or grease should be occasionally smeared over those parts of the traversing gear subject to friction.

Having described the apparatus, and the manner in which it should be applied, I would make a few remarks as to the advantages it offers, and therein embody my argument. The following are the principal advantages. Motion is prevented in a limb moved horizontally in any direction. The longitudinal trucks and rail, as in Salter's and certain other leg-slings, allow the patient to draw himself upwards or downwards in the bed, and prevent motion at the seat of injury or disease during such movement. This action, however, as I said before, is comparatively seldom brought into play. The transverse rail and trucks, the most frequently used, allow the body to be moved sideways, and, in conjunction with the swivel-bar, allow the patient with perfect safety to abduct or adduct his limb, or to lie in a diagonal position across the bed. The form of the instrument being unilateral, it can be used for the upper extremity; and a sound leg is not thrown aside from its fellow by any intervening framework, thus preventing distress in the hip and obviating other inconveniences. The base of the apparatus being placed underneath the mattress, there is no possibility of the under-bedclothes bulging up against the back of the limb and interfering with its free and easy movement. I have purposely omitted to provide for the patient's turning on his side, as I think the act would prove injurious.

It has been said, that the longitudinal movement should take place, for the sake of steadiness, on two rails instead of on one—and for the same reason that railway travelling on a broad-gauge line is superior to that

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Ryde, August 1882.

and vehicles accidents that in some years form but a fraction of the emergency cases whose annual aggregate is vastly greater in London than in any other metropolis. Not only the volume of the traffic, with its dangers, excitements, and delays, but the distances patients frequently have to traverse to reach the nearest hospital, are greater than in any other city. Owing to the unequal distribution of the general hospitals, a fracture, from the site of the accident within the registration area to the nearest general hospital—notably, if to the London, to Guy's, or to St. Thomas's Hospital—may have to be transported four to seven miles. This fact gives not only magnitude to the estimate of the avoidable evils arising from the absence of an ambulance system, but to all the reasons which suggest themselves for the adoption of such a system.

An Account of the Leading Points in the Ambulance Systems working or projected in other Cities.—Although the manner of working is not in each city alike, in all cases there are four invariable factors: these are—the police, the hospitals, the horse ambulance carriages, and the electrical communication. The points of difference in different cities concern chiefly the location and personnel of the ambulance carriage.

In Chicago, the principal hospital is at the outskirts of the city. With the police-stations, of course, it is otherwise; and at these the ambulances are kept. The personnel consists of policemen only. For the ambulance summons, an unique provision exists. At the corner of numerous streets are what resemble the ordinary pillar-post in miniature. Any one of several keys kept in the houses or shops in the immediate vicinity of one of these posts, on being introduced into the keyhole of its corresponding post, sounds an ambulance alarm at the police-station of that particular district, and, as quickly as it could be done by a fire-engine, the ambulance, at a gallop, appears on the spot. As a check to false or reckless alarm, each key, which is registered and numbered against the name of the holder, is so constructed that, once introduced, it can be withdrawn only by the ambulance driver, who delivers it back to its holder, and takes the patient to the hospital of the respective district.

In New York, Boston, and Philadelphia, the ambulances are kept at the hospitals only, horses for which, as is common to the system everywhere, are kept harnessed night and day. The personnel includes a house-surgeon, or substitute. The ambulance summons is sent by telephone from the police-station nearest the site of the accident to the head-quarters of the police, where, on a chart, is seen at once the hospital district of the address where the ambulance is required, and the telephonic summons is then forwarded to the hospital of that district. A diagnosis blank is filled up by the ambulance surgeon before removing the patient; and, immediately on returning to the hospital, this, with the time of departure, arrival, return, and other particulars, is entered in a book for that purpose. If, after the necessary attention, the patient desire it, and the surgeon approve of it, the patient may be transferred by the ambulance to his own home.

In Cincinnati, ambulances are kept at all the hospitals, and at some only of the police-stations. In Washington, they are kept at all the hospitals, and at every police-station. In each of these cities, the ambulances rival the fire-engines in promptness; and, from the general interest awakened by the ambulance carriages, not only amongst the police, but the people generally, there is so much familiarity with the provisions and rules of the system, that such intelligent co-operation as may be in any case expedient is rarely wanting.

In the neighbouring city of Paris, the project which has received the municipal approval consists in having horse ambulance stations, corresponding in their distribution to the former "Secours des Blessés" stations, forming together a distinct municipal organisation.

The Ambulance System and Ambulance Carriage of the London Hospital.—By reference to the diagram, it may be seen that, nearly equidistant and in different directions from the London Hospital, there are eight police-stations. If not in consequence of my suggestion, certainly in accordance with it, each of those stations, formerly in telegraphic connection with Scotland Yard, are now, by the cordial co-operation of Sir Edmund Henderson, being connected also with each other so as to form a distant, but complete, telegraphic ring around the hospital. Tapping this circle at one point, viz., the nearest police-station, by a telephonic wire thence to the hospital, it will be seen how, as represented on the diagram, the entire area round about the hospital is brought into direct communication with it. The cost of this wire for the first three months, I am given to understand, will be nothing, and afterwards, by special concession, below the usual rates. As one of the privileges of subscribers, and at no extra cost, this telephone may be connected at any moment with that of every other subscriber. Thus, every policeman within the London Hospital area having the addresses of the said subscribers within his beat, from the nearest private instrument of the already many hundred subscribers, the am-

bulance summons may be sent direct to the hospital. This is the outline of the plan I have submitted to the London Hospital Committee, and which, I trust, will soon be in complete working.

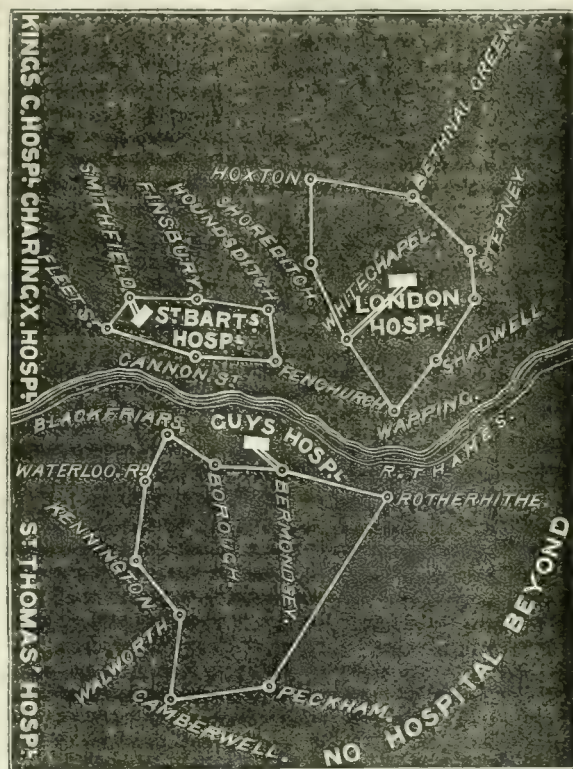


Fig. 1. Explanation of Diagram.—(Small circles) Police Stations.—(Single lines) Telegraphic Wires.—(Double lines) Telephonic Wire.—From Guy's Hospital south, there is no other general hospital whatever; from the London Hospital north, no other general hospital in any direction, except at Dalston.

The ambulance carriage, in the absence of which neither this nor any other scheme could take practical form, I thought at first to import from New York, that being the nearest place where any accident horse-ambulance could be procured. You will not regret to know, however,

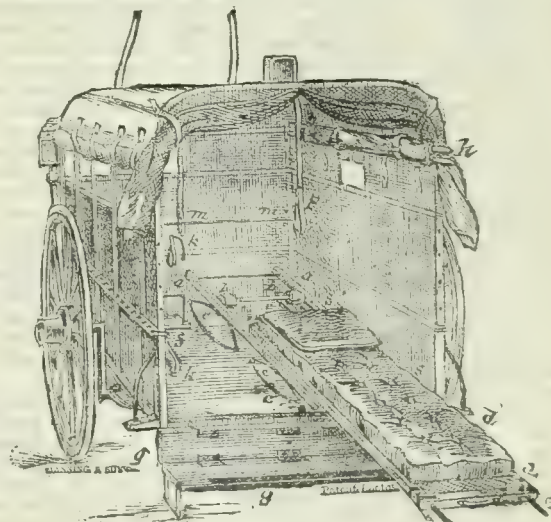


Fig. 2.

that as the ambulance of the London Hospital, which I shall show you to-night, was subsequently planned by me here, and built for me here, with express adaptation for the London service; it is, both in design

By the principle of suspension, as illustrated in the attachment of the canvas stretcher, the conditions, though for a fracture case not so desirable as those of the litter, are for a medical case scarcely less agreeable; the elasticity of the stretcher-poles, as thus used, preventing the propagation of jar or shock to the patient.

One feature in this stretcher is as convenient as it is novel. Across the under side of the canvas, from which both poles and stretcher-bars may be easily and completely detached, are stitched four broad bands of the same material, terminating in firm loops slightly projecting beyond the lateral margin. On this carrying-sheet, to which the stretcher may be thus easily reduced, the patient may be carried easily and comfortably where the stretcher complete would not go. The ease with which it can be insinuated beneath, or withdrawn from under, a patient, or, when there, be left there, may be a great convenience, and avert much suffering.

(c) *Ventilation and Light, with or without exposure of the patient to public view, can be regulated to the utmost.*

(d) *Immunity from Contagion.*—The cane-bottomed litter is, without the mattress, sufficiently comfortable. The interior is then but wood and iron, and accessible to the quickest and most thorough cleansing.

(e) *Adaptability to other Uses.*—The tramway is readily detached from the floor. The interior, then quite clear, is adaptable to any purpose of pleasure or utility for which a vehicle might be desired in connection with an infirmary, hospital, or other institution.

My thanks are due to Mr. J. U. Burt, of the Swinton Street Carriage Works, for his patience and faithfulness in carrying out my designs in the construction of this vehicle.

SOME OF THE LEADING QUESTIONS WHICH WILL ARISE IN THE CONSIDERATION OF AN AMBULANCE SYSTEM FOR LONDON.

1. *The kind of Ambulance Carriage to be Employed.*—Should the carriage I have presented to your notice prompt somebody to the introduction of a better, my satisfaction would be so much the greater. To stimulate invention in this direction, the suggestion of prizes recently put forward by Sir Edmund Lechmere and Major Duncan would doubtless be of service.

2. *The Location and Personnel of the Ambulances.*—Shall they be stationed at the general hospitals, the police-stations, fire-stations, or at special ambulance-stations? If at any one of these only, which? If at more than one, at which other or others? For the police-stations, may be shown their superior number and distribution, the always available force at each; against them, the natural and rightful repugnance of the better classes, for whom the ambulances are equally intended, as well as indeed that of all other classes, to personal police attendance; while the absence of all good first care on the spot, and the uncertainties about admission, detention, or rejection, on reaching hospital, would be then as great as now. For the location of the ambulances at the hospitals, it may be said, the question is one of medical aid on the one hand, of public need on the other; affecting in a personal way, as no other question connected with hospitals could, those who, supporting the hospitals, are accustomed to look to them as the natural source of the best and rightful help, in a possible street-accident to themselves; and that the ambulance of the hospital would be but a natural and legitimate extension of the help it now gives, to the time it is first and perhaps most critically needed, and thus it would but complete the function it now partially fulfils. The facility for a medical attendant would be greater; there would be a guarantee against hospital-yard detention, of possible rejection, and delayed treatment; the help afforded would be disassociated from the now humiliating and criminal suspicions. For the hospitals, there would be evoked higher esteem; more personal sympathy, concern, and help from the subscribing classes. As regards the personnel, the rank of the medical attendant would be of little consequence, his competency of much; the work would be no harder than that to be expected in country or in army practice. The hospital would have, by this service, a new prize and another useful certificate to offer the deserving candidate, for a term as short as may be found expedient. In America, as a rule, the ambulance system is strictly a hospital-ambulance system. The medical attendant is usually what corresponds to a senior or junior dresser. No part of the scheme has so much secured the success and popularity of the system, as the quick medical help it guarantees to the entire public.

3. *Special Ambulance Stations.*—These might be at the same time small emergency hospitals, and in the outer and almost destitute seven mile belt of London, might have a relation to the general hospitals, corresponding to that between the field and the base military hospitals; the patients being drafted from the former into the latter as may be required.

4. *The Form and the Source of Ambulance Summons.*—In America the intercommunication between the respective police stations con-

tinues to be telegraphic—between the police and the hospitals it is telephonic, so that the call can be understood by anybody in attendance at either end of the wire. In regular course, the ambulance summons comes to the respective hospital from the head-quarters of the police; it may come, however, from any public or private telephone whatever. As an instance of the quickness of the service made possible by the telephone, only this morning Dr. Beckwith, of Washington, told me that on the occasion of an accident during the inauguration of President Garfield, he (Dr. Beckwith) himself telephoned from a neighbouring street; notwithstanding the unprecedented multitude in the streets, from the time of the summons to the arrival of the ambulance, was by his watch, exactly two minutes. Before long every police-station in London will be in telegraphic communication with every other. One of these stations is sure not to be very distant from a general hospital. One short telephonic wire therefore will put every police-station in communication with that hospital. Moreover every public and private telephone in London, by the ordinary method of connecting subscribers with each other, will thus be in communication also with every hospital telephone. A street accident occurring anywhere, a policeman guided by his list, from the shop or bank for example, next door perhaps, telephones to the respective ambulance the address where it is wanted. A purposely false summons would of course be a criminal act.

5. *The relation of the Police Department to the Ambulance System.*—This in any case must of course be integral. Whatever the system, it is necessary that every policeman should be intelligent as to the details of it, while the entire force must be in harmony with the other part of the organisation. On this point I am happy to say that by Sir Edmund Henderson, the Chief of the Metropolitan Police, I was long since authorised to state to whomsoever it might concern, that his practical co-operation may be fully relied upon.

6. *The Cost and how it is to be met?*—In America, as a rule, the hospitals have provided the necessary change in their premises; procured and maintained the ambulance horses, etc., complete, in working order, making themselves simply available; the municipalities have done the rest. The cost of the ambulance I show you will be, I think, from sixty guineas and upwards, little more than half the cost in New York of the ambulance there used. Telephonic communication costs at regular rates at present £45 a year, but for this service special concessions are promised. On the advent of the expected Government control of the telephonic service the subscription is expected to be lower and the distribution of it more general. An ambulance carriage is just the kind of thing many donors would like to give. An ambulance station is just the kind of thing many would like to endow, its daily benefit being to them daily visible. From my observation where the system is oldest, I believe that, if put on a voluntary basis, it would by its popularity probably elicit enough to support itself and do more than all things else combined to augment the hospital fund.

7. *The Expediency of attempted Complete Organisation at the outset or of allowing Gradual Development?*—This question confronted in its entirety, it must be admitted, promises no easy achievement. The hospital modifications, the police and telephonic arrangements, the harmonising of these with the heterogeneous and parochial administrations, like the obstacles which, incomparably greater, were surmounted by the railway, telegraphic, and fire-brigade systems, may not and should not be accomplished in a moment. The work, as initiated by the London Hospital, is, considering its importance, strikingly simple and easy. The neighbouring hospitals assuming a similar work for their respective districts, a fair proportion of the metropolitan area, as shown in the diagram, would be provided for, and the ultimate system or systems might be determined by gradual development.

8. *The Authority by which the ultimate Hospital and Accident Ambulance System for London shall be controlled.*—This must remain a question until, sooner or later, the time has fully come for the answer. The necessarily integral position of the police department in such system is suggestive. Of this I should venture to say there can be little doubt that, however successfully different districts may be separately worked, in order to the highest success, the entire organisation will ultimately be under one authority, so complete and absolute as to ensure corresponding responsibility and accountability in every subordinate whatsoever.

SOME OF THE RESULTS AND ADVANTAGES WHICH, FROM THE EXPERIENCE IN OTHER CITIES, MAY BE REASONABLY ANTICIPATED FROM A METROPOLITAN HOSPITAL AND ACCIDENT AMBULANCE SYSTEM IN LONDON.

1. Quickest possible medical aid, and best form of transportation, to the house or to hospital, in street accidents and other emergencies.

2. A sense of security which, by the knowledge of this provision, will be imparted to every rank and class throughout the entire community.

REPORTS

OF
MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

EAST LONDON HOSPITAL FOR CHILDREN.

CASE OF ROUND-CELLED SARCOMA OF THE RIGHT KIDNEY.

(Under the care of Dr. DONKIN.)

[Reported by H. A. FOTHERBY, L.S.A., Senior Resident Clinical Assistant.]

ROSE A., aged $2\frac{1}{2}$ years, was admitted on October 3rd, 1881. Her mother gave the following history. Three months earlier, she had noticed a fulness about the child's belly; but, thinking it to be only increase of ordinary fat, did not attach any importance to it until about a fortnight afterwards, when she noticed that the child was poorly and fretful, and that the swelling was hard and one-sided. She then called in a local practitioner, who discovered a tumour in the right side of the abdomen. For the last month, the child had complained of pain at times in this part, and had been very languid and fretful, picked her nose, ground her teeth, moaned in her sleep at night, often complained of being sick, and had vomited once or twice. The bowels had been rather confined; the motions were said to be of good colour, and the urine passed to be rather milky in appearance. She had had no fits. On palpation in the right abdominal region, a large, apparently solid, ovoid mass could be felt occupying the right side of the abdomen; it extended upwards to the liver, from which it was separated by one finger's breadth of resonance; downwards to within one inch of Poupart's ligament, and forwards to within one finger's breadth of the umbilicus and the linea alba. On rolling the child over to the left side, the resonance of the colon could be made out posteriorly. On percussion, complete dullness was elicited over nearly the whole of the tumour, except to within about four fingers' breadth of the median line, where the tumour was probably overlain by resonant bowel. The area of dullness was only slightly altered by position. The tumour was fairly movable on palpation, and its surface was smooth and elastic. The superficial abdominal veins were gorged with blood, especially the superficial epigastric, which formed distinct plexuses. The abdomen had a circuit of twenty-one inches. The umbilicus was displaced to the left. The spleen was not felt. The liver extended two fingers' breadth below the ribs. The lungs and heart were apparently normal.

October 10th. The abdominal veins were still more turgid; the pulse was small and weak; the temperature was normal; and the tongue was somewhat furred. An exploratory puncture was made in two places with an aspirating syringe, under chloroform, to resolve any doubt there might be as to the solidity of the tumour. The temperature remained normal after the operation.

October 17th. The edge of the liver was felt on the right side three inches below the ribs; in the nipple-line, three-quarters of an inch below the ribs.

October 18th. The child was attacked in the afternoon with vomiting. The respirations became very hurried, and the temperature rose to 101° . She was sick again in the evening. The abdomen was much more distended, and her aspect was very worn and painful. On being touched, she broke out into a whining cry.

October 20th. The temperature on this morning was 101° . She had a hacking cough; and at the base of the right lung behind, respiration was distant, and dullness extended to the upper border of the tenth rib. The respirations were 41. The urine was intensely acid, loaded with urates, deposited large crystals of uric acid on standing, and contained a considerable trace of albumen. The child was very feeble and irritable. There were some puffiness of the face, and slight oedema of the lower limbs.

October 21st. In the morning, the pulse was 132, the temperature 101.6° , the respirations 72. Vomiting continued. The breath was very offensive, and there were sordes on the lips and gums. In the evening, the respirations became more shallow and rapid; the child grew very restless and irritable, and emitted a constant weak moaning cry. The face was of a dusky hue, and puffy.

Towards morning on October 22nd, she lay passive, with eyes half-closed and directed upwards. At 4 P.M., convulsive movements of legs and arms came on, followed by general convulsions, epistaxis, and

a slight discharge of blood from the ears. Death occurred in a few minutes.

At the necropsy, the body was that of a fairly well nourished child. Rigor mortis was well marked. On opening the abdomen, the liver was seen occupying nearly the whole upper half of the cavity, extending from the right to the left hypochondrium, and downwards to within one finger's breadth of the umbilicus. A tumour was seen under the right lobe of the liver, covered with peritoneum, but with no coils of intestines over it, extending down to the symphysis pubis, and internally to the median line. The left half of the abdominal cavity was occupied by intestines and mesentery. There were no signs of adhesions or peritonitis present. On removing the liver and intestines, the tumour was found growing from the lower end of the right kidney, and was closely adherent to the inferior vena cava, which was distended with clot, and measured an inch and a quarter in diameter. The distal end of the vessel was atrophied, and with difficulty recognisable. The clot consisted of a thick fibrous decolorised mass, lining the vessel, and leaving only a lumen about the size of a goose-quill, filled with dark soft coagula. The thrombus extended from the level of the tumour through the rest of the vena cava into the right auricle, which was much distended; the clot here also consisted mainly of decolorised fibrin. Both the ventricles were empty; but the left auricle contained a little soft clot, and the left ventricle was slightly hypertrophied. The valves were healthy. On removing the peritoneal lining, the renal capsule was found spread out over the tumour, and adherent to it, but not to the kidney-tissue proper. The tumour, when removed, was found to have about the dimension of the fetal head at term, but was more elongated and pyriform. Its length, including the kidney, was six inches and three-quarters, of which only one inch and a quarter consisted of kidney proper. Its broadest part measured four inches, and its thickness varied from two to four inches. On section, the growth was found infiltrating the whole of the medullary substance and the lower two-thirds of the cortex, the remainder remaining healthy. The ureters were pervious and healthy throughout. The general consistence of the growth varied in different parts. The central medullary portions were of a soft pulpy consistence; the peripheral hard and fibrous. Hæmorrhages into its substance had occurred, marking out the directions of its fibrous trabeculae, which were seen dividing its substance into several large lobules about three-quarters of an inch in diameter. The lobules in the upper part of the tumour were oblong in outline, and of a much deeper colour than the interlobular tissue, highly vascular, and having a concentric arrangement of fibres and hæmorrhages; the lower ones, more circular, of a deep brown colour, non-vascular, and tending to break down into cavities, had a whorled arrangement not unlike the microscopical appearance of the bird-nest cells in epithelial cancer. There was one large hæmorrhage into the lower part of the tumour, probably due to the exploratory punctures. The left kidney was unaffected; it measured three inches and a half in length. The liver weighed 1 lb. 7 oz., showing, on section, evidence of great mechanical congestion, especially in its right lobe. The spleen was hard and congested. The intestines were healthy. The brain was not examined microscopically. The tumour was found to consist of round-celled sarcoma.

LIVERPOOL EYE AND EAR INFIRMARY.

OPHTHALMIC CASES.

(Under the care of Mr. R. WILLIAMS.)

[From notes by Mr. CHARLES ATKEN, House-Surgeon.]

CASE 1. *Polypoid Growth of the Conjunctiva*.—E. S., aged 16, five months before admission, was hit in the eye by a handful of straw which was thrown at her. She went home and had the eye bathed. The eye had continued to discharge ever since. When she presented herself, there was a copious purulent discharge, and a flap-like polypoid growth was seen protruding from under the upper lid. On evertting the lid, a fragment of straw about an inch long was found near the outer canthus. It had formed for itself a sinus with thickened walls in the substance of the lid. The growth, consisting of granulating hypertrophied conjunctiva, was easily removed, as was also the foreign body; and she made a rapid recovery.

CASE 11. *Neuro-retinitis from Blow on the Forehead*.—T. E., aged 29, was thrown out of a trap on July 5th, 1881, and fell on the right side of his forehead. He was insensible for six hours. He vomited, and had epistaxis and violent headache. When the ecchymosis of the eyelids and conjunctiva subsided on the fourth day, he found he could not see with the right eye, and was therefore brought at once to the infirmary. There was complete conjunctival ecchymosis round the right eye. He had no wound of the forehead. He could not read Jäger 20. Central

of the pelvis. Sudden alteration in the symptoms took place about a year before the operation, accompanied by profuse hæmaturia. Up to that time jolting, such as was caused by riding in a train, caused little pain, and there was no frequency of micturition. The attacks of pain were always brought on by prolonged walking. After that, there was gradually increasing frequency of micturition, and pain was caused both by jolting and walking. It seemed probable that the change was caused by the stone passing from a calyx into the pelvis of the kidney. The stone was originally moulded in a calyx, and at the operation it was found in the pelvis. A like difference of symptoms had been observed in other cases of renal calculus, in some the pain being brought on more by the movement of the muscles in the neighbourhood of the kidney than by jolting of the whole body. Frequency of micturition was also a very remote condition. As all the graver consequences of renal calculus arose from the presence of a stone in the pelvis, and as the chances of cure by the stone becoming encapsuled were certainly great when the calculus was lying in a calyx, it was important to distinguish these two conditions. Future observations might show some such rule as the following to be true. When the pain was induced by walking only, and there was no morbid frequency of micturition, the stone was probably enclosed in a calyx; when the pain was greatly intensified by jolting of the body as well as by walking, and when there was frequency of micturition, the stone was probably lying loose in the pelvis. With regard to the operation itself, the chief points of interest were the success of puncturing the kidney with a fine needle in finding a stone which could not be detected by manipulation; the rapidity with which the bleeding from the kidney was arrested by simple pressure with a sponge, and the simplicity and ease of the whole operation, which was no more difficult than an ordinary perineal lithotomy. To avoid too great loss of blood, the knife should be used as little as possible, the wound being enlarged by tearing. The rapid healing was in great part due to the thickness of kidney-tissue cut through, which prevented to a great extent the escape of urine by the wound. The depth of the wound, the decomposable matter lying in it, and the dangers of disseminated suppuration of the kidney and septic pyelitis, rendered the antiseptic treatment of the greatest importance. —Mr. H. BUTLIN described another case of renal lithotomy. The patient was a man aged twenty, who for ten or twelve years had suffered from severe attacks of neuralgia of the testis. The attacks occurred very frequently, and lasted from thirty minutes to two or three hours. After his admission into St. Bartholomew's Hospital in September, Mr. Willett discovered that the pain was seated in the right side of the abdomen as well as in the testicle, and that the symptoms were those of renal colic rather than of neuralgia of the testis. The urine contained crystals of calcium oxalate, and occasionally traces of albumen, but no blood or pus. In spite of the pain, the patient's health was fairly good. As treatment did not afford permanent relief, Mr. Butlin cut down on the kidney through a vertical incision in the lumbar region. The kidney appeared to be healthy, but a calculus was discovered and removed from the renal pelvis. It was composed of calcium oxalate, was about as large as a filbert, and quite prickly on the surface. The patient made a good recovery, so that, two months after the operation, which was performed on October 5th, he was discharged free from pain and quite well, except that a small quantity of pus was present in the urine. Lister's antiseptic dressing was employed, but this was abandoned two days after the operation, and the wound was healed, as far as possible, like an ordinary lithotomy wound. Urine ceased to flow through it, after about the seventeenth day. This case was of interest, not merely as a contribution to the successful treatment of renal calculus, but as an important contribution to its diagnosis. The absence of blood in the urine was especially remarkable when the situation and nature of the stone were considered. —Dr. WHIPHAM and Mr. J. W. HAWARD also contributed histories of two cases of nephrotomy for the removal of renal calculi. The first case was that of a married woman, aged twenty-three, who was admitted into St. George's Hospital under Dr. Barclay on September 10th, 1880. The patient gave a clear history of having passed a calculus seven years previously. It was a rough stone, which gave much pain. After this she remained in fairly good health; but, although she experienced no paroxysms of pain, yet she was never free from constant uneasiness in the left side. She had never been very robust. Nine weeks before she came under Dr. Barclay's care, the pain in the left loin recurred with great severity; she lost much flesh, and the urine became "very thick" and offensive; she experienced pain in micturition. While under observation, she complained of shooting pains in the left loin, weakness, and loss of appetite. The abdomen was flattened, and neither dulness nor swelling was detected on the right side. On the left side the muscles were firmly contracted, and therefore no tumours were found. There was great tenderness over the left hypochondriac

and lumbar regions, and slight tenderness in the right groin. The urine contained much pus, and was alkaline. During the patient's residence in hospital, she suffered much pain in the region of the left kidney, and had occasional perspirations. Eventually the urine became acid and the pain was much relieved, and she was discharged, somewhat improved, on October 23rd, 1880. On March 21st, 1881, she was readmitted under Dr. Whipple's care, when she stated that she had in the interval never been free from pain, and that for the past week it had been intense. The urine had been persistently turbid, and she had vomited. On March 20th, she had noticed a few clots of blood in the urine. The abdominal tenderness was so great that no satisfactory examination could be made. As no improvement took place, Mr. Haward was called in consultation, and he decided on attempting to remove the calculus by nephrotomy. The patient having been placed under the influence of ether, a tumour was distinctly felt in the left loin, and an incision was made as if for lumbar colotomy. The surface of the tumour was exposed; a bistoury was thrust into it, and the finger passed into the dilated pelvis of the kidney. A firmly fixed stone was at once detected, and without much difficulty removed, together with a few small fragments. Very little blood was lost. The patient did extremely well, and on July 16th was discharged, there being still a little discharge from the sinus in the loin, and a small quantity of pus in the urine. The stone weighed 47 grs., and was composed of phosphate of lime. The second case was that of a woman aged fifty-six, who was admitted under Dr. Whipple's care on October 3rd, 1881. She had suffered from pain on micturition for several years. In 1879, both gravel and blood were present in the urine. She was not aware that she had passed a stone. In October 1880, she had a sharp attack of vomiting, followed by pain in the left lumbar region and hæmaturia. While under observation, she complained of an increase of this pain, and the abdomen was generally tender. There was great muscular resistance on the left side, with fulness and tenderness on pressure on the right side. Fluctuation was detected on October 6th in the left loin, and Mr. Haward, who saw the patient on that day, made an incision into the swelling. During the night a copious discharge of pus occurred, with great relief to the pain. No calculus could be found. The urine contained much pus. On November 3rd, the patient having become worse, the incision was extended, and the wound thoroughly explored; no calculus was found; but, as the kidney and tissues were firmly matted together, no further operation was deemed advisable. The patient died next day. At the *post mortem* examination, it was found that the kidney lay in a cavity, whose contents were purulent; that its pelvis was dilated, and communicated with this cavity by a large irregular opening, through which one or two fingers could be passed. Two or three small fragments of stone were found in the calyces. A large branching calculus occupied the calyces of the right kidney. These two cases were brought forward as illustrating the propriety of cutting into the kidney in cases where the diagnosis of renal calculus was clearly established, and as affording encouragement to the surgeon to perform the operation of nephrotomy in the earlier stages of the disease, rather than to postpone surgical interference until dilatation or suppuration of these organs had occurred. —Mr. CLEMENT LUCAS related a case in which he cut down upon the kidney, but failed to find a stone. The patient was a man aged 49, who, two years before, had suffered from acute pain and hæmaturia. These symptoms passed away, and he remained free from them for six or nine months, when he was again attacked with profuse hæmaturia, and became very anæmic. He passed triangular clots, presumably casts of the renal pelvis. After a month's observation, Mr. Lucas performed the exploratory operation under antiseptics. He regretted that he did not also explore the organ by acupuncture, but at that time thought this was a more dangerous procedure than it had been shown to be. Eleven days after the operation, the patient was sitting up, and on the seventeenth day he left the hospital with the wound soundly healed. Great relief was obtained. He had since returned with evidence of phthisis, so that it was possible he had strumous disease of the kidney. Mr. Lucas remarked on the simplicity of such exploratory measures, which he would recommend in any doubtful case. —Mr. BARKER said that the danger of hæmorrhage from the renal incision was not great. He referred to Professor Brandt's case of "hernia of the kidney", following a wound in the loin, the organ being removed on the fourth day after injury. Mr. Barker had related this case in his paper in the *Med.-Chir. Transactions* (vol. 63). In one case, he was struck with the rapidity with which the bleeding ceased after incision of the organ; and that was also shown in Mr. Beck's case, where very moderate pressure sufficed to arrest the bleeding. Such facts proved that incision or puncture need not be feared. —Mr. MORRANT BAKER pointed out the importance of recognising a totally different class of cases from those just recorded—such

as one which he related at the International Medical Congress, where there was a renal abscess; and, on exploration, a large branched phosphatic calculus was found, which was only dislodged with much difficulty and considerable hæmorrhage. The calculus weighed nearly two ounces. The patient never rallied, and died three days after the operation. This kind of case was distinct from cases where only small stones occurred; and it was a question whether, in such a case, it would not be better to remove the whole kidney.—Mr. BARWELL had not removed a stone from the kidney, but had removed the whole kidney. He thought it desirable not to let cases in which the presence of a stone was suspected go on with prospect of ultimate damage to the organ, when a simple incision and puncture would indicate the nature of the mischief. The incision, too, was made in a part free from danger. Hardly any pyrexia followed. It would be interesting to learn whether a stone would again form, or the kidney become mobile.—Dr. BARLOW said that Mr. Morris had laid great stress on the difference between cases in which the kidney was healthy, and those where pyelitis and destructive changes existed. This point required to be insisted on, for cases such as that described by Mr. Baker belonged to the second class. About three years ago, he (Dr. Barlow) had under his care a Jewess, about forty-seven years old, passing pus in the urine, and who had had pain and swelling in the right loin for eight months. Mr. Couper was consulted, and a grating sensation was felt in the swelling. An incision was made, and pus escaped from the kidney, which contained three large calculi. The organ could not be removed. Death took place next day. It was manifestly unfair to nephro-lithotomy to contrast it with such cases as that.—Dr. LONGHURST pointed out that the successful cases appeared to be those in early life; the fatal ones in older subjects. He knew of a nobleman, the subject of renal calculus, who was advised by a surgeon in Paris to submit to this operation, but he would not accede, and a year later, after a similar attack, died. Both kidneys were found blocked by enormous calculi. In another case, a patient who had symptoms for eighteen months passed one or two small stones *per urethram*. Hence discretion should be exercised in the selection of cases for operation.—The President said the Society and the authors were to be congratulated on this important series of cases. They were of interest pathologically, for they dealt with calculi of different composition—oxalic, uric, and phosphatic; and as illustrating the long time that two calculi might remain in a kidney without increasing in size, so different from the case of vesical calculi. It seemed as if there were greater concentration of urine in the bladder than in the kidney. The question of diagnosis was also very interesting; almost the sole symptom in Mr. Lister's case was the neuralgia in the testicle, hæmaturia being absent. It reminded him of one of John Hunter's cases of stone in the bladder, marked only by pain in the arm. As to the operation itself, the incision in the loin was devoid of danger, especially if antiseptics were used. He thought an acupuncture-needle more convenient to explore the kidney than the needle used by Mr. Beck, who, however, was not only able to detect the presence of the stone, but also to estimate its size. As such a method, the surgeon might decide whether the stone were too large to be extracted from the organ, which would then have to be removed en masse. The free hæmorrhage, and its rapid arrest in Mr. Lister's case, reminded him (Mr. Lister) of the hæmorrhage that resulted from the removal of the stone in a case of *lithiasis* observed with Sir Joseph Lister. Sir Joseph remarked that such free bleeding often occurred, and that it was not unusual. In the renal calculus, the blood vessels were not so much damaged as in the vesical. Mr. HOWARD, in reply, said that he never felt he had heard the subject in favour of early operation, and agreed with Mr. Lister that in advanced cases removal of the whole organ was preferable to attempts at extraction of the calculi. The case of the young gentleman was not a case of *lithiasis*, but of *pyelitis*, and the second case, related by Mr. WARDEN and Mr. BARWELL.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, DECEMBER 18TH, 1881.

HECTOR CAMERON, M.D., President, in the chair.

Fracture of Anterior Fossa of Base of Skull.—Dr. BARLING showed a specimen of fracture of the base of the skull confined to the anterior fossa, in which during life there was severe hæmorrhage from the nose; and, a few hours after admission into the General Hospital, a small quantity of clear serous fluid was discharged from the left auditory meatus. This continued for the thirty-six hours the patient survived the accident. At the *post mortem* examination, considerable brain-laceration was found, but no fracture of the petrous portion of the temporal bone existed; the left membrana tympani was ruptured. It was therefore concluded that the fluid exuded during life was secreted by the lining membrane of the tympanum.

Supracondylar Osteotomy for Genu Valgum.—Dr. WARDEN read a paper on this subject, and exhibited a patient, fifteen years of age, upon whom double supracondylar osteotomy had been performed. Instead of strictly following Macewen's method, the incision was made above the external condyle, and the femur divided with three osteotomies from without inwards. The result of the operation was very satisfactory; the malleoli, which formerly were twenty-four inches apart when the knees were approximated, could now be brought close together.—A discussion followed, in which Messrs. Furneaux Jordan, Freer, Jordan Lloyd, Chavasse, and Barling took part.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, DECEMBER 18TH, 1881.

HECTOR CAMERON, M.D., President, in the chair.

Aneurysm of Fauces.—Dr. BARR showed a woman, aged 52, with a small aneurysm behind the right tonsil, of probably the ascending pharyngeal artery. Hearing was perfect, but the patient suffered much from tinnitus aurium. The left pulse was weaker than the right, and the left pupil smaller than the right. The swelling was about the size of a marble, and its pulsation was distinctly seen and felt. There were no other symptoms.

Removal of Upper Eyelid.—Dr. REID showed a man, aged 68, from whom he had removed this tumour. It had existed for about ten years, and occupied the greater part of the upper eyelid, extending downwards over the inner canthus. After removal, the lid was restored by a flap taken from the forehead, and turned outwards from the root of the nose. Sections of the tumour showed that it had taken origin from the sudoriparous glands. It was further mentioned that both the patient's father and elder brother had died from the same disease of the eye.

Removal of Foreign Bodies from Interior of Eye by Electro-magnet.—Dr. REID showed a patient, from whose eyeball he had removed a large quantity of steel by means of an electro-magnet; and mentioned some of the difficulties he had encountered in trying this mode of operating; describing also the various forms of electro-magnets he had employed. The chief difficulties were the small size of the wound, as compared with the size of the foreign body; the impaction of the body in the tissues of the eyeball; the viscosity of the vitreous body; and the difficulty of getting within "striking distance" of the body with a needle-magnet strong enough to extract it. On the recommendation of Sir W. Lister, Dr. Reid used a barbed wire needle, the magnet being connected with a portable chromate of potash battery; and he had found that the force of the wire was projected fully a quarter of an inch beyond the point of the needle.

Removal of Foreign Bodies from Interior of Eye by Electro-magnet.—Dr. MACLEOD showed portions of muscle containing the parasite, together with numerous parasites obtained from the body of a patient who died in the infirmary from the effects of a severe blow on the abdomen. At the inspection, the surface membranes appeared as if they had been cut with saws; and, on deep dissection of the tissues, numerous white bodies were found everywhere, which proved to be encysted parasites. In the intestines were found numerous larvae, and free and encysted adults, indicating that the host had received the parasite within a few months previous to his death. According to his wife's account, the patient had always been healthy till five months before, when he contracted much fever, and was unable to work. He had been a heavy drinker, and, after his debauches, was fond of eating raw salt horse. As a result probably of the accident which sent him to the hospital, numerous small abscesses were

found between the folds of the intestine, near the liver, and a very large abscess was found behind the liver itself.

Curvature of the Spinal Column.—Dr. McKELLAR exhibited the collection of spines made by the late Dr. Foulis, with a view to determine the frequency of lateral deviation. Dr. Foulis's conclusions were: 1. That great lateral deviation may exist without external sign, and especially without any indication from the position of the spinous processes. 2. That there is no normal lateral deviation; but that, when it exists, it may lean to either side. 3. In many cases of great lateral deviation, nature gives additional support to the spine, by throwing out lateral masses of bone from the sides of the vertebral bodies.

Micrococci in Kidney.—Dr. STEVEN showed microscopic sections of a kidney, from a patient who had died from perinephritic abscess. This abscess communicated by a sinus with the surface of the body. In the tubules of the kidney were found numerous masses of micrococci and granular epithelium. No micrococci were found in the blood-vessels.

OBSTETRICAL SOCIETY OF DUBLIN.

SATURDAY, JANUARY 7TH, 1882.

G. H. KIDD, M.D., in the Chair.

Hegar's Dilators.—Dr. MACAN exhibited a set of Hegar's dilators for rapid dilatation of the cervix uteri. It consisted of twenty-five pieces, each one a solid cylinder of vulcanite, with conical apex, having a diameter increasing in regular order by one millimetre, thus forming a series in which each successive cylinder was one millimetre in diameter greater than the previous. They were to be introduced in the Sims's position, the neck of the uterus being pulled down. The advantages claimed for them over sea-tangle or other porous dilators were (1) less risk of septic infection; and (2) the rapidity with which dilatation could be effected at a single sitting. Dr. Macan had modified Hegar's instrument by making each piece somewhat conical throughout. The diameter of the apex and the base of each piece differing by one millimetre, so that in introducing them *seriatim* the base of the previous piece used was the same diameter as the apex of the next, he considered that their introduction would, by this means, be facilitated.—Dr. KIDD had not used the dilators shown by Dr. Macan, but thought that the question of rapid *versus* slow dilatation was, to a large extent, one of safety, and considered that sea-tangle was the safer method, as by its very slowness it permitted a certain amount of vital dilatation to take place, whilst the more rapid method must, more or less, tend to bruise and tear the structures of the cervix.—Dr. ATTHILL had used the dilators shown by Dr. Macan in several cases; and, whilst agreeing with Dr. Kidd that slow dilatation was in general to be preferred to the more rapid methods, yet in certain cases Hegar's dilators acted most satisfactorily, and were unquestionably superior to any of the instruments for rapid dilatation with which he was acquainted. He doubted, however, the advantages of the modification suggested by Dr. Macan.

Nitrous Oxide as an Anæsthetic in Labour.—Dr. MACAN read a paper on this subject, in which, after tracing the history of the anæsthetics used in labour, and especially that of nitrous oxide gas, from its first introduction in America in 1844 by Horace Wells to its use under pressure by Paul Bert in 1878, and the various opinions held from time to time regarding its value as an anæsthetic, described the latest modifications introduced by Dr. Kilkowitsch of St. Petersburg, who employed the gas mixed with 20 per cent. of oxygen. The quantity of this mixture gas inhaled in each case varied from two to ten cubic feet, but its use might be continued for an unlimited time, as it was capable of supporting life, like atmospheric air, and was quite free from danger; the patient, though quite anæsthetic, never losing consciousness, neither did vomiting, nausea, or headache, result from its employment. Again, the amount of the intra-uterine pressure, as tested by the dynamometer, exerted during "the pains" was not in the least diminished, even when complete anæsthesia was produced, whilst chloroform and other anæsthetics were well known to produce marked diminution in the frequency and fulness of the uterine and abdominal contractions. The objections to its general employment were its expense and cumbersomeness.—Dr. KIDD had never employed nitrous oxide gas in labour cases, but thought that chloroform acted so well that no other anæsthetic could be better; he administered it with Murphy's small inhaler, which the patient could hold in her hand. He used chloroform in almost every case of labour, not pushing it to complete anæsthesia, but enough to "take the edge off the pains", and had never seen any ill results whatever.—Drs. ATTHILL, H. KENNEDY, POLLOCK, and DOYLE, also took part in the discussion which followed, and Dr. MACAN replied that the great advantage claimed for nitrous oxide gas was the possibility of using it without detriment throughout the entire conduct of the case, whereas

chloroform he considered inadmissible in the first stage of labour—a stage, however, in which the woman's sufferings were sometimes most acute. To kill pain without producing unconsciousness was the perfection of an anæsthetic; and that was the effect of the mixture gas used by Dr. Kilkowitsch.

REVIEWS AND NOTICES.

DIE ALBUMINURIE IN GESUNDEN UND KRANKEN ZUSTANDE. Von Dr. H. SENATOR. Berlin: Verlag von August Hirschwald. 1882. ALBUMINURIA IN HEALTH AND DISEASE. By Dr. H. SENATOR. Berlin: A. Hirschwald. 1882.

THIS monograph deals with the whole subject of the presence of albuminous substances in the urine, in a very exhaustive and complete manner. Thus, the author does not confine himself to the consideration only of urine containing albumen coagulable by heat or precipitated by neutralisation, but includes peptone and propeptone; for, he says, and says truly, that the hard and fast lines which were formerly supposed to separate the significance of these substances are melting away; and that it is quite possible that serum-albumen may undergo changes after leaving the blood vessels of the kidney, by which it is converted into propeptone and peptone—a supposition which is rendered highly probable by the discovery of peptone in pus and other pathological exudations. He discusses, at length, the chemical relations of these substances and their occurrence in the urine.

Recent observations having placed it beyond doubt that albumen may appear in the urine of healthy men, he suggests that it is probable that the fluid which normally transudes through the Malpighian tufts is not quite free from albumen; and that, whenever it is concentrated or filtered under relatively low pressure, the percentage of albumen becomes high enough to indicate its presence by the ordinary tests. He also points out that the presence of the urinary salts plays a not unimportant part: the more there is of these, the more difficult it is to discover albumen; and that, under conditions of diminished blood-pressure, the secretion of the renal epithelium is probably lessened, as is that of all glands under similar circumstances. Excessive muscular exercise and digestion also seem to favour the transudation of albumen. Yet, again, another factor is the rate of absorption of the interstitial lymphatics of the kidney; this is known to vary with the blood-pressure, and we may assume that, under conditions of lowered blood-pressure, less albumen is taken up by the lymphatics.

The dependence of albuminuria on changes in the blood-pressure is discussed at length, in a chapter devoted to it. Dr. Senator finds reason to object to most of the experiments by which this question has been investigated. He thinks, however, that the increase of arterial pressure, produced by slowly raising the body temperature of an animal, is the least open to objection—so long as the temperature is not allowed to pass a certain point; and such experiments have shown that albuminuria occurs, as a rule, under such conditions.

Another chapter is devoted to changes in the renal epithelium as a cause of albuminuria. He rejects the theory of Küss; but thinks that, under normal conditions, the epithelium forms a bar to the passage of albumen from the interstitial vascular system of the kidney. He also thinks that the breaking down of the protoplasm of the cells may in itself lead to admixture of albumen with the secretion.

In the third place, he discusses changes in the blood itself as a cause of albuminuria; and maintains that the relative composition of the blood may be fairly regarded as a factor, as albumen filters through membrane more readily in proportion to the quantity of salts in the fluid.

In special cases, these factors are often combined: thus, in febrile albuminuria, we find at first the increased blood-pressure due to heightened temperature; then the increase of urea; and, finally, the diminished pressure from cardiac failure—each of which, doubtless, plays a part. In kidney-disease, we must distinguish between the inflammatory conditions in which the exudation contains albumen, just as inflammatory exudations do everywhere; and those cases in which alterations in the anatomical conditions, degenerated epithelium, etc., or the increase of blood-pressure, are the cause; these, too, may be and often are combined. In simple amyloid kidney, he thinks that the albuminuria is due to abnormal permeability of the vessels.

The essay is a masterly one; the references to the literature of the subject are very numerous; and, though it cannot be said that the problems have been solved, the many vexed questions have been treated in a broad and comprehensive fashion; and good service has been done by the able criticism to which the author has subjected all the theories and experiments which have accumulated in such chaotic profusion during the last few years. Dr. Senator's monograph affords a basis

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 4TH, 1882.

INSANITY AND RESPONSIBILITY.

THE trial of Guiteau in the United States, and that of Lefroy in this country, have recently caused much attention to be directed to the plea of insanity when urged in defence of crime. The question is beset with difficulty from the outset, for insanity has never yet been satisfactorily defined. It is agreed on all hands that the old test of the knowledge of right and wrong is of itself not only insufficient, but sometimes positively misleading. For instance, in the form of disease now universally recognised as *moral insanity*, this knowledge remains intact, the reasoning and intellectual powers being almost or quite normal. Dr. Beard of New York recently attempted to define insanity as "a disease of the brain in which mental co-ordination is seriously impaired"; and recommended experts to make use of this definition in the witness-box. Dr. Beard is, however, obliged to admit that insanity is not a disease of the brain, but a manifestation of a diseased brain; also that he is unable to explain what he means by mental co-ordination. His formula is therefore worthless. The most recent definition of insanity is that proposed, in the current number of the *Journal of Mental Science*, by Dr. Mercier. It runs thus: "Insanity is a failure in the process of adjustment of the organism to its environment." Without expressing any opinion as to its utility for scientific purposes, we may say at once that this definition seems to be eminently unfitted for use in a court of law. The best writers on the subject admit their inability to frame any definition which would meet all cases. Medical men who have had the greatest experience in lunacy know that there is no hard and fast line of demarcation between sanity and insanity; one passes insensibly into the other. Between those persons who are certainly lunatic and those who are undoubtedly sane, there are a great many on or near the borderland; and it is in these cases that difficulty arises when a definite judgment has to be pronounced one way or the other. The requirements of the law demand that a definite boundary shall be drawn, where science tells us that no natural frontier-line exists. Perfect mental health is probably as rare as perfect bodily health; and it is most difficult to decide what amount of departure therefrom should be held to constitute insanity, or to confer irresponsibility. It may fairly be argued that the commission of a brutal crime is in itself proof of the existence of an unhealthy state of mind; but it is certainly no proof of such a degree of insanity as would justify its perpetrator being held irresponsible for his act. There is no doubt that the power of self-control is less developed in the criminal classes than in educated persons and others, whose power of governing their passions has been strengthened by long habit. But the protection of society demands that all who have the power of self-control in any degree shall be made to exercise it, and shall be held answerable for their actions. Crime is punished by law, not from any desire for vengeance upon the criminal, but in order that he and others may be deterred from its commission in the future. It has even been held that the less the power of self-control, the greater is the deterrent required, and, consequently, the more severe should be the punishment. There

is a germ of truth in this view, but humanity forbids its being adopted as a principle of action.

The only persons whom society can afford to hold irresponsible for their actions, are those whose mental condition is such, that either they cannot correctly appreciate the nature and consequences of their acts, or, having the knowledge of right and wrong, they are yet quite unable to control their impulses. Is this tantamount to saying that all persons who are sane are responsible, and those who are insane are irresponsible? Because, if so, we have approached very near to obtaining a definition of insanity, or at any rate of such a degree of it as might be recognised by law as conferring immunity from punishment for acts committed. But we fear that the difficulty is not to be thus easily solved, for it is certain that the great majority of lunatics who are confined in the county asylums of this country are able, in varying degrees, to control and to appreciate the nature and consequences of most of their acts. As a matter of fact, they live under a system of moral government, under which they are provided with rewards in the shape of tea, tobacco, the privilege of attending various amusements, etc. These rewards are held out to them as incentives to exert to the utmost whatever power of self-control they may possess. The result of this effort cannot fail to be beneficial to the patient, whatever his degree of success may be. As for punishment, the word is usually banished from the asylum vocabulary; and yet there is no doubt that the withholding of the above-mentioned privileges where they have not been earned, or the doctor's order that a patient may not attend some entertainment because he is in too excited a condition, is regarded by the inmates in the light of punishment, and as such is avoided by them. It is well known to all who have experience in the matter, that the general conduct of insane persons is greatly modified under the action of this system of rewards and trifling punishments. We thus arrive at the conclusion that, in order to prove that a man is quite irresponsible for his actions, it is not sufficient to prove that he is insane. This view has not been hitherto prominently advocated, and it is probably partly owing to its having been overlooked that many difficulties have arisen in the past. Insanity has always been regarded as the sufficient and only test of irresponsibility, and the question of insanity has been tried rather than the question of responsibility. It is a not unfrequent occurrence for medical experts to give evidence as to the mental unsoundness of a person whose general behaviour, conversation, and actions, are such that the judge and jury refuse to see in him an irresponsible agent. The truth is, that the medical and legal aspects of mental disease must, in the very nature of things, differ materially. They should not be confounded together, but kept apart. Many a man is properly the subject of medical treatment for mental symptoms, who could not legally be recognised as insane. The law can take no cognisance of mental disease, unless it be in nature or degree such as to justify interference with personal liberty or responsible action. The legal question should not in future be whether an accused person is sane or insane, but whether he is a responsible agent or not; whether his mental condition is such as to justify the plea of irresponsibility. We are free to admit that we thus only escape one difficulty to be brought face to face with another; but whereas a satisfactory definition of insanity was found to be unattainable, we have been able to indicate to some extent the lines on which the question of responsibility should be tried. The evidence of experienced alienists would still be necessary; but we think it may fairly be hoped that, under the altered conditions, it would not apparently militate against common sense views in the way that has hitherto occasionally happened.

It may at first appear somewhat startling, that a man should be held responsible for acts committed while he was insane; but no fears need be entertained on this head. Under the system now proposed, the man who should be proved to have shot his aunt while under the influence of the insane delusion that she was the devil, would still be acquitted on the ground that he was unable to appreciate the nature and consequences of his act. The difficulties which have heretofore arisen have been confined to cases of doubtful insanity, and for these a new

criterion would be provided, upon which to base an opinion. No person would be held answerable for acts which could be proved to have been committed during delirium, or as a result of uncontrollable impulse. "Irresistible impulse" is unfortunately no mere fancy, invented for the special benefit of accused persons; it has a real existence, and is known to occur specially in epileptics. How far a person should be held responsible for acts committed during a paroxysm of so-called ungovernable fury, must be decided on the merits of each individual case; the great object in view being to impress the community with the conviction that they must exercise restraint over their tendencies to passion, and not "give way" to fury of this nature. With regard to the question of the partial responsibility of the insane, upon which we have already touched, it may become possible, at some future time, to institute a system of punishments which will be in some measure proportionate to the degree of self-control possessed by the criminal; but for the present we must be content if some better criterion can be found, upon which to give judgment whether a given person is or is not to be regarded as responsible.

There are not a few patients in our pauper and criminal asylums, who are perfectly well aware of the irresponsibility of their position with regard to the criminal law, and who openly take advantage of it. Such an one will often, in cold blood, threaten the officials of the institution with murder, stating at the same time that he knows he is a lunatic, that the law will not hold him responsible, and that he can therefore do what he pleases without fear of punishment. This scheming lunatic will await his opportunity for months or years, and will then choose the most favourable time for making his attack. Medical superintendents of asylums know that such patients would exercise far more control over their homicidal inclinations, if they knew that they would be tried on grounds other than the mere fact of their insanity. They quite appreciate the nature of the act they contemplate, and they are capable of exercising a considerable amount of self-restraint.

It has for some time been notorious that the defence of insanity is often set up as a last resource upon the most unsubstantial and insufficient grounds. If it can only be ascertained that a near relative of the prisoner has at any time been insane, or even eccentric, this is sometimes thought sufficient evidence upon which to found a defence. Unfortunately, mental disease is so prevalent, that there are but few families absolutely free from it. Common sense demands, however, that a man's responsibility shall be judged by his own mental condition, and not by that of his relatives. It is no doubt perfectly right that in a case of doubtful responsibility all the facts, including the family history, should be brought forward. The weight attaching to them in the opinion of alienists should also be put in evidence before the court. There is no reason whatever why experts should not give evidence on both sides in a disputed case; it is, indeed, most desirable that both views should be clearly explained and advocated. A barrister does not necessarily believe in the innocence of the client whom he defends; but it is his duty to place his case in the most favourable light before the jury. In the same way, as long as the function of medical experts is confined to the giving of evidence, men will be found ready to advocate both sides in contested cases. There is no doubt, however, that a purely legal training does not enable a judge to discriminate nicely as to the value of this kind of evidence; and it is therefore most desirable that, when the question of responsibility arises, a neutral medical assessor should be called in, or the question should be tried before some competent medical tribunal.

HOMICIDE BY INJECTION.

Suppose a medical practitioner, having under his charge a case of so-called "puerperal fever," give up, for a time, attending fresh labours? This is really the question which has to be answered definitely and clearly. If it had been proved that such a thing as puerperal fever existed, having a definite course, poison, and symptoms, like scarlatina, then clearly a practitioner attending a case of puerperal fever would be justified in going to deliver another woman in labour. But nothing

of the kind has been proved. Nearly every case of puerperal fever has its own special symptoms and its own special origin. In one case, it may be traumatic; in another, the lying-in woman may be in a state of fever from infection carried to her from a patient suffering from some zymotic fever. Unfortunately, there is an idea abroad that puerperal fever is a distinct morbid entity, and that, therefore, any practitioner attending such a case should cease to attend further midwifery cases, and put himself in quarantine for a longer or shorter period, according to the supposed malignity of the particular case. This erroneous notion was further spread and fostered by an article in the *Times* newspaper, in which it was stated that: "It is the invariable practice of medical men, if they attend a case of this fever, to hand over the whole of their midwifery practice to other persons for at least two or three months; and it has been shown by ample experience that this course is absolutely necessary to preserve the lives of their patients."

As Dr. Matthews Duncan stated in a letter read at the discussion on puerperal fever, in 1875, at the Obstetrical Society of London, anything more inconsistent with truth it would be difficult to find. It is this error, ignorantly and irresponsibly promulgated by journals such as the *Times*, which gives rise to prosecutions for manslaughter against medical practitioners and midwives. The recent charge against Dr. Joseph of Brisbane happily broke down at an early stage of the proceedings. He was charged with manslaughter, by infecting one patient with puerperal fever by bringing the contagion from another patient of his. The prosecution contended that he had neglected the rules usually adopted by medical men in relinquishing midwifery practice whilst, and for a time after, attending a patient ill with puerperal fever. The medical evidence on this point was, however, so contradictory, that the magistrate dismissed the case before hearing any witnesses for the defence. At the discussion on puerperal fever at the Obstetrical Society, above referred to, the balance of opinion was certainly to the effect that puerperal contagion was carried by the hands and clothes, if carried at all; and that due care in disinfecting the hands was all that was necessary to the safety of the lying-in women. Dr. Arthur Farre then stated that he had long discarded the name puerperal fever, and used the term *post partum* fever. It is time, in the face of our present knowledge, for other obstetricians to follow his example, and banish from our nomenclature an unscientific, vague term, which is nothing more than an *aylum* *in* *medicina*.

SYPHILIS OF THE LUNG.

DR. PANCRITIUS, a general practitioner in Berlin, has lately published a work on syphilis of the lung (*Lungen-Syphilis*, Berlin 1881, pp. 295) which is chiefly occupied with the clinical, and occasionally the pathological, records of one hundred and ten cases of the disease from his private practice. So large a collection of cases from the private practice of a general practitioner could not in any case fail to be interesting, and those recorded by Geheimrath Dr. Pancritius have the advantage of being set forth with a certain skill, and with a scientific and practical intention. It is in such a work as this, that we find the faithful transcription of all those small and great incidents in the health of private patients, which become known to the general practitioner as they occur, and which accumulate in his memory to form a body of knowledge and experience, differing from that which the clinical or consultant practitioner acquires, but not necessarily inferior to the latter, either in quality or in quantity. Knowledge and experience so gathered are too seldom communicated to the profession, and the reason of that is obvious enough. It requires a peculiar kind of skill to extract matters of interest from the common round of practice, a talent not unlike that which enabled White of Selborne to make, within the narrow limits of his Hampshire parish, a volume of observations which all the world unites to admire. It is with no disrespect to the general practitioner, that we would compare his observations to those of the field naturalist. The most famous scientific books of the century, the *Observations on the Insects of Selborne*, and the numerous volumes that have followed it, are much more the work of the field naturalist than of the anatomist and

embryologist. There is a natural history of disease as there is a natural history of living things, and it is that aspect of disease which comes more particularly under the notice of the general practitioner. We do not say that the work of Dr. Pancritius is distinguished by any very unusual qualities; he has merely taken occasion to follow the constitutional symptoms, in a large number of cases, with a closeness and comprehensiveness that would have been hardly possible to any one single specialist, and that too in a disease where the complete picture, or the entire panorama of incidents from first to last, is absolutely indispensable. More than twenty years ago, he began to think that certain disorders of the respiratory system, of a sufficiently common kind, occurred with a good deal of uniformity in those who had contracted syphilis, and he has ever since been on the out-look for those pulmonary concomitants of syphilis. We gather from remarks dropped here and there in the book, that Dr. Pancritius has been regarded by some of his colleagues in Berlin as an enthusiast in this matter. But that is nothing more than the criticism which every prophet meets with in his own country, and fortunately the printed copies of his book do not carry the local atmosphere of unbelief with them. It is becoming daily more common to put syphilis and tuberculosis into the same class of diseases due to the introduction of a virus into the body, and the parallelism between the effects of the actual or supposed virus in the respective cases, and more especially the effects on the lungs, becomes daily more interesting. But it is from the practical point of view that the recognition of syphilitic lung-diseases claims the serious attention of everyone. It is of the utmost importance that we should be able to recognise among private patients, as well as among the multitudes who flock to dispensaries and hospitals with chest complaints, those cases upon which the too stereotyped expectorant and tonic mixtures would only be thrown away, and on which the antisyphilitic treatment should be tried.

In contending for the comparative frequency of syphilitic affections of the respiratory system, the author of this work does not profess to have discovered an unusual number of syphilitic patients who had gummatous nodules (or cavities resulting therefrom) in their lungs. On the other hand, the syphilitic affection of the lung, which he wishes to emphasise, is an interstitial pneumonia, an induration of the connective tissue following the track of the bronchial and pulmonary arteries for a certain distance from the hilus of the organ into its interior. It is essentially an affection of the middle region of the lung, and the affection is not one of the air-cells, but solely of the supporting connective tissue of the organ. The physical signs are found mostly in the interval between the base of the scapula and the vertebral column; they are nothing uncommon, being more or less diminished percussion resonance, weakened respiratory murmur, and especially weakened or altogether absent expiratory murmur, and these variously extended or added to in intensity. Dr. Pancritius, being a general practitioner and not a thoracic specialist, has a wholesome appreciation of the limits imposed upon diagnosis by means of physical signs. At page 5 of his introduction, he gives expression to a sound and excellent maxim which we welcome all the more as coming from a country where there has always been a tendency towards detail for its own sake, *Die Technik beherrscht das Denken*—"technical skill lords it over the thinking faculty". His picture of pulmonary syphilis, from which we might almost leave out physical signs without seriously impairing its value, is somewhat as follows. There is first an active stage, in which the patient, often with the appearance of blooming health and feeling well in general, complains that there is, especially on exertion, a certain feeling of weight in one side of the chest (usually the right), with difficult respiration, and not seldom dyspnoea in the evening. After a time, these subjective indications become more intense; the dyspnoea while walking is marked, there is a dry cough, and sometimes in the evening some slight asthmatic attacks. A true pulmonary catarrh, without fever, may follow, the dyspnoea may become more intense, and there may be, with the cough, slight pains referred to the middle portion of the affected lung. These hardly distinctive symptoms, are gradually increased so that the respiration becomes wheezing, the asthmatic attacks come on oftener and last longer,

and there is general disorder of the digestion, with a feeling of weight in the hypochondria. If the practitioner be on the look-out, he will hardly ever fail to find, in this first stage of the pulmonary affection, the usual indications of constitutional syphilis in the skin, the mucous membranes, the bones, etc. There may be also, rheumatic and nervous symptoms, sleeplessness, and blood-disorders such as chlorosis. In the second stage, the destructive or passive stage, there is more or less fever, purulent expectoration, even hæmoptysis, very severe and frequent asthmatic attacks, general disorders of the digestion and of the secretions, loss of strength, cachectic appearance, and, as the disease progresses, all the various indications of pulmonary phthisis may show themselves. Of those symptoms, the author specially dwells upon dyspnoea, asthma, hæmoptysis, and the characters of the sputa.

Reduced to the bald form of a systematised statement, the diagnostic marks of pulmonary syphilis do not appear very striking. The strength of the author's case lies, naturally, in his clinical histories, and it is only from their perusal that the reader will obtain an adequate impression in each particular case, either for or against the distinctive syphilitic character of these not uncommon lung troubles. There are records of the *post mortem* condition in about fifteen of the cases, and there is a very much larger proportion of cases, some of them truly remarkable, in which the more or less tardy adoption of an antisyphilitic treatment led to a rapid reduction of the symptoms and a permanent restoration to health. It sometimes happened that syphilis was at first stoutly denied by the patient, and only confessed to when the chances of recovery were seen to depend on telling the truth. It is worthy of note that the primary sore in 43 per cent. of the cases was of the non-indurated variety.

THE Royal Commission on the Medical Acts meets to-day (Friday) for the consideration of its report.

GRAY'S *Anatomy* has been translated into the Chinese language, and published in six volumes at Foochow.

THE Homage Jury of the manor of Fulham have granted £2000 to the West London Hospital for building a west wing.

AT the last meeting of the Committee of Council the expenses in the defence of Dr. Ferrier were approved and paid.

THE PRINCE OF WALES has appointed Wednesday, the 29th of March next, at Willis's Rooms, for the festival dinner of the Victoria Hospital for Children, at which his Royal Highness has consented to preside.

DEPUTY SURGEON-GENERAL MOORE, Honorary Surgeon to the Viceroy of India, has been elected for the present year as Dean of the Faculty in the University of Bombay.

A DEATH from chloroform is reported as having recently occurred at Munich, in the case of a woman on whom a dental operation was being performed.

PROFESSOR PANUM of Copenhagen has been chosen to preside over the next International Medical Congress; and Dr. Carl Lange has been appointed general secretary.

PROFESSOR TRENDELENBURG of Rostock has accepted an invitation to succeed the late Dr. Busch as professor of surgery at Bonn. The post was also offered to Professor König of Göttingen, but was declined.

MRS. CHARLES ROUNDELL has acted on a happy inspiration in opening a small convalescent home at Kilburn, in connection with Queen Charlotte's Lying-in Hospital. It is intended to be a temporary home for those single women with their first child who, on leaving the hospital, have no friends to whom to go, and who are not yet strong enough to return to service. Drs. Hope and Grigg, Physicians to Queen Charlotte's Hospital, will act as consulting physicians to this home.

DR. GILBERT D'HERICOURT, member of the Anthropological Society of Paris, is entrusted by the French Government with a mission to Sardinia, to collect anthropological information, and to study the ethnology of the population.

In the Hyderabad assigned districts the total deaths from "fevers" in 1880 was 31,027, or 1448 less than in 1879. The fever mortality was at the rate of 14.2 per 1000 of the population, the average rate for the previous five years being 19.9.

M. PAUL BERT has established at the Collège de France a laboratory of Physical Biology. Dr. Brown-Séquard, Professor of Medicine at the Collège de France, and M. d'Arsonval, are appointed directors of the newly organised laboratory.

WE learn that the Secretary of State for the Colony of South Australia recently wrote to the authorities at Washington, announcing that, under the amended medical laws of that colony, holders of foreign diplomas are entitled to be registered as duly qualified medical practitioners.

At a meeting of the Collective Investigation Committee on Wednesday, Dr. Mahomed, Assistant-Physician to Guy's Hospital, was appointed Honorary Secretary *pro tem.* for the purpose of conducting the work of the committee, in place of Dr. W. R. Smith of Cheltenham, who has retired. Dr. Mahomed has all along interested himself much in the subject. His address is 12, St. Thomas's Street, London, S.E.

A LECTURE on behalf of the National Health Society will be delivered by Mr. Frederick Treves at the Town Hall, High Street, Kensington, on Saturday afternoon, February 25th, at four o'clock, on "The Dress of the Period". The lecture will deal with the present injurious follies of fashion—tight lacing, superfluous garments, and high heels. The chair will be taken by Dr. Andrew Clark.

THE vestry of the parish of St. George-the-Martyr, London, have caused notices to be issued throughout the district, calling attention to the danger arising from throwing orange-peel on the pathway, and intimating its intention to prosecute all offenders in this respect, who are liable to a penalty of from 40s. up to £5 for the offence.

THE annual congress of German surgeons will be held in Berlin on the last day of May and the first three days of June. The meeting is delayed this year, in consequence of many of the members residing at a distance having expressed a desire to be able to visit the Sanitary Exhibition in Berlin, which will be opened on May 15th.

It has been decided to erect in the south part of Berlin, where there is great want of hospital accommodation, a new hospital with 400 beds, on the barrack system. The cost is estimated at 1,500,000 marks (£750,000). Of this, one-third will come from a large legacy left to the city by the late Fraulcin Beschart.

M. CAUDET, prefect of the Paris Police, has issued directions concerning the inspection of dangerous, unhealthy, or inconvenient habitations. One principal direction, as first class, and as second class, is that the houses be inspected. Each of these classes is obliged to inspect, at least twice a year, all the houses classed, and to make the sanitary improvements required.

The Prefect of the Police has issued to all the directors of the Paris prisons, and to the directors of the hospitals, a notice that, in case of fever or any contagious affection declares itself among the prisoners. The following diseases are comprised in the list furnished to each director: typhoid fever, scarlet fever, measles, diphtheria, erysipelas, erythema, whooping cough, smallpox, scarlatina, and cholera.

THE BRITISH MEDICAL BENEVOLENT FUND.

AT a special meeting of the Committee of the British Medical Benevolent Fund for the election of annuitants, on January 25th, three annuities of £20 were voted to candidates aged respectively 85, 84, and 66; one of £26 to M.D., F.R.C.S., aged 71; one of £10 to a lady aged 63. An annuity of £20 was also raised to £26 by the aid of the special fund. The annuitants of the age of 85 and 84 were worn-out members of the profession; the annuitant aged 66, a widow, who had made most strenuous and persevering efforts to maintain herself. The last mentioned lady was so overjoyed by the news of her election, that she had an attack of apoplexy and died.—At the monthly meeting of the Committee on Tuesday, January 31st, there were twenty-two applications for relief, to eighteen of whom grants were made, amounting in the aggregate to £242. Among the applicants were a medical man aged 78, incapacitated for practice, who had outlived his friends; and another stricken with hemiplegia; to each of whom the maximum amount in the power of the Committee to grant—viz., £24—was voted. More than £200 of the sum named will be distributed in weekly or monthly instalments. In addition to the above, £10 was voted to the daughter of a newly elected annuitant, who had died before receiving the first instalment.

THREE DEATHS UNDER CHLOROFORM.

DEATHS under chloroform are again recurring with distressing frequency. An inquest was held at Malvern Wells on Saturday, on the body of Charles Nelmes, aged 51, who died while under chloroform. It appeared that deceased had sustained a dislocation of the shoulder; and he waited upon Mr. Haynes, surgeon, who attempted to reduce it by ordinary means, but failed to do so. Mr. Haynes then decided to administer chloroform; but, before doing so, he examined deceased's heart, but could detect nothing which should prevent him from administering chloroform. He accordingly gave the deceased small doses. Soon afterwards, deceased's legs became convulsed, and he held them; but death took place in a very short time. Dr. Pike and others said they should have acted precisely as Mr. Haynes had done. In cities and towns, it was easy to get a medical man to assist in administering chloroform; but it was different in the country. The quantity administered was not excessive. Mr. Brown, surgeon, who made a post-mortem examination, said that deceased was in such a state of health that he might have died at any moment. The jury returned a verdict of "death from natural causes, accelerated by chloroform judiciously and properly administered"; but some of the jury deprecated the practice of the profession in putting persons under the influence of chloroform "single-handed".—A case is also reported in the daily papers of Mr. T. Fenton, of Broughty Ferry, near Dundee, who was about to undergo an operation for sympathetic ophthalmia. "Two medical gentlemen attended from Dundee, and Mr. Fenton was put under the influence of chloroform, but it had not been administered many minutes before he died." We should be glad to have medical details. We hear also of a third case of death under chloroform, and it has occurred at the Royal Free Hospital this week, of which, however, we have not yet received details, or seen any published report.

CONSIDERABLE WORKING IN THE CITY.

DR. J. J. THOMAS, the recently elected Coroner for Central Middlesex, is doing good service to the public by pointedly directing attention, in cases which have come before him in his official capacity, to the dangerous consequences arising from prescribing by druggists, which goes on so extensively both in London and the provinces. It is high time that an effort were made, either by the Apothecaries' Society or by one of the Medical Associations, to put a stop to a practice as illegal as it is dangerous; yet there is but too much reason to fear that a sort of understanding entered into by the members of the Apothecaries' Society about a year ago, not to publish prosecutions in cases of counter-practice, has enabled druggists to transgress the law, and has placed a serious difficulty in the way of those who desire to enforce

it. The position of the Apothecaries' Society in this matter is indeed a curious one. Originally a body of chemists themselves, they have acquired and well justified a status as medical examiners and diploma givers. It is thought by some medical reformers that the time has come when the Apothecaries' Societies should cease to exist as medical authorities, and certainly if the English Society desire to seal its own fate, it cannot do better than continue to connive at illegal practices.

THE CASE OF DR. ABRATH.

THE trial of Dr. Abrath, of Sunderland, for alleged conspiracy with a patient named McManus, to defraud the North-Eastern Railway Company, has, we are glad to say, terminated in the only possible way—in a verdict of acquittal; and Dr. Abrath has, in the words of the jury, left the court without a stain upon his character. The case is too well-known to need detailed comment from us. It was alleged by the prosecution, that Dr. Abrath had induced McManus to simulate the results of injuries received in a railway collision; and, by inference, it was suggested that the now, as was admitted, paralysed condition of McManus was in reality due to injuries inflicted by his medical attendant. Few will, we think, be inclined to believe that, for a few hundreds of pounds, any member of the profession could be guilty of such shocking barbarity as was alleged. The direct evidence for the prosecution mainly rested upon the evidence of witnesses, who, even according to their own statements, were deeply perjured; and the medical evidence for the prosecution was not strong. Probably the railway company by this time deeply regrets its too hasty action; but probably nothing can repair the injury done to Dr. Abrath. No doubt railway companies are frequently defrauded by persons claiming compensation for imaginary injuries; but the day will, indeed, be a sad one for our profession, when members will deliberately support, and even suggest, the simulation of fictitious injuries. Dr. Abrath is to be congratulated on having successfully resisted the prosecution instituted by a powerful public company, and on his character having undergone successfully so severe an ordeal.

NEPHRO-LITHOTOMY.

THE debate which occurred at the last meeting of the Clinical Society will go far towards placing the operation of nephrotomy for the removal of renal calculi upon a definite basis. The discussion was introduced by Mr. Marcus Beck, who related the steps which he had taken for the removal of a renal calculus, which was supposed to have existed for twelve years in a man aged 19. Manipulation, when the posterior surface of the kidney had been exposed in the loin, failed to detect the pressure of a stone; the kidney was then punctured with a needle, and the presence, situation, and size of the stone were demonstrated. The kidney was then incised, and a calculus of uric acid, weighing 29 grains, removed. The bleeding, which had been considerable, ceased directly the stone was extracted. The operation was performed under carbolic spray, and the patient made an excellent recovery. Urine escaped by the wound from the seventh to the eleventh day; the wound was quite healed in the fifth week after the operation. Mr. Beck added some carefully chosen remarks upon the case, which will be found fully reported elsewhere (at page 158). Mr. Butlin next detailed a somewhat similar case, operated upon by himself in St. Bartholomew's Hospital. This calculus was composed of oxalate of lime, and was "about as large as a filbert". The patient was twenty years of age, and made an excellent recovery. Dr. Whipham and Mr. Haward then related two cases. The former was that of a woman, aged 23, from whom a phosphate of lime calculus, weighing 47 grains, was removed. This patient also did extremely well. In a second case, where the patient, a woman, was fifty-six years of age, there was a prominent swelling in the left groin, which was incised by Mr. Haward; a copious discharge of pus occurred, and pain was relieved, but no calculus could be found. The kidney and tissues were firmly matted together, and, after an enlargement of the wound a month after its original production, the patient sank. After death, the

kidney lay in a purulent cavity, with which its pelvis communicated by a large irregular opening. Fragments of calculi existed in the calyces of the kidney; and a large calculus was found in the right kidney. These three successful cases in early adult life clearly indicate that the dangers of nephro-lithotomy are no greater than care and caution on the part of the surgeon may reasonably be expected to guard against; and that the renal tissue is not to be considered charmed ground, upon which the surgeon's knife may not venture. But the fatal case detailed by Mr. Haward, as also another related by Mr. Marrant Baker, in which there was a sacculated kidney, with much pus and a phosphatic stone weighing two ounces, and in which the patient also sank, indicate that caution is necessary in the choice of cases for the operation. In the fatal cases, the ages of the patients were more advanced, being fifty-six and forty-three respectively, apparently a point of some importance. The disease in each patient, too, was of old standing, and pus was present in the urine in large quantities. For this class of cases, Mr. Baker advised removal of the whole kidney where practicable. As Mr. Barwell suggested, it will be interesting to watch the successful cases, and see if there be any re-formation of calculus. The calculi were, as will have been perceived, of all kinds. As one result of this discussion, the operation of nephro-lithotomy cannot fail to become a recognised method of affording surgical relief, in a class of serious cases hitherto often considered to be beyond the pale of the surgeon's art.

ST. BARTHOLOMEW'S HOSPITAL.

THE preliminary arrangements for the erection of the new convalescent home for St. Bartholomew's Hospital are at present in rapid progress, and it is expected that the new home will be ready for occupation early in 1883. The purchase of fifteen acres of land for the purpose, near to Swanley Junction station, has been effected by Messrs. Dunn and Soman, 27, Bishopsgate Street Within; and Mr. G. Aaron, the architect, to whom has been entrusted the preparation of the designs, will superintend the work. The new home, which will enjoy all the advantages of a commanding situation (260 feet above the Thames), looking over an extensive tract of charming country, will be within a convenient distance of town, and will be one of the largest, as it promises to be one of the most complete, convalescent homes in England. The building, it is proposed, will accommodate eighty-five beds, three-fifths of these for males, and two-fifths for females. An important feature will be, that no one will be subjected to the trouble of obtaining letters of recommendation; but patients will be admitted to its benefits solely on the recommendation of the medical man in charge of the case. The inadequate accommodation afforded by its present home of thirty-two beds (for males only), which was presented by Sir Sydney Waterlow, and formally opened by the Prince and Princess of Wales in 1872, has long been evident; and Sir Sydney Waterlow, as treasurer of this institution, has more than once, at public gatherings, expressed the great want of a large and permanent home, offering facilities for both male and female patients. The liberality of one of its governors, Mr. Kettlewell, who has contributed £11,000, and other donors who, within the last few months, have contributed respectively £5,000 and £2,000, has led to the taking of immediate steps for the erection of a new convalescent home for St. Bartholomew's, which soon promises to have its realisation.

PAYMENT FOR THE REPORTING OF INFECTIOUS DISEASES.

THE Medical Officer of Health for Edinburgh has submitted his statement of the payments to medical practitioners in Edinburgh for the last half of 1881. These payments are made in virtue of a clause in the local Act, requiring medical men to give notice to the medical officer of health of all cases of infectious disease within their practice, and making a payment of two shillings and sixpence for each such case. It appears that 1,795 cases were so reported, for which payments were made to the amount of £224 7s. 6d. The reports were sent in by one hundred and thirty medical men, the number of reports from each me-

dical man varying from one to ninety-nine cases. This has suggested to us a calculation of the payments which would be paid to medical men, should a similar system of payment for infection become general throughout England. There were in England and Wales, during last year, 58,239 deaths from the principal zymotic diseases; and, although there is no basis at present for a satisfactory estimate, we cannot assume that those deaths represent less than twenty times as many cases of attack—including, as the diseases do, measles, whooping-cough, and diarrhoea. The cases of attack, therefore, in England and Wales last year, may be very roughly estimated at 1,164,780, or more than a million. This would signify, at an expenditure of two shillings and sixpence per case, an annual cost of nearly £146,000.

HOW SMALL-POX SPREADS.

IN view of the growth of small-pox in the South of London, the guardians of the St. Olave's Union have determined, upon the recommendation of Dr. Stevens of the Local Government Board, to institute a house-to-house visitation in aid of vaccination. Dr. Stevens, who was present at the last meeting of the guardians, stated that he found the spread of small-pox to be due to three distinct classes of people. When an infant was taken out of the workhouse unvaccinated, it was seldom, if ever, traced; and, in support of this, it was stated that last year, out of two hundred children born in the Marylebone Workhouse, only seven could be accounted for as having been vaccinated. The second class was the unvaccinated and unrevaccinated; and the third was the badly vaccinated. If the advantages of vaccination could be brought home to the inhabitants of the parish during this house-to-house visitation by some clear and convincing statement of the real facts on the subject, the good done by such visitations would be immensely increased. At present, the persons employed for the purpose have never the time, and seldom the capacity, to combat the far-fetched and ridiculous objections which are instilled into the minds of the more ignorant classes by the copious propaganda of the antivaccinators; and the distribution to each house of a collection of plain unvarnished facts, such as that recently prepared by the National Health Society, and approved by the Local Government Board, would immensely save the time of the officials, and do much to counteract the mischievous influence of antivaccinators.

AN INTERESTING PATENT.

AMONG American patents published in a list before us are five compounds for obliterating small-pox marks, etc. (E. Marriott, February 9th, 1881). The ingredients are pumice-stone, elder-flower, glycerine, white soap, and fatty matter. Unfortunately, however, for the progress of science, it was "not proceeded with".

THE DEAD POOR IN HOSPITALS.

AN application made on Jan. 27th, at the Southwark Police Court, brings forward again the disputed question as to the responsibility of union authorities for burying the bodies of poor persons who die in hospitals. The application was made by a man who resided in the St. George's Union, for assistance in removing the dead body of his wife from Guy's Hospital, and having it buried by the parish. He said that himself and his wife had lodged at a common lodging-house about a week, when the latter was taken very ill, and removed to Guy's Hospital, where she died. He had seen the superintendent of the hospital, and told him he was too poor to remove and bury the corpse; and he learnt that, unless the remains were removed at the end of five days, they would be taken to the dissecting-room. The hospital authorities had no funds at their disposal to assist the friends of the poor who died there; and the applicant was advised to see the relieving officer of the district from which his wife had been taken to the hospital. The relieving officer of the St. George's Union had told the applicant that he was unable to render any assistance, and suggested that the applicant should attend before the Committee on the following Wednesday, by which time the corpse, if it remained in the hospital, would have been taken to the dissecting-room. The magistrate, on hearing

these facts, sent for the relieving officer, who contended that, as Guy's Hospital was situated in the St. Olave's Union, it was the duty of the relieving officer of that union to go to the expense of removing the corpse, and burying it. The magistrate, on the other hand, considered that, as the deceased and her husband had lived in the St. George's Union until her removal to the hospital, it was the duty of that parish to remove her, and bury the body. After some discussion, the relieving officer agreed to see that the body was removed and buried, the magistrate undertaking to pay all the expenses in the event of the amount being disallowed by the auditor. The question here raised, as to the responsibility of an union to bury poor persons from other unions who may die in hospitals, could, we think, be settled by Section 31 of the 7th and 8th Vict., cap. 101, under which it is competent for the guardians to undertake the burials referred to. It does not appear, however, that it is at all compulsory for them to do so; and it seems a matter left entirely to their discretion. Nevertheless, it is to be hoped, for the sake of common humanity, that no miserable haggling about the responsibility of one or another authority for the burial of a dead pauper will prevent the body from receiving decent interment in due course, however sore pressed for subjects our medical schools may be, and actually are.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

THE thirty-fourth annual meeting of this Association was held at the Grosvenor Hotel on Friday, January 27th. The report of the committee showed the growing prosperity of the Association, the number of members and the funds being steadily increasing. The following is a list of office-bearers and committee for 1882:—*President*: Mr. Hardie. *Vice-Presidents*: Mr. Dacre Fox, Dr. John Roberts, Dr. Henry Simpson, Dr. Stevenson. *Treasurer*: Dr. Joseph Stone. *Secretaries*: Dr. A. Wahlteuch; Mr. J. Broadbent. *Committee*: Dr. Barlow, Mr. Crosbie, Dr. Cullingworth, Dr. A. M. Edge, Dr. A. Emrys Jones, Dr. Mallett, Dr. Pierce, Mr. Reston, Dr. D. Lloyd Roberts, Dr. Thorburn, Mr. Walmsley, Mr. Westmorland.

THE PARKES MUSEUM.

AN important meeting of the Executive Committee of the Parkes Museum was held on Friday, January 27th, 1882—Professor Berkeley Hill in the chair—when Mr. Basil Field was appointed Honorary Solicitor to the Museum. The Curator, Mr. Mark H. Judge, as Secretary of the recent International Medical and Sanitary Exhibition, presented the final report of the Exhibition Committee, which, after giving a detailed account of the origin and success of the undertaking, concluded as follows. "The work for which the Exhibition Committee were appointed having now come to an end, they have the satisfaction of handing over to the Executive Committee of the Museum the sum of £933 11s., together with furniture and fittings to the value of £100, while contributions to the Guarantee Fund to the amount of £80 10s. have been transferred to the Parkes Museum Building Fund, making the financial result of their labours a profit to the Parkes Museum of £1,120." The report was signed by Mr. John Eric Erichsen, F.R.S., the Chairman, and the Secretary. On the motion of Professor Hayer Lewis, seconded by Dr. W. R. Gowers, it was unanimously agreed that the report was eminently satisfactory, and that it should be entered on the minutes. The Honorary Secretary, Dr. G. V. Poore, read a communication from the Council of University College, in which that body agreed, with some modifications, to proposals which had been made on behalf of the Museum to the Council of the College, in reference to the erection of a building for the Museum. After a long discussion, in which Professor Berkeley Hill, Professor Hayer Lewis, Dr. W. R. Gowers, Professor Cornfield, and Mr. Rogers Field took part, the modifications suggested by the Council of University College were accepted; and it was resolved that steps should be taken to obtain the funds necessary for carrying out the scheme, which embraced—1. The building of an addition to the north wing of the College for the purposes of the Museum; 2. An endowment for the maintenance and management of the Museum; 3. The Museum to be

open free to the public, and to be placed on a somewhat similar footing to the North London Hospital—i. e., to be autonomous, with due representation of the Council of University Council on the Executive Committee of the Museum. It is estimated that £30,000 is the sum that will be required to thus permanently establish the Museum as a national institution. Towards this, Mr. Thomas Twining of Twickenham had written to say that he would subscribe the sum of £100, if one hundred promises of a similar amount were obtained. Promises of subscriptions may be sent to the Curator at the Parkes Museum, University College, Gower Street. Subscriptions may be paid to the account of the Parkes Museum at the Union Bank, Argyll Place, Regent Street.

THE INSANE IN HOUSES.

A GROCER at Easthorpe has been indicted, under the Lunacy Act, for undertaking the care of a lunatic without the requisite certificate; and further charged with neglecting and ill-treating him. The facts of the case were admitted. The only question for dispute was whether Brocklesby was really a lunatic or not. Dr. Tate, superintendent of the Nottingham County Lunatic Asylum, had no doubt whatever that he was of unsound mind, and had not been properly cared for. The witness further stated that, two years ago, the patient had an attack of delirium tremens, and that, since that attack, his mental condition had become worse. Witnesses were called, including the medical man of the district and the rector of the parish, who stated that, in their judgment, he could not be described as of unsound mind, though they agreed that he was of weak intellect. The jury returned a verdict of Not Guilty, and no evidence was, therefore, offered on the second indictment.

PAINLESS SLAUGHTER.

THE promoters of the movement which has been started for bringing about a reform of the methods of killing animals for food have held a preliminary meeting at the rooms of the Society for the Prevention of Cruelty to Animals, Dr. Richardson in the chair. The objects of the movement are stated to be sanitary as well as humane, and embrace the abolition of private slaughter-houses, the establishment of a model abattoir under efficient inspection, and the training of slaughterers. With the invitations to the meeting, the promoters circulated a printed paper setting forth the numerous evils, direct and indirect, of the present system.

CERTIFICATES OF STILL-BIRTHS.

MR. CORYN, surgeon, of Acre Lane, Brixton, has been summoned at the Lambeth Police Court, for having unlawfully made a false statement: as to a child born alive having been still-born, and also given a false certificate under and for the purposes of the Births and Deaths Registration Act of 1874, knowing such certificate to be false. It was proved in evidence that the defendant delivered the mother of the child, which was at that time alive, but died a few hours afterwards. Mr. Coryn, in answer to the charge, said that he did not know, when he gave the certificate, that he was doing an unusual or illegal act. The child in this case was an eight months' child, with scarcely any life in it; and he knew from the first that it could not live. He therefore gave the certificate that the child was still-born, to save the parents, who were poor people, the expense of an ordinary burial. He further stated that he had occasionally given such certificates to the poor during the course of a twenty-one years' practice. Mr. Chance, the police-magistrate, in giving his decision, said that he trusted that such a practice would not be followed in future, and pointed out what assistance such a course might be to crime. Looking, however, to the high character hitherto borne by defendant, and the fact that there was no desire on the part of the guardians of Lambeth parish, who had taken out the summons under the direction of the Registrar-General, to press for a heavy penalty, Mr. Chance ordered him to pay a fine of twenty shillings and costs, at the same time expressing a hope that the proceedings would prevent such a thing from taking place again.

EXAMINATION OF MIDWIVES AT THE OBSTETRICAL SOCIETY OF LONDON.

THIS examination has been greatly increasing in popularity during the last two years. Last year, forty-four candidates presented themselves for examination for the Society's diploma, as against twelve candidates in 1879. Of the forty-four candidates, thirty-nine received the diploma. Dr. Aveling, the chairman of the board of examiners, stated in his report at the annual meeting of the Obstetrical Society, on Wednesday last, that the degree of knowledge shown by a large proportion of the candidates was due to the careful teaching they received from the physicians to the several lying-in hospitals in which they had studied. The Obstetrical Society instituted the examination provisionally until the passing through Parliament of a Bill for the Supervision and Registration of Midwives.

THE GERMAN HOSPITAL.

THE annual meeting of this hospital took place on the 25th ultimo, under the presidency of Baron H. de Schröder. The report of the committee stated that during the past twelve months, nearly 21,000 persons had been benefited through the agency of the hospital. The one hundred and twenty-five beds which the hospital now held had constantly been occupied, and in many cases applicants had to be turned away for want of room. Nevertheless, 1,609 in-patients had been received during the year, and in a great many instances their stay at the hospital had been extended over many months. The number of out-patients was 19,390. The expenditure during 1880 was £8,628. This amount, however, included £832 for repairs and alterations, which exceeded that of last year for similar purposes by £500. The receipts amounted to £9,297 including the award of £95 from the Hospital Saturday Fund for the year 1880. In legacies £250 had been received; about £200 less than last year; whilst the annual subscriptions amounted to £2,279. One of the resident medical officers, Dr. Adolph Schreiber, having tendered his resignation, the committee had chosen Dr. Bernhard Spatz, who would enter upon his duties in the beginning of March next.

INFECTIOUS DISEASES.

MEANS for the prevention of the spread of infectious diseases formed the subject of discussion at a meeting of the St. George's, Hanover Square, and Westminster Committees of the Charity Organisation Society, held at the residence of Canon Farrar, on Tuesday last. A number of gentlemen and clergy were invited to attend. Canon Farrar presided, and related a circumstance which had come under his own observation, where a case of scarlet fever caught by a little girl visitor while riding across London in a cab, had spread until it had attacked nine persons in Canon Farrar's house, including Mrs. Farrar. With sixty boys also resident, the Canon had, by isolation and disinfection, prevented the spread of the disease amongst them. Mrs. Johnstone, of the Hastings Sanitary Aid Association, read a paper describing the organisation formed in the towns of Hastings and St. Leonard's to combat with infectious diseases. She pressed upon her hearers the fact that these infectious diseases were preventable; and described the course which was adopted by the Sanitary Aid Association of Hastings, the principles of which could be applied to the population of any other town. The association acted in conjunction with the local resources for dealing with poverty and sickness, and was auxiliary to those resources, as well as to the sanitary authorities. The association had women instructors, who, when an infectious case broke out, visited the case, and gave instructions as to the course to be adopted—in fact, instructed the heads of the family as to the treatment of disease; and the relief given in poverty depended upon the fulfilment of these instructions. Isolation was practised in the treatment of cases at home; and where there were bread-winners in a family, who would otherwise have to be in contact with contagion, lodgings were obtained for them. Then, when the case was recovering, it was necessary to keep the patient from mixing with the general population. If the patient were a child, it must be kept from school for at least eight weeks, while twelve weeks would be necessary in some cases; and she

insisted that a quarantine of at least eight weeks was necessary in all cases—sanitary action going on meanwhile, both as regarded the patient and the house. At the conclusion of the reading of the paper, Sir Henry Cole thanked Mrs. Johnstone for her interesting address, and urged that, by there being a "guild of health" in every parish, the origin of contagion might, to some extent, be cured. Dr. Bond said that, by attention to the rules laid down by Mrs. Johnstone, the endeavours of the physician to lessen epidemic disease would be materially aided. Mr. Michael, Q.C., urged the necessity of personal attention being given in each household to sanitary needs in a house. It was stated that it is purposed to introduce a Sanitary Aid Association into Westminster, on the Hastings model. A vote of thanks to Mrs. Johnstone closed the proceedings.

HOSPITAL SUNDAY IN LIVERPOOL.

JANUARY 8th was the eleventh anniversary of Hospital Sunday in Liverpool, which is always observed on the second Sunday in the new year. By a coincidence, it chanced to be the same date as that of the first Hospital Sunday in 1871. The weather was unfavourable; but the results are fairly good, the total sum realised exceeding £7,300.

PROFESSOR VON BISCHOFF.

THE fiftieth anniversary of the doctorate of this eminent professor of anatomy and physiology in the University of Munich was celebrated on January 16th, a large assembly being present. The King of Bavaria sent him the insignia of commander of the order of St. Michael, and also a congratulatory telegram. The University of Heidelberg conferred on him the honorary title of Doctor; and congratulatory addresses and telegrams were received from the Universities of Munich, Erlangen, Giessen, Marburg, Halle, Leipzig, Königsberg, Bonn, Strassburg, Kiel, Vienna, and Prague; also from various medical and other learned societies in Berlin, Vienna, St. Petersburg, Amsterdam, Brussels, Erlangen, Helsingfors, Frankfort, etc.; several of which elected Dr. Bischoff an honorary member.

GEOLICAL SOCIETY OF LONDON.

THE following were elected officers of the Society for 1882, at the meeting of the Fellows on Wednesday last. *Honorary President*, Arthur Farrer, M.D., F.R.S. *President*, J. Matthews Duncan, M.D. *Vice-President*, John Henslow, M.D.; Jonathan Hutchinson, F.R.C.S.; Charles Coleman, M.D.; John Bruster, M.D.; John Thoburn, M.D.; J. A. W. Rees, M.D. *Treasurer*, J. B. Potter, M.D. *Secretary*, F. C. M. D. *Librarian*, A. L. Galbraith, M.D.; G. F. Harrison, M.D. *Council*, H. Cotton, M.D.; E. Parnes, M.D.; J. H. V. D. M.D.; C. H. Henslow, M.D.; J. Bruster, M.D.; W. O. L. Henslow, M.D.; E. J. Tilt, M.D.; T. Spencer Wells, F.R.C.S.; W. S. Henslow, M.D.; E. L. Baskett, M.D.; J. Henry Parnes, M.D.; O. H. Carter, M.D.; F. Charles, M.D.; F. Malins, M.D.; F. Henslow, M.D.; F. W. Henslow, M.D.; C. Brodie Sewell, M.D.; J. Henslow, M.D.; H. C. Andrews, J. Ford Anderson, M.D.; H. Strange, F. Wallace, G. E. Jarrow, M.D.; G. P. Bate, M.D.; W. Henslow, M.D.; F. Henslow, M.D.

LECTURES ON THE DEVELOPMENT OF ENGLAND.

THE following is the programme of the course of lectures on the development of the human embryo to be delivered by Professor W. K. Lillie, F.R.S., at the Royal College of Physicians. 1. February 1st—On the development of the human embryo. 2. February 8th—On the development of the human skeleton and a comparison of its cranial and vertebral parts. 3. February 10th—On the superficial cartilaginous skeleton, bones, and pharynx; and on the limbs; and on the development of the endocranium. 4. February 13th—The endocranium, proper, in its growth and development throughout the vertebrate series. 5. February 15th—The histological changes undergone by the endocranium: (a) the neurocranium, (b) the chondrocranium, (c) the chondrocranium, (d) the osteocranium. 6. February 17th—The sense capsules of the vertebrata. 7. February 20th—The visceral

arches and cranial nerves in the branchiata. 8. February 22nd—The visceral arches in the abbranchiata: their abortive development and modification in relation to the sense capsules, especially in the mammalia. 9. February 24th—Recapitulation, and conclusion.

THE JACKSONIAN PRIZE.

WE hear that five essays have been received at the College of Surgeons for the Jacksonian Prize, on the Pathology and Surgical Treatment of Diseases of the Hip-Joint. The following is the subject for the prize for the present year: Wounds and other Injuries of Nerves: their Symptoms, Pathology, and Treatment. Essays for this and the Collegial triennial prize must be sent in on or before the 30th of December next.

SCOTLAND.

DR. RATTRAY, who has acted as chemist and dispenser to the Royal Infirmary, Aberdeen, for the long period of forty years, has sent in his resignation to the Committee of Management.

A MEMORIAL statue has been erected over the grave of the late Dr. Simpson, of the Indian Medical Service, whose premature death on the eve of his departure for India cut short a life of great promise. The granite tablet was subscribed for by former friends and fellow students of Aberdeen University.

THE GLASGOW ASYLUM FOR THE BLIND.

THE fifty-fifth annual meeting of the supporters of this institution was held on the 16th instant, when the annual report was read and approved. From the report, we find that 158 persons received the benefits of the institution during the past year, of whom 73 were resident in the place, while the remainder lived among their relatives or in their own homes; but we regret to observe that, though nothing could be more satisfactory than the work carried on at the institution, it has not been successful from a pecuniary point of view. This is no doubt easily accounted for, when it is remembered that many of the articles manufactured by the blind, when brought into competition with those produced by workmen who have sight, and more particularly with those produced by machinery, must be sold at considerable loss. The directors are very properly turning their attention to this matter, so as to introduce the manufacture of other articles likely to be more productive. The new buildings which it has been decided to erect on the site of the old ones are now making rapid progress to completion; and, though funds will be needed to carry out the original plan of the building, no doubt they will be forthcoming, and a short time will see an institution built and equipped with all the appliances and requirements of the present day necessary for carrying on the work of such a necessary charity as the Glasgow Blind Asylum.

COMET LECTURES IN THE NORTH OF SCOTLAND.

THE final lecture of this course was delivered by Dr. Stirling in Montrose, on Tuesday evening, when the hall was filled by a very large audience. The subject of lecture was "Respiration and Ventilation." The lecture was illustrated by a very large number of experiments, to show the properties of the gases which compose the air, and the changes which the air and blood undergo in respiration. The properties of oxygen, nitrogen, carbonic acid, and aqueous vapour, were all shown by a series of experiments. In speaking of respiration, attention was drawn to the giving off of aqueous vapour by the lungs, and how injurious to life is air which contains even a trace of this matter. Unlike carbonic acid, it is not so readily absorbed from a room by merely opening the windows, as it has a tendency to adhere and cling to articles of furniture. The various means by which it may be adapted to natural ventilation in our rooms were shown, including Bird's plan, Tobin's tubes, Arnott's valve, Sheringham's valve, etc. Every room ought to have a fireplace, and the damper ought to be up. Special attention was directed to the ventilation of

bedrooms, where, of course, one spends about a third of one's existence. A bedroom-window opened for an inch at the top is usually all that is required to admit sufficient fresh air. A hearty vote of thanks was awarded to the lecturer and to the Combe Trustees. These lectures have been thoroughly successful, as night after night the hall has been crowded; and we are sure the Combe Trustees are doing a good work in thus educating the people in the great problems of public health.—In Aberdeen, Dr. Stirling delivered the third lecture on Saturday evening, to an overflowing audience, every foot of floor-space being occupied. The physiology of the muscular system was illustrated by experiments on the legs of a frog, and the hygiene by practical remarks on the necessity for muscular exercise, more especially for ladies. The greater part of the lecture was taken up with the subject of food and feeding. A large number of the commoner foods were placed on the lecture table and their properties were described. The increased use of good vegetable food, such as our best cereals, was strongly advocated, and several foods were mentioned which working men might advantageously use as substitutes for part of the butchers' meat, for which they have to pay so high a price. The comparative values of flours for bread making were mentioned, and macaroni which is made from the hard dry glutinous wheat of Northern Italy was mentioned as a food which ought to be used more extensively than it is in this country. The comparative merits of white fine flour "Reform meal" and "Whole meal" were next dwelt upon, the principle which ought to guide the miller in the manufactures of flour being this: that he ought not to remove too much of the bran; above all, he ought to retain the layer in the wheat grain lying next the starch, as this layer contains about 14 per cent. of gluten. A short reference to the beverages in common use closed the lecture.

IRELAND.

DR. H. S. PURDON has been appointed Certifying Surgeon for the Belfast district, in the room of his father, the late Dr. Charles Purdon.

THE Fancy Fair recently held in aid of the funds of the Ballymena Cottage Hospital has realised the very handsome sum of £350.

SIR GEORGE B. OWENS, M.D., has been appointed by the Lord-Lieutenant a member of the Board of Superintendence of the Subsidised Hospitals in Dublin.

AN election for a coroner in the barony of Loughinshollin, county Derry, took place on the 27th ult. There were three candidates for the vacancy, two being medical practitioners, viz., Dr. McIver of Moneymore, and Dr. John Murdoch of Magherafelt; but, at an early period, the latter gentleman retired from the contest. Dr. McIver was successful, having polled a majority of 188 votes over his opponent.

QUEEN'S COLLEGE, BELFAST.

It is stated that the number of students entered for the present winter session amounts to 565, being an increase of about ten per cent. upon the previous winter session. Of these, 355 have been enrolled in the Faculty of Medicine, making the medical school of this College the largest in Ireland.

HOUSE OF INDUSTRY HOSPITAL.

DR. C. E. FITZGERALD, Ophthalmic Surgeon to the Queen in Ireland, has resigned the post of Ophthalmic Surgeon to the Richmond Hospital, in consequence of his numerous other pressing engagements. It is understood that Dr. A. H. Jacob, late Ophthalmic Surgeon to the City of Dublin Hospital, and to the Dublin Eye and Ear Infirmary, and Oculist in Ordinary to His Excellency the Lord-Lieutenant, will be appointed successor to Dr. Fitzgerald. The board of governors have lately created an assistant-surgeoncy to the Richmond Hospital, and Mr. J. V. Lentaigne has been appointed to fill the office.

SMALL-POX IN BELFAST.

THE disease has slightly increased during the past few weeks; and, on January 21st, there were 129 cases under treatment in the Union Hospital, 30 patients having been admitted with small-pox during the week. A rumour having prevailed in Belfast to the effect that the guardians intended erecting a disinfecting apparatus on the workhouse premises, a deputation of the citizens waited on the board last week for the purpose of requesting them not to sanction such a proceeding. The rumour, however, was unfounded, the guardians never intending anything of the kind, as they were of opinion that an arrangement of the kind mentioned would be most injurious to the inmates; and considered that a piece of ground on a place called the "Twin Islands" would be the most suitable site for a disinfecting apparatus. In consequence of the extra demand put at present on the medical staff by the prevalence of small-pox, it was suggested that an extra medical officer should be appointed, but the board decided not to do so for the present.

BELFAST HOSPITAL FOR SICK CHILDREN.

DURING the year, 295 intern, and 6,721 extern, patients received treatment at this hospital, the mortality only amounting to three deaths. The expenses exceeded the income by nearly one hundred guineas. The building-fund has been closed, and a "rent-extinction" fund to fine down the head rent has been formed, the amount standing to the credit of the latter being £226. It is gratifying again to record an increase in the number of students of the Queen's College, Belfast, attending the hospital, thirty-seven having been enrolled during last year, the largest yet registered. As their attendance is voluntary, it shows the value they derive from the clinical teaching they receive at the institution.

PRESENTATION TO MR. B. WILLS RICHARDSON.

AT the last meeting of the Surgical Society of Ireland, on the 27th ultimo, Dr. Barton, Vice-President of the College of Surgeons, who presided in the unavoidable absence of the President of the College, presented the late secretary of the society (Mr. Richardson) with a silver salver and a tea and coffee service of silver plate. This presentation was made by the members of the society in recognition of Mr. Richardson's services to the society, as one of the honorary secretaries, for a period of twenty-five years.

ULSTER EYE, EAR, AND THROAT HOSPITAL.

THE annual meeting was held last week, and we learn that, during the past year, 1898 new cases were under treatment, and 174 admitted to the wards of the hospital. Some of the extern patients were admitted free, others at a nominal entrance fee of one shilling; and the same principle, of requiring all those who were able to contribute to their support to do so, has been pursued in the intern department; but, in the majority of cases, the cost of maintenance has been met by the Poor-law unions, or by those interested in them. In this way, a sum of £363 was obtained from patients. It was announced that the late Mr. George Benn, who formerly had given a donation of £1000 to the hospital, had left a bequest amounting to a similar sum. As regards financial matters, the debt on the hospital has been considerably reduced, and the funds appear to be in a very favourable condition. A vote of thanks to the office-bearers of the institution, including Dr. McKeown, was adopted by the meeting.

FOOTBALL: THE HOSPITALS' CHALLENGE CUP.—On Tuesday last, in the presence of a good muster of spectators, St. Bartholomew's (the present holders of the challenge cup) and St. George's met at the Half Moon Ground, Putney. A more exciting game could hardly be imagined. In the first portion of it each side had twice to act on the defensive, while the second half of play, so far as results were concerned, proved a counterpart of the earlier one, each team having again to touch down twice in self-defence. The play all round was exceptionally good. When "No side" was called the match was left drawn, both fifteens being accredited with four touches-down. These clubs will therefore compete in the third ties.

foundations and interior shall be carefully lined with cement, and the exterior be backed with puddled clay, or some additional security to prevent leakage—compelling all cesspools to be freely ventilated, requiring all soil-pipes to be fixed outside the house, and to be carried up to a safe position on the roof, advising the ventilation of syphons connected with the soil-pipe, the separate disposal of bath-water, slops, and kitchen drainage, and in general terms directing prominent attention to the special points on which English sanitary engineers are in the habit of insisting, such as having a separate water supply for the waterclosets from that provided for drinking and other general purposes, the cistern for the one being guarded from that of the other with scrupulous care. 12. That the municipality shall make every exertion to carry into effect the provision of some general and complete system of drainage that would ensure the removal of the night soil of Cannes to a convenient distance from the town, and put a stop to the inconveniences felt by even a portion of it finding its way to the sea. Any such scheme would also include arrangements for the removal of the other different forms of house drainage for the disposal of which, at present, it is so difficult to provide. 13. That the canal authorities be warned against permitting the use of bunches of brushwood or other vegetable materials to direct the current of water or otherwise regulate the stream. 14. That a careful guard be kept over the canal banks to prevent possible contamination with night-soil, and that in the event of any public or private works being undertaken in their vicinity, to prohibit latrines, drains, or cesspools, from being constructed on a higher level, without the most absolute certainty being provided that any contamination shall be impossible. 15. That the filters in connection with the canal be carefully tended, and the filtering media be changed sufficiently often to ensure absolute purity of the water that passes through them. 16. That the annual closure of the canal for cleaning out its bed and executing repairs should be so arranged that the water supply may be in complete working order on the 15th October of each year. 17. That the municipal authorities encourage, by every means in their power, any proposal to substitute a system of iron pipes for the open canal that now provides the water supply of Cannes. 18. Other points of general hygiene, as the regular inspection of cow-sheds, etc., the fixing of the maximum number of animals to be accommodated in each building with regard to the available cubic space; the surveillance of slaughter-houses, the careful examination of the carcasses of all animals to be used as food, to ensure the rejection of those in which the lungs are not freely permeable to air, or other internal organs are diseased; the prohibition of the sale of meat not slaughtered on authorised premises, and other kindred considerations affecting the general health of the community have found no place in our recommendations—not because we consider them unimportant, but because we believe them to be outside the scope of the more narrow questions to which we have been asked to apply ourselves."

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 12th, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, June 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881. FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

LANCASHIRE AND CHESHIRE BRANCH.—*Preliminary Notice*.—A special meeting of this Branch will be held at Manchester on Wednesday, February 8th, at 5 P.M., to consider the subject of Compulsory Notification of Infectious Disease.—A. DAVIDSON, Honorary Secretary, 2, Gambier Terrace, Liverpool.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the Railway Hotel, Stafford, on Thursday, February 23rd, at 3.30 P.M. VINCENT JACKSON, General Secretary.—Wolverhampton, January 29th, 1882.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The fifth meeting of the session will be held at the Medical Institute, Birmingham, on Thursday, February 9th, 1882. The chair will be taken by the President, Mr. Bartlett, at 3 P.M. Paper: Mr. J. S. Gamgee: The Benefits conferred by Vivisection on Human Surgery. Members are invited to exhibit Patients, Pathological Specimens, New Drugs, In-

struments, or Appliances, at the commencement of the meeting. N.B.—Members are requested to pay their subscriptions to Dr. Rickards.—E. MALINS, M.B., 8, Old Square; E. RICKARDS, M.B., 14, Newhall Street, Honorary Secretaries.—February 1st, 1882.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

At a meeting of the Committee of Council, held at the Council Room of Exeter Hall, Strand, London, on Wednesday, January 18th, 1882: Present, Mr. C. G. WHEELHOUSE, President of the Council, in the Chair; Dr. W. Strange, President-elect; Dr. W. F. Wade, Treasurer; Dr. Clifford Allbutt, Mr. Alfred Baker, Mr. T. H. Bartleet, Surgeon-Major Boileau, Dr. L. Borchardt, Dr. A. Carpenter, Dr. C. Chadwick, Dr. J. Ward Cousins, Dr. A. Davidson, Dr. Charles Drage, Dr. W. A. Elliston, Dr. B. Foster, Dr. E. Long Fox, Dr. W. C. Grigg, Mr. A. J. Harrison, Dr. C. Holman, Professor G. M. Humphry, Mr. W. D. Husband, Dr. Leslie H. Jones, Dr. D. J. Leech, Mr. C. Macnamara, Mr. F. E. Manby, Mr. F. Mason, Mr. R. H. B. Nicholson, Mr. H. Power, Dr. S. Rees-Phillips, Dr. C. Parsons, Dr. R. C. Shettle, Mr. S. W. Sibley, Dr. E. M. Skerritt, Mr. H. Stear, Dr. A. P. Stewart, Dr. E. Waters.

The minutes of the last meeting were read and found correct.

Read letters of apology for non-attendance from Dr. Duffey, and Dr. Eytton Jones.

Read letter from Dr. Sieveking suggesting that the medal for distinguished merit be given to certain officers of the Association.

Resolved: That the President of the Council be requested to write to Dr. Sieveking, and inform him that the Committee of Council do not consider the carrying out his suggestion advisable.

Read communication from Dr. Urban Pritchard, the late Mr. Douglas Hemming, and Mr. Baker, asking that the Section Otology be recognised as a separate Section at the annual meeting.

Resolved: That, in compliance with the request, Otology be recognised as a separate Section at the annual meeting in August next at Worcester.

Resolved: That, on the occasion of the jubilee meeting, to be held at Worcester in August next, there be three vice-presidents in each of the Sections.

The President-elect reported that he had received an intimation from the Mayor of Worcester that it was his intention to invite the members of the Council to accompany him officially to divine service in the cathedral.

Read letter from Mr. R. E. Power of Portsea, suggesting that the list of members should be enlarged, giving particulars of each member's titles, and that an alphabetical list of members should be added.

Resolved: That Mr. Power be informed that the Committee of Council does not see its way to carrying out his suggestions with regard to increased information in the list of members.

Read resolutions of the East Anglian Branch, of which the following are copies.

Resolutions of the autumn meeting of the East Anglian Branch, viz.:

1. That it is, in the opinion of this meeting, desirable that steps should be taken at once to investigate thoroughly the subject of syphilis, and its effects upon the civil population of Great Britain, and more particularly of the great maritime and mercantile centres.
2. That the British Medical Association, representing so large a body of the guardians of the public health, is at the present time the only organisation capable of carrying out this investigation successfully.
3. That a copy of these resolutions be forwarded to the President and Committee of Council of the Association, with a request that they would take into consideration the expediency of forming a central committee of investigation, with power to appoint local committees in such places as they may think desirable; such subcommittees to consist not only of members of the Association, but of all medical men living in the place or neighbourhood, who are willing to assist in the work; to lay down the lines upon which these subcommittees are to work, and to receive and digest their reports.

Resolved: That the resolutions of the East Anglian Branch be referred to the Collective Investigation Committee.

The election of eighty-three candidates was then considered.

Resolved: That the election of one member be referred to the Council of the Lancashire and Cheshire Branch on the ground of suspected homoeopathy.

Another candidate was referred to the Council of the Metropolitan Counties Branch.

Resolved: That eighty-one be, and they are hereby, elected members of the Association, and that two of the candidates be referred to the Councils of the Branches of the districts in which they respectively reside.

Resolved: That the minutes of the Journal and Finance Committee be received and adopted, and the recommendations carried into effect.

The minutes of the Journal and Finance Committee contain the report on the examination of the monthly accounts, amounting to £4,041 os. 9d., and the auditor's quarterly report on receipts, amounting to £5,431 18s. 2d.; and recommendations to empower the Treasurer to invest £2,000.

Resolved: That the seal of the Association be attached to the instructions for the payment in future of dividends due from the London and North-Western and Midland Railway Companies direct to the Bank.

Resolved: That the minutes of the Scientific Grants Committee of to-day's date be approved and carried into effect.

The minutes of the Scientific Grants Committee contain recommendations of the amount of £50.

Professor Humphry, as Chairman of the Committee, reported that the Collective Investigation Committee had nominated Dr. William Robert Smith of Cheltenham for election by the Committee of Council as Secretary to the Collective Investigation Committee; but that he had received a letter of this date, stating that circumstances had occurred which prevented Dr. Smith's acceptance of the appointment. Under these circumstances, the Committee would reconsider the appointment of Secretary.

The President of Council reported that steps had been taken to support Dr. Ferrier, F.R.S., in the recent prosecution for vivisection.

Resolved: That the report of the President of Council, with regard to the steps taken in the prosecution of Dr. Ferrier, F.R.S., for vivisection, be approved, and the legal expenses, amounting to £75, paid out of the funds of the Association.

Dr. Alfred Carpenter gave notice that he would move, at the next meeting,

That the resolution appointing a Commission to inquire and report upon the Transmissibility of the Diseases of Animals to Man by way of Flesh or Milk used as Food, be rescinded as far as the members of the Commission is concerned, and the subject of the investigation be referred to the Collective Investigation Committee.

DUBLIN BRANCH: ANNUAL MEETING.

THE fifth annual meeting of the Dublin Branch was held on Wednesday, January 25th, 1882, in the hall of the King and Queen's College of Physicians; Dr. JOHN T. BANKS, Vice-President of the Branch, in the chair. There was a large attendance of members.

The minutes of the last annual general meeting were read and confirmed, and letters of apology from some of the officers of other Irish Branches, who were unable to accept the invitation of the Council to attend the annual meeting and dinner were read.

Dr. GEORGE F. DUFFY, Honorary Secretary, read the annual report of the Council for the past year as follows:—

"In presenting the Fifth Annual Report, your Council has the melancholy duty, in the first instance, of reminding the members of the great losses the Branch has sustained during the past year. Seven of its members, including its President and President-elect, have died since the last annual meeting. And the earth is still fresh over the grave of a member of your Council, Dr. Reuben J. Harvey, prematurely struck down by the same disease as that which, in the beginning of the year, took away the life of the deeply regretted Dr. Peel. The fatality which removed two valuable lives as those of Drs. Hayden and McClintock, the two chief officers of the Branch, also deprived it of two of its most ardent promoters and most active members. Both took the greatest interest in its success; and spared neither time or trouble in contributing towards establishing the position the Branch now holds, as well by their energies and talents, as by the support derived from their position and reputation.

"Your Council feel assured that the Branch received with the greatest satisfaction the sincere expression of brotherly feeling conveyed to it in the resolution of condolence adopted by the Council of the Metropolitan Branch (which was published in the *Lancet*, and in the *Dublin papers*), on the occurrence of the death of Dr. Peel, and the death of Dr. Cryan and of Deputy Inspector-General Hayden; the Branch has also lost two of its original members; and by the death of Thomas F. Bakenham Walsh, A.M.D., a member who only joined the Branch last year.

"On account of illness and other causes, eight gentlemen have resigned their membership; and two members have been removed from the roll by the Council, in consequence of non-payment of arrears of subscription. From all these losses, and from the fact that no new members have joined the Branch during the year, and from the number of members on their death during the year, as well as from the resignation of the President-elect, Dr. Cryan, and the resignation of the President-elect, Dr. Cryan, the Branch has lost two of its original members; and by the death of Thomas F. Bakenham Walsh, A.M.D., a member who only joined the Branch last year.

"On account of illness and other causes, eight gentlemen have resigned their membership; and two members have been removed from the roll by the Council, in consequence of non-payment of arrears of subscription. From all these losses, and from the fact that no new members have joined the Branch during the year, and from the number of members on their death during the year, as well as from the resignation of the President-elect, Dr. Cryan, and the resignation of the President-elect, Dr. Cryan, the Branch has lost two of its original members; and by the death of Thomas F. Bakenham Walsh, A.M.D., a member who only joined the Branch last year.

in Ireland, received its careful and anxious consideration. The Council approved of making the notification of infectious diseases general throughout Ireland instead of merely local. It also agreed that the provisions of the proposed Bill should be compulsory, and apply generally to every sanitary district, instead of its adoption being left to the wishes of any sanitary authority. It regretted that the direct method of notification by the medical attendant was that adopted in the Bill, instead of the method approved of by the British Medical Association; as the Council was aware that a large proportion of the profession throughout the country strongly object to the former method. The Council, therefore, urged Mr. Gray to modify this clause in his Bill in such a manner as to make it acceptable to the bulk of the profession. This the Council believed might have been done by the adoption of what is known as the "dual method". The Council was also strongly of opinion that a fee of at least 2s. 6d. should be payable to the medical attendant for each certificate sent by him to the sanitary authority. Mr. Gray received the opinions of your Council courteously, and expressed his willingness to accede to most of them. Owing, however, to opposition to the Bill it could not be proceeded with last Session. But your Council are glad to inform you that they have been recently engaged, in conjunction with the Committee of Council of the Irish Medical Association, in framing a Bill, the provisions of which they trust will be acceptable to the members of both bodies, and which it is hoped may be introduced next Session. The text of this proposed Bill will be laid before this meeting, and a resolution proposing its adoption by the Branch, submitted to you.

"Your Council has given its best attention to all other subjects that have come under its notice. They are pleased to observe that one of their members, Mr. W. Stokes, has been selected by the Committee of Council to deliver the Address in Surgery at the next—the Jubilee—meeting of the Association. The funds of the Branch, which have been audited by Dr. E. H. Bennett, up to the 24th inst., show a balance in favour of the Branch of £20.

"With the object of continuing the custom which has heretofore existed, of filling the Presidential chair by a Fellow of the College of Physicians and a Fellow of the Royal College of Surgeons alternately, the Council has nominated Drs. Kidd and Banks, Vice-Presidents, as President and President-elect, respectively, of the Branch; and Mr. Edward Hamilton and Dr. Lombe Athill as Vice-Presidents.

"The thanks of the Branch and of the Council are again due to the President and Fellows of this College for their readily accorded and courteous permission to hold our meetings within its walls."

Dr. J. W. MOORE moved: "That the report of the Council as now read be received and adopted."

Mr. PORTER seconded the motion, which was adopted.

Dr. PORTER then declared the Ballot open. He proposed, however, that Dr. George H. Kidd be elected President by acclamation. This was a pleasing duty, for he could not propose for the office one more worthy to fill it. He trusted that when they next met in that hall on a similar occasion they would not have to deplore such heavy losses as they had to lament that day.

Dr. KIDD then took the chair amid applause.

Dr. KIDD then read the draft of a Bill suggested by the Committee of Council of the Irish Medical Association, and by the Council of the Dublin Branch, to provide for the better Notification of Infectious Diseases in Ireland. The principal sections of this Bill, which we are unable to print verbatim, are the 3rd and 4th, which are as follows:

"3. If an inmate of any building used for human habitation is suffering from any of the infectious diseases specified in Schedule A to this Act, the person in charge of such inmate, or if such person be prevented by illness or otherwise, the owner or any other person having the management or control of such building, shall forthwith cause notice thereof to be given, by letter or otherwise, to the sanitary authority of the district in which such building is situated, as nearly as possible in the form contained in Schedule B to this Act."

"4. Every person who contravenes the provisions of the Act in relation to any person suffering from any of the diseases set forth in Schedule A to this Act, may, if he shall think fit, satisfy the requirements of such case of disease to the sanitary authority of the district in which the person suffering from such disease is resident; and every person so notifying shall, upon being called upon, and sworn, or sworn to be delivered, or shall transmit by post to the sanitary authority, a certificate acceptable to the sanitary authority in the form set forth in Schedule C to this Act, or a statement in the same form, giving the name and place of residence of the patient, and the nature of the disease from which such patient is suffering, and that of the person, and deliver to the person in charge of such patient, or to the person in charge of the building in which the patient resides, a further certificate in the

form set forth in column 3 of Schedule C to this Act, the production of which certificate shall be a good defence for such person against any penalties for breach of the terms of this Act.

Dr. ROBERT McDONNELL said he had had the advantage of reading over the proposed Bill, and of studying its provisions. He moved: "That the draft Bill to provide for the better notification of infectious diseases in Ireland, as suggested by the Committee of Council of the Irish Medical Association and by the Council of the Dublin Branch of the British Medical Association, be and hereby is approved of and adopted by this Branch; and that the Council of this Branch be authorised to take such steps as may seem to it advisable to procure the introduction of said Bill into Parliament during the coming session." Some members of the Branch, he said, might have some little difficulty as to the merits of the Bill. Some might wish it to go further—others might consider it had gone too far; but everything of the kind was a matter of compromise. They should give and take. The Bill, he thought, was a good one, and if the Branch came to a unanimous resolution on the subject it would help forward a Bill which would eventually be one of incalculable benefit to the public at large.

Dr. JACOB, in seconding the resolution, said the members of the medical profession were under no compulsion in this matter, and thus the element which was most distasteful to some members, including himself, had been got rid of. They could not shut their eyes to the fact that notification by medical men was much more efficacious than any other, and therefore they tried to introduce into the Bill a clause which would practically effect notification by medical men. That they did by the fourth section, which provided that when a medical man was called in to attend a patient suffering from infectious disease he might in the exercise of his discretion make the notification. He was not forced to notify the disease, but he might do so at the request of the patient; and for giving notice to the sanitary authority he should receive a small fee. That would relieve the householder from all liability under the circumstances. Thus a physician on entering a sick room would do so entirely unfettered. The plan proposed was deserving of trial, and he believed it would work in a way beneficial to the public.

Mr. CHAPLIN (Kildare), President of the Royal College of Surgeons, expressed his approval of the Bill, which saved the medical man from an invidious position, while at the same time its provisions left him free to serve the public in a matter of great importance. He fully concurred in the observations made by Dr. McDonnell and Dr. Jacob, and he was prepared to give the Bill his most strenuous support.

Dr. JOHNSTON, President of the King and Queen's College of Physicians, also expressed his full approval of the Bill, and said that all objections to the measure were removed by Clause 4.

Dr. J. W. MOORE said that the public, through the members of Parliament, asked for direct notification by the medical attendant. The profession preferred doing it in an indirect form, and the form proposed in this Bill solved the difficulty. The Bill was most necessary. For the last two months measles had been a widespread epidemic in Dublin, and three or four weeks, or more, had passed away before the *habitat* of that epidemic was found out. Time was lost and the epidemic spread. The consequence was that the death-rate of Dublin had been raised to an extent that was a disgrace to the city. Dr. Moore then spoke of the effective manner in which the provisions of the Bill would be carried out by the forms provided in the schedules annexed.

The resolution was then put and adopted unanimously.

President's Address.—The President, Dr. Kidd, delivered an address on "Medical Education." It is published at page 146.

Vote of Thanks.—Dr. JOHNSTON proposed, and Mr. CHAPLIN (Kildare) seconded, a vote of thanks to the President, Dr. Kidd, for his admirable address. The vote was carried by acclamation, and the President expressed his acknowledgments.

Election of Officers.—The following were elected officers and council for 1882. *President*: G. H. Kidd, M.D. *President-Elect*: John T. Banks, M.D. *Vice-Presidents*: Edward Hamilton, M.D.; Lombe Atthill, M.D. *Council*: E. H. Bennett, M.D.; Thomas Darby, F.R.C.S.I.; J. M. Finny, M.D.; Samuel Gordon, M.D.; T. W. Grimshaw, M.D.; Rev. S. Haughton, M.D., F.R.S.; J. W. Moore, M.D.; E. D. Mapother, M.D.; Robert McDonnell, M.D., F.R.S.; H. R. Swanzy, M.B.; P. C. Smyly, M.D.; William Stokes, M.D. *Representatives on the General Council*: Isaac Ashe, M.D.; Thomas Darby, F.R.C.S.I.; Rev. S. Haughton, M.D., F.R.S.; James Little, M.D.; R. McDonnell, M.D., F.R.S.; J. W. Moore, M.D.; G. H. Porter, M.D.; W. Stokes, M.D. *Honorary Secretary and Treasurer*: G. F. Duffey, M.D.

The proceedings then terminated.

The Dinner.—In the evening, the members and their friends (to the number of seventy-six) sat down to dinner in the great hall of the College of Physicians—Dr. KIDD, President, in the chair. Amongst those

present were: the High Sheriff of the City, Mr. E. D. Gray, M.P.; the Right Hon. Edward Gibson, M.P.; Sir Patrick O'Brien, Bart., M.P.; Sir William Carroll; Sir George Owens; Mr. Maurice Brooks, M.P.; Dr. Lyons, M.P.; Mr. Charles Meldon, Q.C., M.P.; Mr. Findlater, M.P.; the President of the Royal College of Surgeons; the Vice-President of the King and Queen's College of Physicians; the President (Dr. Banks) and the Honorary Secretary (Dr. Chapman) of the Irish Medical Association; the Governor of the Apothecaries' Hall; the President of the Pharmaceutical Society of Ireland; the President of the Obstetrical Society of Dublin; Dr. Croker King, Local Government Board; the Registrar-General; Master Pigot; Dr. Jacob, etc. After dinner, in addition to the usual loyal toasts, the toast of "The Houses of Parliament" was given by the President, and responded to by Mr. Maurice Brooks, M.P., Sir Patrick O'Brien, M.P., and the Right Hon. Edward Gibson, M.P. The President next gave "The Colleges of Physicians and Surgeons", to which the President of the College of Surgeons and the Vice-President of the College of Physicians responded. Dr. Lyons, M.P., proposed "The British Medical Association and its Dublin Branch". The President responded, and proposed "The Irish Medical Association", to which Dr. Banks (its President) responded. The toast of "The Visitors" was responded to by the High Sheriff, Mr. E. D. Gray, M.P.; and that of "The Press" by Mr. J. A. Scott and Dr. Jacob. Dr. McDonnell proposed the health of the Honorary Secretary, in eulogistic terms, and the toast was most warmly received. Dr. Duffey replied, and gave the toast of the gentlemen who had contributed towards the enjoyment of the evening by their finished and effective singing. To this toast, Mr. Martin responded; and the company soon afterwards separated.

CORRESPONDENCE.

THE BRITISH MEDICAL BENEVOLENT FUND.

SIR,—I have received from Dr. Henry, honorary secretary to the Metropolitan Counties Branch of the British Medical Association, the first list of subscriptions and donations to the British Medical Benevolent Fund received by him in response to an appeal on behalf of the fund; issued, by the authority of the president and council, with the usual annual circular asking for the subscriptions to the Association and Branch. The subscriptions to the fund amount to £54 18s. 6d., the donations to £60 11s. 6d., making, with a donation of ten guineas sent separately by the President of the Branch to Dr. Jonson, chairman of the committee of the fund, a total of £126.

This result surpasses our most sanguine anticipations, and goes far to make the reaffiliation of the fund to the Association an accomplished fact. The South Wales and Monmouthshire Branch is also employing the organisation by which its own subscriptions are collected for obtaining subscriptions to the fund; were this done by all the branches, not only would a larger amount of money be available for the relief of distress among members of the profession and their families, but the existence of the fund would be made known more widely and a larger number of cases would be reached.

That the fund would worthily represent the charitable department of the Association will be admitted, when it is stated that it distributes £1,800 yearly in grants for the immediate relief of necessitous applicants, and £900 in annuities.

I enclose a list of the subscriptions and donations received through Dr. Henry, and beg to remain, your obedient servant,

W. H. BROADBENT, Treasurer.

34, Seymour Street, Portman Square, W., January 23, 1882.

THE GRAVE SOCIAL PROBLEM.

SIR,—During the sixteen years that I have been a head master, I have been two or three times informed by my assistant-masters that they had grave reasons for suspecting the existence of this great social evil in the school. What I did then was this. I spoke to the boys as soon as they were all next assembled together in the large school-room, as follows; at least, this is an outline of what I said to them:—"Boys, it distresses me much to learn that many of you are in the habit of indulging in a vice—a secret, solitary, horrid vice—which, if persisted in, must inevitably be the ruin of your souls and minds and bodies. Universal experience assures us of this. Your happiness here and hereafter will be destroyed by the self-indulgence I allude to. Many of you know what I mean; many of you do not, and God grant that you may never know! How terribly guilty is he who first, whether by precept or example, teaches another the way to sin! That the vice I refer to is a *sin*, you all yourselves in your very hearts must feel. And

this vice is also, like every other kind of sin, *unnatural*. The reason it is *unnatural* is this. Conscience is entirely opposed to it, and so is a true regard for our own interests (or self-love, as it is called); and everything must be called *unnatural* that is opposed to these two great principles of our nature—conscience and self-love. One dreadful feature of this vice is that it grows through indulgence. Excess draws on excess; and one seldom gives up this habit once contracted, until it is too late—until health and strength at last give way, and death comes to remove the sickly, wearied victim of his passions from the world. Consumption, madness, mental and bodily weakness, and a thousand other ills, all result from indulgence in this vice. If you continue to indulge in it now, you will probably not be able to marry; and if you do marry, you will probably never have any children, (and what unhappinesses may spring from this!) and if you have children, they will be probably like their parents—weak and delicate and sensuously disposed; for children, of course, always inherit their parents' propensities of all kinds. We masters find it by no means difficult to recognise the boy who indulges in this vice. Debility, dislike to outdoor games, inattention at class, want of memory, proneness to reverie and moping about by himself, are among his principal characteristics. For God's sake, therefore, boys, and for your own; for your parents' sakes, whether these be dead or alive; and for your children's sakes, in case you may ever have any, stop, and stop at once, this vice,—those of you who may have indulged in it. Take, as it were, the pledge against it; mentally resolve never again, while life lasts, to be guilty of it; pray earnestly and trustfully to God for grace and strength to enable you to for ever keep this your resolution, and to remember your prayers. Play more than you have been hitherto doing; give not place to reverie; learn your lessons more vigorously; in short, be *always either at work or at play*, and you will presently find yourselves growing happier and healthier in mind and in body, and the less and less inclined to commit this sin."

Warning and advice of this kind will never be found to fail. Such warning, such advice, when affectionately and kindly given, will be always effectual; and boys will be even grateful for it. And as a schoolmaster may address his boys in general, so, of course, *mutatis mutandis*, can a schoolmaster or a father address any individual boy. There can be no doubt, boys ought to be informed about the fearful evils that arise from indulgence in this vice. Otherwise, how on earth can they know about them? Perhaps I should add, that I once called in the aid of our medical attendant in the case of one boy. The wretched lad was, I felt, destroying his intellectual and physical health by his apparent inability to restrain himself. Between the doctor's treatment of him and my advice, a total reformation has been, I rejoice to believe, effected in the once miserable boy.

It is a grave error to suppose that boys addicted to this vice are always brutal, low-minded, worthless fellows, etc. They are very often quite the opposite of all this—a fact that should not be lost sight of by schoolmasters and parents.

It may be urged that there is a danger of actually teaching a boy this vice, while striving to warn him against it. This is true. Discretion is necessary in this as in every other matter. (However, if the advice be given vaguely and in general terms in the way that I have sketched out, it is only the guilty ones that can know what is meant. The innocent ones only know that something awful is being spoken of, and that the less said about it the better. And when, in due course of time, a knowledge of the evil referred to may come to them (and to what man or schoolboy does it not come sooner or later?) then the early words of warning will be sure to recur to them, and be remembered not in vain.

So much has been lately written in your JOURNAL about the prevalence of this vice that I trust, Sir, you and your readers will forgive me for my audacity in venturing to describe a plan which I, myself, have found not unimportant in preventing and stopping it. I am, yours faithfully,

MAURICE C. HIME, M.A., LL.D.

Leeds College, Leeds, January 27, 1882.

THE MORTALITY FROM DIPHTHERIA AT DIFFERENT AGES.

In the recently issued *Transactions of the International Medical Congress*, there is a table given at p. 85, at which, containing many very interesting statements, or as I believe may be termed, with regard to this subject, which, from another table given by the writer of this paper (Dr. A. J. Smith, of New York), as a somewhat preliminary notice, I venture to briefly and possibly the only purpose of what is here presented. It is to be hoped that, before the valuable information is reported to the permanent body of the world, some means may be found of correcting the obvious error which has crept in

somewhere in framing this statistical table, that I ask permission to draw attention to the subject in your columns.

The paragraph immediately preceding the table which I am about to quote, states that of 9,354 reported deaths of diphtheria in the United States, only 445 occurred under one year, 778 in the second, 1,034 in the third, 1,011 in the fourth, 991 in the fifth; thus 4,219 under five years (45 per cent.); 3,057 between the sixth and tenth, that is, as many as in the three years beginning with the third and ending with the fifth year. Between 10 and 15 there were 1275, about as many as in the first and second together, and but few more than in either the third, the fourth, or the fifth year. Then comes the table which states that "there were between"

15 and 20 years 329 less than in the first year.

21	"	25	"	112	"	"
26	"	30	"	57	"	"
31	"	35	"	28	"	"
36	"	40	"	28	"	"
41	"	45	"	18	"	"
46	"	50	"	13	"	"
51	"	55	"	10	"	"
56	"	60	"	10	"	"
61	"	65	"	4	"	"
66	"	70	"	2	"	"
71	"	75	"	2	"	"
75	"	80	"	2	"	"
81	"	85	"	2	"	"
86	"	90	"	1	"	"

If we desire to ascertain from this table what proportion of the total reported deaths from diphtheria took place between the ages say of 15 and 20 years, we must first subtract from 445, the number given as the total for the first year, 329, leaving 126 as the number of deaths between those years. Similarly, if we want to know whether more or fewer deaths took place between 56 and 60 than at the above ages, we must subtract 10 from 445, and compare the result, 435, with 126 as given above. Finally, when we get to the bottom of the table we shall be astonished to learn that the deaths from diphtheria between 86 and 90 amounted to 444, or only one less than during the first year of existence.

Statistics such as these, if they could be considered correct, would go far to disprove the author's opening statement, that diphtheria is pre-eminently a disease of childhood. But they are obviously not correct, and are proved not to be so by another table given at p. 89, from which it appears that the total of deaths from the disease between 55 and 60 was 10, between 85 and 90, only 1, and so for all the others. The numbers given in the above table as so many less than in the first year, really represent the absolute number of deaths, between the stated ages, which took place out of a total of 9,354. The table, however, as it stands in the printed volume of *Transactions*, is incorrect and misleading.—I am, etc.,

H. NELSON HARDY.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE number of small-pox cases and deaths at Camberwell have happily diminished. During the past fortnight two deaths from the disease have been registered in Peckham, and four others (due to the parish) have occurred in hospital. Twenty-eight fresh cases of small-pox came under notice during this period, of which number twenty-one were sent to the hospital by the guardians.

WHO IS TO BLAME?

We have received a letter with this heading from Jarrold-on-Tyne stating that a case of measles occurred in a common lodging-house, registered to accommodate forty-six inmates; that an order was obtained on the 10th December for the removal of the child, who expired on that day; and on the 12th, the child not being removed, he sent a notice to the sanitary authority, which the inspector communicated to the medical officer of health. Another medical practitioner spoke to the inspector on the subject, and eventually the mother removed with the child to some other lodging. "The sanitary authority blames the Poor Law authority and vice versa." This seems to be no uncommon occurrence at Jarrold, as the sanitary authority has no hospital for infectious diseases, and the Poor Law authorities have in one instance removed a patient from the Fever Hospital of South Shields, which is in the district. The answer, under these circumstances, to the question, "Who is to blame?" is quite clear, viz., that the relieving officer, on

receiving the certificate of the parish surgeon, should have immediately removed the child to the Fever Hospital. This case shows the muddle which often happens from the present state of the law, which although as regards paupers is clear enough to those who are acquainted with it, yet is very uncertain as regards other people, because there is no legal or authoritative definition as to what constitutes a pauper. In the metropolis this is to a great extent avoided by the relieving officers removing, in most parishes, to the Asylums Board Hospitals all those who are unable to provide proper medical attendance, nursing, and food for themselves. The medical officer of health is called upon to remove those who are without proper lodging and accommodation, and object, if paupers, to be removed by the relieving officer. Much time is sometimes lost by the friends of infected persons going to the wrong officer, and it is therefore highly necessary that something should be done to place the law upon a more satisfactory footing. It is true that the sanitary authority may provide a hospital for infectious diseases, but very often neglects to do so, in which case the medical officer of health is powerless. It is to be hoped that the Royal Commission on Hospitals now sitting will make some recommendations for the abatement of this dangerous state of the law, and for placing these matters on a more satisfactory footing.

SMALL-POX AT LEEDS.

THE outbreak of small-pox at Leeds seems to be assuming proportions which are somewhat alarming, in view of the inadequacy of the isolation accommodation at the disposal of the sanitary authority. Last week, the Mayor and other members of the Town Council attended, as a deputation from the Corporation, a meeting of the subscribers of the Fever Hospital, and stated that the Corporation were in a somewhat serious difficulty with regard to the treatment of infectious cases. The guardians had represented that it was absolutely necessary to provide an institution for dealing with infectious diseases, and which would receive pauper cases. The Fever Hospital Committee promised to consider a proposal to rent a portion of their hospital—a building constructed in 1870, and capable of containing about eighty beds. How far, however, this building is adapted for the present wants of the borough, does not appear to be clear. Meanwhile, small-pox is growing in the town, and the medical officer of health expresses himself as "at his wit's end how to deal with it".

SMALL-POX IN THE UNITED STATES.

WE understand that, in consequence of the spread of small-pox in the United States, the Executive Committee of the National Board of Health have declared the disease to be epidemic, and have insisted upon the adoption of vigorous measures, including the establishment of quarantine stations, with a view to prevent its spread. The United States have no compulsory vaccination law, such as exists in our own land, and the number of unprotected persons that accumulates between one epidemic and another is therefore very great. The last annual report of the State Board of Health of Massachusetts, in dealing with the disregard into which vaccination has fallen in the United States, gives as an instance that, amongst the children at the schools in an important town in the State, having large railroad connection with all parts of the country, more than one-half of the children of nine years old and under had never been vaccinated; the practice of vaccination having apparently fallen into disuse since a period of about nine or ten years ago, when the prevalence of an epidemic of small-pox called attention to its necessity. Dr. Adams, who reports on the whole subject, suggests that a State Vaccine Establishment should be formed, the chief business of which should be to propagate vaccine lymph by animal transmission, or in other ways, and from which all the physicians in the State should be supplied. This lymph should be proved by constant testing, and all the recipients should be compelled to report the results obtained. With the matter should be sent a recommendation to each physician to vaccinate, if possible, every infant born in his district, after so many months of its birth; also such instructions as may best prevent imperfect vaccinations. Dr. Adams thinks that vaccination should be forbidden by law, except by the hand of those to whom lymph is intrusted by the institution; that all the schools of the community should be subjected to an annual inspection, and that revaccination should be insisted upon whenever the protection of the public health requires the adoption of such measures. The Board of Health have not thought fit to adopt these recommendations, believing that the present laws of the State, if enforced, are sufficiently effective. The question becomes one of great importance, in view of the increasing prevalence of the disease in Philadelphia and New York, and the fact that inquiry and inspection in many towns have shown that the provisions of the statutes in respect to vaccination have been much neglected.

OBITUARY.

ANDREW WOOD BAIRD, M.D.,
PHYSICIAN TO THE DOVER HOSPITAL.

DR. ANDREW WOOD BAIRD was born at Colchester. In 1817, he began his studies at the University of Edinburgh. At the commencement of his medical studies, he resided with his mother's uncle, Mr. Andrew Wood, and, on his demise, with his mother's cousin, Mr. William Wood; both of whom filled the office of President of the Royal College of Surgeons of Edinburgh, and helped to make the name of Wood a power in the Scottish medical world. In 1821, he became a Licentiate of the Royal College of Surgeons of Edinburgh; and, in 1823, he took the degree of M.D. at the Edinburgh University. In 1824, he established himself as physician at Ipswich. In 1827, he became a Member of the Royal College of Physicians of London. He was, in connection with Mr. R. D. Alexander, banker, of Ipswich, the means of establishing the General Hospital for East Suffolk, to which he was physician. He also enjoyed one of the largest consulting practices in the county, and was, in every respect, the trusted and valued physician and friend both to rich and poor. In 1852, he left Ipswich. On leaving, he was presented with a valuable microscope and a purse of gold. As he had been in Ipswich, so he became in Dover—trusted and loved both by rich and poor. He continued to practise his profession to within a few days of his death; one of the greatest wishes of his life being thus fulfilled. He held for twenty-nine years the office of physician to the Dover Hospital. He died on January 10th, and it may truly be said of him that his end was peace. His remains were interred at Copthill Cemetery, Dover, on Monday, the 16th ult. The inhabitants showed, by closing shutters and attending at Copthill, the esteem in which he was held.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

ELECTION OF MEMBER OF MEDICAL COUNCIL.—A convocation will be holden on Tuesday, February 14, at two o'clock, for the purpose of holding an election of a person to represent the University in the General Council of Medical Education and Registration in the United Kingdom, for the period of five years, in place of the late Professor Rolleston.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted as members on January 26th, 1882.
Beavor, Charles Edward, M.D. Lond., 129, Harley Street, W.
Bradshaw, Alexander Frederick, Devonport.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 26th, 1882.

Gilbert, James William Thornton, Linden Gardens, Chiswick.
Larmuth, Leopold, Cheadle.
Shillito, William Alsop, Broomhall, Sheffield.

The following gentlemen also on the same day passed their Primary Professional Examination.

Sutton, John Bland, Middlesex Hospital.
Tomalin, William J. Clarkson, Guy's Hospital.
Wholey, Thomas, London Hospital.

MEDICAL VACANCIES.

THE following vacancies are announced:—

BOROUGH OF BRIDPORT.—Medical Officer of Health. Salary, £40 per annum. Applications to the Town Clerk by February 4th.
BRADFORD FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATION.—Assistant Medical Officer and Dispenser. Salary, £120 per annum. Applications by February 9th.
BRISTOL GENERAL HOSPITAL.—Physician's Assistant. Salary, £50 per annum. Applications by February 18th.
BRITISH LYING-IN HOSPITAL, Endell Street, W.C.—Honorary Physician. Applications by February 15th.
CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor.—House-Surgeon. Salary, £100 per annum. Applications by 11th February.
CRAIGLOCKHART HYDROPATHIC, near Edinburgh.—Resident Physician. Applications to the Managing Director, Craiglockhart Hydropathic Company, Limited, 40, Frederick Street, Edinburgh, by 6th February.

Feb. 4, 1882]

OPERATION DAYS AT THE HOSPITALS.

MONDAY	Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
TUESDAY	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Westminster, 11 A.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 1.30 P.M.—National Orthopaedic, 10 A.M.
WEDNESDAY	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.
FRIDAY	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Foyal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARGING CROSS.	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., Dental, M. W. F., 9.30.
GUY'S.	Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.
KING'S COLLEGE.	Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear Th., 2; Skin, Th., 1; Throat, Th., 3; Dental, Tu. F., 10.
LONDON.	Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.
MIDDLESEX.	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.
ST. BARTHOLOMEW'S.	Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 2; Dental, Tu. S., 9; Th., 1.
ST. GEORGE'S.	Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Th., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.
ST. MARY'S.	Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Eye, M. Th., 1.30; Ear, M. Th., 2; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, W. S., 9.30.
ST. THOMAS'S.	Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. S., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.
UNIVERSITY COLLEGE.	Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.
WESTMINSTER.	Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 2; Eye M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.	Medical Society of London, 8.30 P.M. Third Lettsman Lecture, by Mr. H. Royce Pell, on Acute and Chronic Orchitis.—Odentological Society of Great Britain, 8 P.M. President's Introductory Address. Casual communications from Messrs. Sewill, Hutchinson, Dr. Campbell.—Royal College of Surgeons of England, 4 P.M. Professor W. K. Parker: On the Morphology of the Mammalian Skull.
TUESDAY.	Pathological Society of London, 8.30 P.M. Specimens to be shown: The President and Dr. Goodhart: Addison's Disease. Dr. B. Fenwick: Incompetence of Tricuspid Valve. Mr. Shattock: Congenital Tumour of Neck. Dr. S. West: 1. Cardiac Hypertrophy; 2. Fatty Degeneration of the Heart. Dr. Norman Moore: 1. Specimens of Gout; 2. Osteoma of Tibia. Dr. Hale White: Changes in Medulla Oblongata causing Sudden Death. Mr. H. Morris: Unreduced Dislocation of Hip. Dr. Roger Williams: 1. Sarcoma of Bladder; 2. Acute Suppurative Arthritis. Mr. Davies Colley: 1. Congenital Hypertrophy of Testes, etc.; 2. Inguinal Hernia. Mr. H. Bendall: Acute Paronychia in Man. Comparative Pathology: Fracture of Femur in a Puma; Pneumothorax in a Goat; Cystic Kidney in a Pig.
WEDNESDAY.	Hunterian Society, 7.30 P.M. Annual General Meeting for the Election of Officers, 8 P.M. The Hunterian Oration will be delivered by Dr. Robert Fowler in the theatre of the London Institution.—Royal Microscopical Society, 8 P.M. Annual Meeting for Election of Officers and Council.—Royal College of Surgeons of England, 4 P.M. Professor W. K. Parker: On the Morphology of the Mammalian Skull.
THURSDAY.	Alteration Society, St. Bartholomew's Hospital, 8 P.M. Dr. Stowers: Skin-Diseases in relation to Syphilis.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Knowsley Thornton: Case of Threatened Suppression of Urine after Ovariectomy; Arms packed in Cold Wet Towels; Recovery. Mr. Balmanno Squire: Case of Erythema Iris. Dr. D. W. Finlay: Case of Aneurysm of Ascending Aorta (patient will be shown). Mr. R. J. Godlee: Case in which a Piece of Grass swallowed by a Child made its Exit in an Intercostal Space.—Royal College of Surgeons of England, 4 P.M. Professor W. K. Parker: On the Morphology of the Mammalian Skull.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following were the questions submitted to the candidates at the examination for membership on the 13th ultimo. *Surgical Anatomy and Principles and Practice of Surgery.* (Four questions at least to be answered, including one of the first two.)—1. Enumerate the Structures that must necessarily be divided in Removal of the Clavicle, and name the important parts in danger of being wounded. 2. Mention the Structures which are in contact with the Male Urinary Bladder. 3. Describe a case of Acute Abscess of the Mammary Gland, and give the appropriate Treatment throughout. 4. Mention the Symptoms and Treatment of Gonorrhoeal Ophthalmia. 5. Describe the Symptoms presented on Dissection in a case of Necrosis of the Shaft of the Tibia, in an advanced stage.—section in a case of Necrosis of the Shaft of the Tibia, in an advanced stage.—1. What are the Causes of Haemorrhage during the first stage of Labour? How would you treat them? 2. What are the difficulties and dangers special to Labour with the Head presenting? How would you deal with them? 3. What are the Signs and Symptoms of Pregnancy at the seventh month? Mention those on which you would rely in making a diagnosis. 4. How would you distinguish between Fibrous Polypus of the Uterus and Inversion of the Uterus?—*Principles and Practice of Medicine* (three questions, including the fourth, to be answered). 1. What are the causes of Haemorrhage into the Brain? In what parts does it commonly occur? And what are the symptoms which result from it? 2. What are the causes, morbid anatomy, signs, prognosis, and treatment of Typhlitis? 3. What are the causes of general Dropsy? How would you distinguish its several varieties, and how treat them? 4. State the effects, uses, and doses of the following drugs: Iodide of Potassium, Bromide of Potassium, Creosote, Acetate of Lead, Dilute Hydrocyanic Acid, Liquor Morphiae Hydrochloratis, Liquor Strychniae, Vinum Colchici, Tinctura Aconiti, Tinctura Nucis Vomicae.

At the recent examination of candidates for the membership of the Royal College of Surgeons, the following were the questions submitted to the candidates, who were required to answer four, and no more, of the six questions in each series. *Anatomy.*—1. Describe the Thorax as a whole. 2. Describe the different kinds of Diarthrodial Joints, and give examples of each kind. 3. Describe the attachments and give the relations and nervous supply of the Omohyoid Muscle. 4. Describe the anastomoses around the Ankle-Joint, and the course of the vessels entering into the formation of these anastomoses. 5. Describe the course and distribution of the Lymphatics of the Bladder, Penis, Scrotum, and Testis. 6. Describe the course of the Nerves supplying the Muscles of Mastication, and mention the position where they severally enter the respective muscles. *Physiology.*—1. Give the structure of a medium-sized Artery and Vein; and compare the conditions under which the blood moves in these vessels respectively. 2. State the average under which the blood moves in these vessels respectively. 3. How is Respiration affected by external conditions? 3. Describe the microscopic structure of a Lobule of the Pancreas, and the changes that take place in its cells during the different phases of their secretory activity. 4. What are the functions of the third Pair of Cerebral Nerves? How may these functions be determined? 5. Define and explain the terms Systole, Inhibition, Astigmatism, Summation of Contractions; and distinguish between tone and quality of Sound. 6. Describe the Structure and the uses of the Mucous Membrane of the Large Intestine. What are the uses of the Large Intestine?

DR. S. E. STONE.—We have communicated with Mr. Spear, who has kindly given directions to forward to our correspondent a copy of the report which he made to the Local Government Board on the subject of woolsorters' disease.

HOSPITALS IN SCOTLAND.

SIR,—Referring to paragraph on page 58 of the JOURNAL of January 14th, I beg to state that the *Medical Directory* is in error, so far, at least, as concerns the county of Nairn, which possesses a fully equipped hospital capable of accommodating twenty patients, and quite sufficient for the wants of the district.—Yours, etc., B. CRICKSHANK, M.D.
Nairn, January 18th, 1882.

"CURIOSITY" is, we fear, destined to remain unsatisfied; we do not possess the information required.

SURGEON (Canning Town) should bring the matter before the Council of his Branch for discussion as to what is best to be done. Subjects such as these are best discussed, in the first instance, in the Branch, and the discussion may then with advantage be reported in the JOURNAL; but, as presented, it will partake of the character of an *ex parte* statement.

REPORTS

TO THE

SCIENTIFIC GRANTS COMMITTEE OF THE
BRITISH MEDICAL ASSOCIATION.THIRD CONTRIBUTION TO THE LIFE-HISTORY
OF CONTAGIUM.

By PETER MURRAY BRAIDWOOD, M.D., F.R.M.S.,

AND

FRANCIS VACHER, F.R.C.S. Ed.

(Continued from page 170 of last number.)

Microscopical Observations.

These are based on a careful examination, with low powers and with moderately high powers ($\times 350$), of several dozen sections, prepared for us by Messrs. A. C. Cole and Son, of viscera, containing secondary deposits removed shortly after death from the animals in which we had induced artificial septicæmia. The subjects used for this purpose were rabbits, forming Experiments 7, 8, 10, 12, 13, 17, 19, 20, 21, and 22 in Series A; the victims of experiments in Series B; and those of Experiments 1, 2, and 3 in the third (C) series. Our sections were for the most part tinged with carmine; but, in some instances, we had sections stained with methyl-aniline dye, with the object of endeavouring to detect micrococci or other organisms in the tissues; in this, however, we failed. As in the case of the microscopical observations described in our former two reports on contagium, the tissues were immersed in pure spirits immediately after their removal from the cadaver, and were not subjected to any form of manipulation excepting section-cutting.

Experiment 7. Lung.—The blackish-red spots were seen under the microscope to consist of alveolar extravasation arising from capillary embolism. A portion was distinctly observed, under a low power, to be composed of air-vesicles filled with exuded blood. The small artery in the immediate neighbourhood showed its channel occluded by a clot, and so also did a capillary branch adjacent. Under a high power, the same conditions were more distinctly observable, while the borders of the alveoli were sharply mapped out by rows of highly tinged corpuscles heaped together. *Lung.*—Whitespots showed thrombosis of small blood-vessels and their capillary branches, giving rise to isolated patches of hæmorrhagic extravasation at the pleural margin of the lobules, and thickening of the superimposed serous membrane. *Liver.*—With a low power, at the circumference of the section, was observed a spot showing obliteration of the hepatic cells, in its centre surrounded by a ring of deeply tinged cells and a projection outwards of the neighbouring serous capsule. The adjacent hepatic lobules appeared healthy. Under a high power, in the centre of this spot were seen very minute capillaries occluded by clots, causing exudation of serum and of blood-corpuscles, which pushed aside the hepatic cells. At the margin of the spot, the hepatic cells were seen elongating, as if forming a capsule to enclose the extravasated blood. Here and there, even in the healthy hepatic tissue, were to be seen blood-vessels with thickened walls and more or less occluded cavities; these belonged to the hepatic system, and the coats of the arterial capillaries seemed to be most altered.

Experiment 8.—The *liver*, under a low power, showed the viscous infected with secondary deposits, consisting of exuded blood, and encysted and broken-down tissue. These deposits, on section, had the appearance of walled irregularly shaped cavities, with villous-like processes projecting into them. Examined under a high power, the same appearances were observed more distinctly, and the hepatic veins in the centres of the lobules were seen to be filled with blood-clot.

Experiment 10.—The *heart*, both on transverse and in longitudinal section, showed only blood-clots in the capillaries.

Experiment 12.—The *lung*, emphysematous, showed, under a low power, immediately under its serous covering, minute cystic cavities with surrounding thickening. The interalveolar tissue was greatly increased in amount. On examination by a high power, no embolism could be detected, but here and there the alveoli were seen filled with

blood.—The *liver* was seen under the microscope to be healthy, except at one spot, where a plugged capillary led to a congested patch; the hepatic vessels for the most part showed thrombosis.

Experiment 13.—The *lung* showed healthy tissue with minute clots scattered here and there, filling the larger capillaries and their branches.

Experiment 17. Liver.—This organ, to the naked eye, exhibited various-sized whitish spots, slightly raised above the surface, of irregular outline on their surface, and not surrounded by a red zone, as was noticed in the secondary deposits of the preceding livers. The smaller of these spots, under a low power, were seen to consist of cavities lined by a membrane, and occupied partly by oval-shaped bodies, partly by a coagulated caseous substance, which fell out of its place for the most part when the section was being made. The larger spots had a similar appearance under a low power. Both series of cavities were bounded each by a distinct wall, and most of them were subdivided by a partition. In many of the sections, plugging of the capillaries, especially of the hepatic vessels in the centres of the lobules, could be seen distinctly. Under a high power, the caseous material in the centres of the cystic cavities was seen to consist of granular cells, and free deeply tinged nuclei embedded in a hyaline substance; while the walls of the cavities were formed of newly developed fibrous tissue, and the hepatic tissue in the immediate neighbourhood of the cavities was greatly congested.

Experiment 19. Spleen.—A section tinged and examined with the naked eye presented, scattered here and there, spots of extravasation, which, examined under a low power, showed embolism of the main blood-vessel to a Malpighian corpuscle, and exudation of blood into the tissue. Under a high power, nothing more distinctive could be discovered in this section.

Experiment 20. Liver.—The hepatic veins in the centres of the lobules were seen to have distinctly thickened walls. The secondary deposits were markedly encysted, occupying apparently the centres of the lobules, and pushing aside hepatic tissue. The section closely resembled that of the liver in Experiment 17. Under a high power, the wall of the cyst was seen to have a markedly fibrous character, and its contents to consist of coagulated serum pretty deeply stained. In the wall of the cyst and in its contents were seen embedded peculiar oval bodies, with very sharply defined dark margins, enclosing granules not unlike hydatid cysts. The hepatic tissue itself appeared healthy. The walls of the hepatic vessels in the neighbourhood of the secondary deposits were seen to be thickened, and in some parts the lumen of these vessels was seen filled by an embolus of coagulated fibrine.

Experiment 21.—The *liver*, under a low power, showed clots or emboli filling the hepatic veins in the centres of the lobules, and causing extravasation followed by softening, which for the most part was limited to the centres of the lobules—in fact, exhibited a centrifugal character. Under a high power, the softening just described was seen to be induced by plugging of the central vessel in the lobules, thickening of the coats of all the vessels, destruction of the hepatic cells composing the affected lobules, and a fibrous development between the vessels in the lobules. The hepatic tissue surrounding the secondary deposits was evidently congested and swollen. *Kidney.*—Excepting coagula filling the blood-vessels at intervals, and an abnormally distended state of the tubules, nothing was discernible by a careful microscopical examination of this organ.

Experiment 22. Lung.—Under a low power, a capillary was seen terminating in a round extremity, which appeared to be a blood-clot enclosed in a cyst or in a distension of the blood-vessel. The pulmonary tissue was thus thrust aside, and the branches of this vessel were seen to be also occluded. Under a high power, the wall of the cyst was seen to be distinctly fibrous in structure. It appeared as the swollen end of a capillary, with subsequent thickening of its coats, and the deposit of fibrous tissue round them, while it enclosed coagulated blood. The pulmonary alveoli immediately surrounding the secondary deposits had thickened walls, and all the blood-vessels in the neighbourhood, were plugged.

From this narration, it is evident that the microscopical changes to be observed in the viscera of the rabbits on which we experimented were very similar; so much so, that we have not deemed it desirable to lengthen out this report by detailing the results of our examination of the numerous sections we obtained from the rabbits employed in our second and third series of experiments. To appreciate more correctly the value of our microscopical observations, this portion should be studied along with the explanation of our drawings; and it will become evident that, while the causation of these secondary visceral lesions consists in embolism, exudation, and softening or caseation, the microscope shows distinct changes in those secondary deposits induced by the injection of lochia different from those to be seen in the viscera of rabbits infected by the injection of putrid fluids swarming with organisms.

remarks that "an animal or septic poison, introduced into the system, is the exciting cause of the primary disease, systemic infection. It is connected in some subtle manner with a vitiated condition of the blood. The blood undergoes decomposition, or, as some please to have it, passes into a state of fermentation, but withal does not present any appreciable change". He distinguishes septic infection from pyæmia, and considers the appearance presented by the veins in pyæmia to be due to softening clots.

Dr. Wilks holds the opinion that pus, or its elements or germs, give rise to purulent deposits—as cancer-germs originate cancerous growths at a distance. The channel of infection is probably a small vein, which absorbs the morbid matter; and this latter matter causes coagulation of the blood, with congestion, terminating in suppuration or sloughing. He considers that pyæmia occurs sometimes without any prior local mischief, and frequently without previous suppuration anywhere. He says: "There is little support to any doctrine which assumes phlebitis, or even thrombosis, to be a necessary link in the chain of causation." (*Guy's Hospital Reports*, 1861.) "Pyæmia", he remarks, "is ushered in, preceded by constitutional disturbance, or constitutional irritation." Distinct and distant structures or organs may sympathise with each other, or the whole may sympathise with the condition of any part, through the medium of the blood. An injury may, by exciting morbid or abnormal action, lead to the formation of certain matters which may provoke constitutional disturbance by affecting the blood.

Mr. Savory (*St. Bartholomew's Hospital Reports*, 1866) states "that thrombosis may exist without any evidence of phlebitis, and that it very often occurs without being followed by pyæmia; that phlebitis may occasionally exist without thrombosis, and often occurs without being followed by pyæmia; that pyæmia often exists without any evidence of thrombosis or phlebitis; and that, therefore, it has not been satisfactorily shown that either phlebitis or thrombosis stands, in any special or peculiar manner, in relation to pyæmia as cause and effect". He considers the recurrence of rigors to indicate the repeated introduction of fresh doses of the poison—the intensity of the rigor being probably in proportion to the intensity of the forthcoming mischief. He believes that there is no evidence that pyæmia is contagious, nor that "it depends upon the introduction into the system of any specific matter from without". He holds, further, that the distinction between ichorrhæmia or septicæmia and pyæmia cannot be established; and that pyæmia may be not only chronic, but also transient and recurrent. The causes of the local congestions and suppurations in pyæmia he classifies thus. "Stasis due to mechanical action: a blockade produced by the impaction of solid particles, according to their size. Arterial embolism: by fragments too large to pass through the smaller arteries. Capillary embolism: by fragments small enough to pass into the capillaries. Stasis due to change in the blood, produced by the admixture of morbid fluids: the local effect of blood-poisoning properly so-called, capillary obstructions. Stasis due to a combination of the two above-mentioned causes. The subsequent changes are determined by the action of the morbid fluid, or obstructing substance—the changes it provokes—and by the constitution and health of the individual."

"While", says Savory, "cases of simple embolism must be referred to the action of solid particles, the terrible disease known as pyæmia must be due to the action of some putrid fluid poisoning the blood. The effects of the subtle poison are, moreover, proportionate to the intensity of the poison, the quantity introduced, and the rate of its absorption."

Mr. Baker, in his "Reply to the British Medical Association", after reviewing briefly the history of pyæmia, and detailing concisely the various theories propounded and facts ascertained regarding it, remarks that he considers there is ample ground for the suspicion that the entrance of pus into the blood of human beings is one of the causes of pyæmia. "At present", he says, "we cannot estimate the frequency of this cause, nor can we determine dogmatically the modes in which pus gains entrance to the blood, or the process, zymotic or otherwise, by which it induces the symptoms and pathological changes which attend that disorder." He considers that "pyæmia may result from phlebitis of a suppurative kind, although such a source of blood-disorder is believed to be of unfrequent occurrence; and that the same effects may be produced by embolism in the minute ultimate arteries, from chronic disease invading arteries of larger size. In the introduction of foreign matters, whether hurtful or otherwise, into the blood, the capillaries have by far the most active powers of the whole system of blood-vessels".

Dr. Bristowe says: "We do not see how the embolic theory explains satisfactorily those cases of pyæmia, starting from some portion of the systemic nervous system, in which the lungs escape in great measure or entirely, while secondary deposits are found, it may be, abundant in other organs. Lastly, it seems to us as erroneous to regard the cor-

puscular elements of pus only as pus, as it would be to attach that name to the 'liquor puris' exclusively. On the whole, we are disposed to believe that, owing to some form of unhealthy process supervening in the region of primary disease, unhealthy pus, or the elements of unhealthy pus (call it ichor if you will), find their way into the circulating fluid, and poison it; that this poison partly shows itself in producing in the blood a tendency to coagulate in the smaller vessels, partly shows itself in inducing more subtle, but even more serious, effects upon the system at large. We are not", continues Bristowe, "disposed to deny that some of the local effects may really be due to embolism, some even to the infarction of coagulated masses of pus-cells; but we believe that thrombosis alone is the more general explanation of that obstruction of the minute vessels which leads to the secondary deposits."

Dr. Matthews Duncan believes that there is a most intimate connection between phlebitis, inflamed lymphatics, erysipelas, pyæmia, putrid infection, and puerperal pyæmia. He considers that all existing evidence brings puerperal pyæmia into the closest alliance or identity with surgical pyæmia. He denies that epidemics of puerperal pyæmia (puerperal fever) ever occur, and states that it follows a very different law to small-pox or cholera; its ravages vary as those of pneumonia.

Dr. Hüter (*BRIT. MED. JOURNAL*, Feb. 17th, 1873) says: "Rigors, with the increase of temperature which is peculiar to them, denote the shutting off of a large number of the cutaneous vessels from the circulation, by being blocked up with white corpuscles and monads." He "believes, further, that the enlargements of the liver, spleen, and kidneys in fevers, are due to disturbance of the circulation through the obstruction caused by monads. This explanation", he says, "agrees very closely with that given by Klebs of the phenomena of pulmonary metastasis after injury, and with that of Birch-Hirschfeld, of the swelling of the spleen in rabbits after the introduction of putrid blood."

Dr. Birch-Hirschfeld (*BRIT. MED. JOURNAL*, June 21st, 1873) found that, "with the ushering in of the first symptoms of pyæmia, the pus from a wound showed also a corresponding change, consisting in the presence of micrococci, either in pairs, strings, or colonies (the latter especially when pyæmia was far advanced or rapid in its course), and in an altered appearance of the pus-corpuscles, which were finely granular, or had less definite outline and lustre, showing their nuclei very distinctly on the addition of any re-agent. The blood of such pyæmic patients contained similar micrococci, and its white corpuscles had undergone a change very like that of the pus-corpuscles."

Kiegel, Klebs, and Eberth consider pyæmia and septicæmia to be identical, but Birch-Hirschfeld asserts that they differ.

Dr. B. W. Richardson states that, from the serous fluid from a pyæmic patient (a case of ovariectomy), he had obtained "septime"—a poisonous alkaloid from which he had made salts, "hydrochlorate and sulphate". He concluded, from his experiments with this alkaloid and its salts, that: 1. All the organic disease-producing poisons are modified, i.e., poisonous secretions. 2. The secretions are rendered poisonous by two processes: (a) by contact with organic poison pre-existing; (b) by direct decomposition. 3. The poison of each secretion possesses several qualities; it can only be absorbed by particular channels, and it can only provoke further disease by coming into contact with a secretion allied to that from which it was itself derived. 4. The reproduction of the poisons depends on the continuance of the process of physical changes in a continuous secretion. The force of secretion is the force of reproduction. 5. The poisons kill by various means: (a) by the secretion causing obstruction of necessary function; (b) by exhaustion from excessive secretion; (c) by extreme irritation of nerve and reflex injury; (d) by the absorption of the poisoned secretion into the blood, and disorganisation." (*BRIT. MED. JOURNAL*, March 27th, 1875.)

Since 1865, somewhat similar results have been obtained by Coze and Feltz, Davaine, Béhier, Vulpian, Unna, Thin, and Clementi.

Dr. B. W. Richardson found next that "it was the property of all the septic poisons to liberate oxygen from that solution of oxygen known as peroxide of hydrogen". The septic matter appears to be derived "either from fibrine or from cellular tissue, or from derivations of these bodies". His theory is, "that the septic product acts upon the blood in the extreme circulation, when it has accumulated in sufficient quantity by liberating a portion of the oxygen". Moreover, as the "poisonous organic product is itself destroyed in the process, the effects it produces may remit, until a new charge of the poison has been produced in sufficient quantity to cause a repetition of the febrile state". In the most malignant forms, "the blood may be so charged with septic matter as to be unable to take in oxygen in the process of respiration, then death takes place by asphyxia after a brief period of

ileum, and then along the lower end of the kidney to the point at which it was extracted. The abdominal and pelvic cavities contained *about thirty-two ounces of bloody fluid*. Death, in our opinion, was caused by peritonitis.

I had looked forward with the greatest interest for this *post mortem* report, and was not the least surprised when I heard that the peritoneal cavity was full of bloody fluid. The peritonitis was only of the agglutinative character; such alone as showed nature's efforts to protect vital organs by the exudation of plastic lymph.

This was a case that, with the lights now before us, might have been saved by timely operation. Richardson lived five days and a half, an unusual length of time after such wounds. The wound of the liver was not necessarily mortal. The perforation of the stomach and the ileum could have been safely sutured, and the peritoneal cavity cleared of the quart of bloody fluid, which caused death by septicæmia.

We all remember the death of Mr. James Fisk of New York, the great financier. He was shot in the abdomen (January 6th, 1872), as he was ascending the private stairway in the Grand Central Hotel. As soon as I heard of the shooting, I told some of the doctors in attendance that he could be saved only by abdominal section, clearing out the peritoneal cavity, and repairing the damage done by the bullet to intestines and blood-vessels; otherwise, he would die of septicæmia. He died in eighteen hours. *Post mortem* examination was made by Drs. Janeway and March eleven hours after death. Drs. Wood, Sayre, Phelps, Trepler, Fisher, Beach, and Shine were present. The ball "entered six inches above the umbilicus, and one inch and a half to the right of the middle line; passed downward and to the left through the omentum and mesentery, piercing two loops of the small intestine, and was found in the left inguinal region, about twenty-two inches below the point of entrance. There was little or no hæmorrhage." I was present at the necropsy. There were from four to six ounces of bloody serous fluid in the pelvic cavity. I was standing by the distinguished surgeon James R. Wood at the time, and called his attention to it. No importance was attached by those who made the necropsy to the presence of the reddish serum, as no allusion was made to it in their *post mortem* report.

Here there were two perforations of the ileum and a wound of the omentum and mesentery, all easily reached and remediable by the present resources of our art. This was only nine years ago; but at that day and time the old dread of opening the peritoneal cavity still hung like a pall over the medical mind. Peritonitis was then the bugbear that it had been for ages; but we have stripped it of its terrors; for, with the light of science and the confidence of experience, we now constantly explore the abdominal cavity with the utmost impunity.

It was said that Mr. Fisk died of shock. The term *shock* covers up a vast deal of ignorance. What would some of us do if it were not for the words *malaria*, *neuralgia*, and *cold*? So it is with shock. I do not pretend to say that men may not die of shock; but death from shock, uncomplicated with hæmorrhage or septic influences, is rare indeed. To say that a man like Mr. Fisk died of shock is begging the question. He was in the prime of life, and in robust health. I have never seen the *post mortem* examination of a man so absolutely perfect physically. Not a flaw was to be found in any of his organs. He had no weak, flabby, or fat heart, and no valvular trouble. His kidneys and all other organs were in a perfect state. About ten hours after the shooting, reaction was sufficiently established for him to dictate his will to a lawyer, and then to see his wife. In three or four hours more, his mind wandered a little; he became comatose, and died eighteen hours after the wound.

It is absurd to say that a great, strong, healthy man died of shock, when there was only a perforation of two superficial loops of small intestine to account for it; but it is quite reasonable to say he died of septicæmia, when there was sudden perforation of intestine, with extravasated flatus and fluids, especially when we find bloody serum or other foreign fluids in the peritoneal cavity, even in small quantities. In the case of Mr. Fisk, there were from four to six ounces of bloody serum in the pelvic cavity. It is not the quantity, but the quality, of the exudation, that kills. In some of Mr. Spencer Wells's earlier ovariectomies, he saw blood-poisoning produced by very small quantities of "ichorous fluid" in the peritoneal cavity; and in one case his own hands suffered from it.

We have yet to learn that the vital powers may be as suddenly overwhelmed by septic agents in a concentrated dose as by opium in a concentrated dose.

I have seen nausea, vomiting, exhaustion, incoherent talking, dizziness verging into coma, instantly relieved by washing out two or three teaspoonfuls of turbid sero-purulent matter from a septic pus-pouch behind the body of the uterus; and then, in two or three hours more, all those symptoms of prostration and blood-poisoning

would be reproduced, and then relieved in the same way, again and again, till a counteropening was made in the bottom of the sac, which permitted continuous drainage through the vaginal *cul-de-sac*; this saved the life of the patient. One must see such things, to realise the rapidity of blood-poisoning by concentrated septic material. Let me repeat that there is no more reason why the system should not be suddenly overwhelmed by the rapid absorption of concentrated septic fluids, than by the rapid absorption of an overdose of morphia. Opium in sufficient quantities may kill in from eight to twelve hours. Septicæmia may do the same thing often in less time.

When I went to Sedan, as Surgeon-in-chief of the Anglo-American Ambulance, in August 1870, I went hoping that I might be able to do something to elucidate the subject of the treatment of gunshot wounds of the abdomen; but, unfortunately, the cases that came under my observation were moribund, and therefore beyond all hope of relief. But I learned this great truth—that they all died of septicæmia, the *post mortem* examinations showing large quantities of bloody serum in the peritoneal cavity in every case, evidently the source of blood-poisoning; while there was not the slightest trace of peritonitis. There was not a single exception to this. From what we saw there, I felt more convinced than ever that all cases of shot-wounds of the abdomen, that did not speedily die of hæmorrhage, always died from septicæmia, the result of large quantities of bloody serum in the peritoneal cavity, and not from peritonitis.

In ovariectomy, we see patients dying of septicæmia when bloody serous fluid is retained in the peritoneal cavity; and we see them recovering if we prevent the exudation of this fluid, and recovering with equal certainty if we drain it off after or as it is formed. This is an important lesson in peritoneal surgery. The principle established by it is applicable to all other wounds of the peritoneum, whether made by accident or by the surgeon's knife, by puncture, or by bullet. In other words, wounds of the peritoneum, however made, have a common course to run, and are all amenable to the same general laws. Here, then, is the similitude between deaths from ovariectomy, from perforation, and from gunshot wounds of the peritoneum. In all these, patients may, and do, die of peritonitis; but this is not the rule. It is not the universal law; it is rather the exception. And, even if peritonitis should complicate a septicæmic case, there is no reason why we should not proceed precisely as if such complication did not exist. Indeed, I am convinced that the time will soon come when peritonitis, properly so called, will be treated by abdominal section and clearing out morbid products from the peritoneal cavity. Nature cures peritonitis in its early stages by uniting contiguous inflamed surfaces by intervention of plastic lymph. But, if the inflammatory process go further than plastic exudation; if it terminate in pouches of pus in folds of the intestines, or in purulent effusion in the peritoneal cavity, as seen in puerperal peritonitis—then death follows from the absorption of these puriform collections, which produce blood-poisoning, whether called septicæmia or pyæmia. In this stage, why should we not open the abdomen before it is too late; liberate adhesions; remove matter, whether imprisoned in pouches or free in the pelvic cavity; clear out deadly foreign products, and thus get rid of septic agents, just as we do with bloody serum after ovariectomy? In the one case, the source of poison is generally locked up in little pouches; in the other, it is free in the peritoneal cavity, and usually in the pelvic portion of it. In searching out and removing the products of peritonitis, it would be necessary to examine every inch of intestine and every portion of omentum involved in adhesions. This can be done, and it will be done; for it is but the imitation of nature's clumsy efforts in this direction; and, when we follow the laws of nature, we are sure of going in the right course.

Bristowe says: "In a large number of cases, and especially in such as result from the perforation of some viscus or sac, and the escape of irritating matters, general peritonitis of the ordinary adhesive character is at once excited, and the effused matters consequently become confined to some limited district or districts. In many cases, a circumscribed abscess is thus produced, which may possibly undergo cure by the discharge of its contents, either externally or into the bowel." It would be better to do this work promptly by surgical interference, than to wait for the slow and uncertain efforts of nature.

But, to return to our subject; let us look at blood-poisoning from a peritoneal point of view. Septicæmia and pyæmia are caused by the absorption of putrid fluids. The septicæmic putrid fluid is bloody serum in the peritoneal cavity. Pathologists will give us its peculiar characteristics. The pyæmic putrid fluid is vitiated pus, generally in peritoneal pouches, the result of peritonitis. Septicæmia often kills rapidly; peritonitis always more slowly. Death may result in a few hours from the one, while it takes days for the other. Peritonitis poisons more slowly, and is really less dangerous. The reason of this

ON ACUTE TRAUMATIC MALIGNANCY.*

By RICHARD BARWELL, F.R.C.S.,
Senior Surgeon to Charing Cross Hospital.

THE title of this communication, "Acute Traumatic Malignancy", is intended not as denoting a distinct doctrine, but as a means of eliciting opinion and confirmatory facts, of which latter I cannot but think several are probably in the note-books or the memory of others in the profession. The cases on which the name is founded made a great impression on my mind, leading me to think that occasionally, under the stimulus of severe irritation, the tissue-elements which, under favourable circumstances, would assume only the additional activity necessary for repair, may take on a more prolific cell-germination, culminating in a rapid form of malignant disease in one of those forms, be it named myeloid or round-celled sarcoma, or encephaloid cancer, which consists of little else than heaped up cells and their progeny. Without further preface than these few words, I will proceed to read the cases.

CASE I. Mr. B., aged 17, in playing football, fell violently on his shoulder, and was disabled: this happened on April 24th, 1875. He rested the arm in a sling, and applied cold lotions, and, in about ten days, was so much better, that he began to use the limb again; but, after about a week, pain slightly returned; then some swelling was observed, which, increasing rather quickly, alarmed his father, who then brought him to me.

May 19th. I found the shoulder enlarged, the tumefaction being most marked in front; it was soft, but not uniformly so, there being some patches, ovoid or circular, harder than the rest, but which seemed to float on a soft substratum. The swelling did not rotate with the bone. Behind the joint, little or no enlargement was perceptible. The arm below was considerably shrunken. I gave a very guarded diagnosis and prognosis, the tumour having the appearance of malignancy.

May 25th. The shoulder was considerably increased in size, the skin a little tense, the surface white and waxy; a meshwork of large veins marking themselves out under the skin; the texture soft and doughy, with a sense of false fluctuation, chiefly manifest in front and on the outer aspect. I passed in an exploratory instrument, and, pushing the cannula home after withdrawal of the trocar, was fortunate enough to extract a shred of tissue. Under the microscope, this showed a congeries of large cells, with a number of brilliant nuclei. I gave my view that excision of the shoulder must be at once performed. Mr. B.'s father said he must think it over.

I saw nothing more of this patient until June; he had, I believe, in the interim, consulted other surgeons. Although the disease had so far advanced as to render operation of doubtful value, as I at the time stated, I nevertheless thought it my duty to afford the chance; and therefore, since no glands, either in the supra-clavicular space or in the axilla, were involved, I excised the shoulder. The disease, however, returned shortly afterwards, and the young man died in about three months.

I am sorry not to be able to bring the specimen, which is in keeping at the Charing Cross Medical School; but our removal into the new premises has not yet afforded time for putting all our museum in order, and the subcurator in charge is ill. I must, then, simply describe it as a round-celled sarcoma, commencing apparently in the subsynovial tissue. It is only necessary to call attention to the fact that, twenty-six days after receipt of injury, the growth had so far advanced as to bear pretty strong evidence of its nature. It therefore probably commenced not later than six or eight days after traumatism, perhaps sooner.

CASE II. John G., aged 63, stevedore, first came under my notice when seeking admission into Charing Cross Hospital, October 11th, 1881, suffering from the effects of falling down a ship's hold eighteen days previously, severely bruising his left side.

History.—His own and his relatives' account is that, up to the time of his accident, he had been a perfectly healthy, and, for his age, a remarkably vigorous man, with the exception of a slight winter-cough. After the fall, he had considerable pain in both sides; kept his bed, and put on poultices. About a week before application at the hospital, he first noticed a little swelling on the right side. The man appearing ill and suffering, I followed him shortly into the ward, expecting to find a localised traumatic empyema.

Condition.—The man was weak, pale, and suffering a good deal of

pain, increased on inspiration. About three inches outside the angles of the ninth and tenth ribs was a lump about the size of half a small egg, its lesser end projecting outward and backward. It was very slightly or not at all painful on pressure, and felt solid, or semisolid. The tumour itself, and a considerable area round it, were dull on percussion. On going further, I also found the whole left chest dull, and the respiratory sounds very weak, and apparently distant. An exploratory puncture in the lump produced merely a little blood.

I do not think it worth while to follow the short history of this case. There seemed nothing surgical about the state, and Dr. Pollock was kind enough to take charge of the case. He, in consultation with medical colleagues, detected signs of some fluid in the left pleura, which was punctured, and about five ounces of turbid serum withdrawn; but the man became rapidly weaker, and died October 24th, thirty-one days after the receipt of the injury.

Post mortem examination, October 25th (twenty-four hours after death).—The appearances were such as certainly had not been diagnosed or even suspected during life. The specimen is on the table. The whole left pleura (parietal) is one mass of malignant growth, in places three-quarters of an inch thick, nodulated on the surface, and white. The lung is infiltrated with a like material. The right pleura (parietal) is, at its lower part, in the same condition, but traced upwards, the amount of growth diminishes, and, quite at the apex, disappears also. Through the right lung, isolated masses of this substance are scattered. It is curious to observe that while, on the left side, the parietal pleura is most affected, on the right the visceral layer is most diseased; and that, while the left kidney was healthy, the upper part of the right kidney contained a like mass of the neoplasm.

The new growth was an oat-shaped or oval-celled sarcoma. There were no giant-cells. In that part which was examined, there was no stroma or intercellular substance; or, if any, it was perfectly homogeneous. The cells were $\frac{1}{1000}$ of a millimetre long, $\frac{3}{1000}$ broad (thousand is the denominator as an entity of measure which we mark with the Greek letter μ). A few of them were caudate at one or both ends; others had no prolongations. Nuclei were large, often multiple.

One other case I feel sure I am justified in shortly relating. I was speaking to Sir J. Paget about this latter case, asking him if his experience had brought him in contact with cases of malignant disease rapidly following injury. He stated that, many years ago, a man came into St. Bartholomew's Hospital, under the care of Mr. Lloyd, with a fractured fibula. The limb remained the usual time in splints; and, when they were removed, a peculiar and unusual swelling was observed about the parts. Shortly afterwards, this was diagnosed as a malignant growth; the limb was amputated, and the diagnosis verified by anatomical examination. The man left the hospital well.

Now these cases, although they do not justify me in a dogmatic assertion that traumatism may call forth in a previously healthy individual a rapid development of malignant growth, do, I hold, more than justify me in calling attention to the possibility of such occurrence. Of course I have not lost sight of the other alternative; namely, that, in all these cases, malignancy may have been present previous to the injury. But, if we take the circumstances of the three cases, the hypothesis of previous malignant disease necessitates the concurrence of a series of coincidences such as could hardly arise. For example, in my first case (Mr. B.), and in Mr. Lloyd's case, the very part injured would have to be the part previously affected by malignancy. In those two cases, the presence of such disease elsewhere is negatived by the course of events; while in my case No. 11 we can hardly conceive the pleura, previous to injury, to have been at all like that now shown. Even if we suppose such disease, how strange that it should cause no symptoms till the moment of the injury, and then give very marked ones; and how still more strange that in this case also the injury should fall on a place occupied by such severe and such singularly occult or quiescent disease.

We must also consider the possibility that the man's kidney alone was affected previous to injury, and that afterwards the disease spread into the chest; but the right kidney is the diseased one; the left pleura most involved. Nevertheless, if we grant this supposition as possible, it rather goes to prove my contention, when taken in connection with Cases I and III, in which no other malignant manifestation is present. For, I presume, the development of tumour depends upon two factors—the tendency to neoplasm, what Billroth calls tumour-diathesis, and a local irritation, the nature of which is generally quite occult, sometimes is mechanical and long continued. It must always be understood that irritations, either mechanical or chemical, produce in healthy individuals only common or traumatic inflammations resulting in thickening, suppuration, or other of the usual terminations. So, after an ordinary wound of the skin, a scar, which slowly more and

* Read at a meeting of the South London District of the Metropolitan Counties Branch.

have ensued, perhaps leading to various surmises; and, as he was disliked by his mates, this might possibly have caused unjust suspicions against one or other of them.

THOMAS PARTRIDGE, M.K.Q.C.P., M.R.C.S.E., Stroud.

CONTRACTION OF THE PALMAR FASCIA.

SINCE reading the recent communications on this subject, the following well marked example in a woman has come under my care.

Mary B., aged 78, has always had good health; never had swollen or painful joints; and has no family history of rheumatism or gout. She has been a washerwoman the greater part of her life. A year ago, her right hand "began to get drawn", and her right shoulder to be painful and stiff; for six months she has had pain in the right palm, near the fingers, when grasping anything. The right palmar fascia is now greatly thickened: distinct processes can be seen and felt passing from the middle of the palm to each of the digits; the hand to the ring-finger is thick and cord-like, and the first phalanx is strongly flexed; the other digits are only slightly flexed. When the thumb is extended, a band of fascia stands out prominently, going to the thumb along the anterior margin of the thenar eminence; and from the middle of this band, a piece of fascia passes forward to join the process to the index finger. At their point of union, the skin is much dimpled; the palm is also puckered in other places. The skin of the left palm presents marked puckering, but the processes of fascia are less distinct than those of the right hand; the band going to the left thumb is the most prominent. The right shoulder is somewhat stiff and tender: movements of the joint are painful, and grating is felt when the arm is moved. On the outer side of the joint, some bony nodules are distinctly felt; they seem to be connected with the capsule. The right knee is tender, and slightly swollen. Other joints are unaffected. The heart is normal.

The two chief factors in this case seem to be old age and occupation. No doubt transitional anatomical forms can be traced between the joint-changes in this partial variety of arthritis deformans, and those of acute articular rheumatism; but, taking into consideration its localised character, its first appearance so late in life, and the absence of rheumatism from other members of the family, it seems difficult to admit a rheumatic diathesis; at the same time, senile degeneration does not afford a complete explanation.

The thickening and contraction of the palmar fascia is possibly the result of a chronic inflammatory process set up by constantly washing and wringing clothes. Thickening of fibrous elements may also be partly regarded as a degeneration incident to age.

J. S. BURY, M.D., B.S., Manchester.

CLINICAL MEMORANDA.

CASE OF SPINA BIFIDA: SPONTANEOUS CURE.

THERE are, perhaps, few congenital malformations of childhood more commonly met with than spina bifida; and whilst, in the great majority of such cases, the prognosis must be unfavourable, yet recovery does sometimes take place, and usually in one of three ways, viz.: (1) spontaneously, and generally by elongation of the pedicle, and consequent obliteration of the opening communicating with the spinal canal; (2) and, still more rarely, after rupture of the sac itself; and (3) as the result of operative measures. In some cases, also, although the tumour increases in size, yet such increase, not being disproportionate to the general growth of the individual, produces no grave symptoms, and may not eventually cause death. Spontaneous cure in these cases is, however, so comparatively rare, that I feel justified in publishing brief notes of the following case which occurred in my practice, and which, I think, affords several features of especial interest.

Mrs. V., a healthy woman of the labouring class, free from any hereditary taint so far as I could ascertain, was delivered by my assistant of a female child, which was found to be the subject of spina bifida, although in all other respects healthy and well developed, in October 1879. The mother received instructions as to local treatment, especially as regarded careful nursing. The tumour, about three inches in diameter, and circular, was situated over the last two lumbar vertebrae in the median line, where a large sulcus could be felt. It was semitransparent, fluctuating, evidently the result of arrested development in the spinous processes and laminae, and the largeness of the sulcus in the canal enabled the tumour to assume the non-pedunculated form. The tumour was very tense and shining whilst the infant was held in the sitting position, and I had no doubt that it communicated with the cavity of the theca. In February 1880, when the child was more than three months old, the diameter of the tumour had in-

creased to five inches, thus giving about fifteen inches as the circumference; and it projected one inch and a half from the plane of the body. Otherwise, there was no apparent difference; and, in the meantime, the child had thriven well, and been free from any symptoms of hydrocephalus, convulsions, paralysis, or local inflammation.

When the child was six months old, the tumour began to lessen, and at the end of ten months it had entirely disappeared. When sixteen months old, I had an opportunity of making another examination, when there was nothing to be seen but an indurated cicatrix, almost level with the surrounding skin. The bones were completely ossified, and the child in perfect health.

REMARKS.—From the extreme tension and thinness of the cyst-wall, it is very surprising how it escaped rupture; and this fact witnesses to the extreme care with which the child had been nursed by its mother, especially as no padding or other special protective means had been applied; experience in other cases having taught me the desirability of non-interference, with the exception of ordinary precautionary measures, so long as there were no urgent symptoms, or complications of any kind. No remains of the cyst were left; and, as the tumour had entirely disappeared, and complete ossification resulted, the case must be regarded as a most satisfactory example of spontaneous cure.

R. A. DOUGLAS LITHGOW, LL.D., M.R.C.P.Ed., &c.
London.

OBSTETRIC MEMORANDA.

INSTRUMENTAL v. NORMAL PARTURITION.

THE following case may be interesting, and is not unimportant as bearing on the question of "Instrumental v. Natural Parturition".

I attended Mrs. B., in September 1880, with her first child. The presentation was normal; the brim and outlet of the pelvis of average capacity; and the child's head of about the average size. The labour was rather a lingering one; and, owing to the excitability of the mother, and her intense desire for the termination of the case, I decided to use forceps about eight hours after the commencement of labour. At this period, the head was about half through the pelvis, and the os uteri fully dilated. With little trouble, I delivered her of a healthy living child, and with no more laceration of the perineum than occurs at nearly every birth, and the mother convalesced without a single bad or even troublesome symptom.

Last November, I was again summoned to attend her in her second confinement. This time, on arrival, I found labour very advanced, the child's head being almost on the perineum; the pains were strong, but not unusually violent, and occurred about every three or five minutes. Although my patient almost implored me to use "instruments", I now refused to do so, as I thought nature would in all probability very soon accomplish her delivery, and with more safety. I remained about an hour watching the case; the "pains" gradually becoming stronger. The perineum was somewhat rigid, and did not dilate readily, and I endeavoured to protect it as far as I could, as the head was now pressing strongly upon it. However, in spite of all I could do, during a series of strong "pains", it was suddenly born; but, at the same time, I felt and heard the ominous sound of something giving way. I knew there was some laceration of the perineum, but, on examination afterwards, it did not seem a great deal. My patient convalesced well, and did not complain much; but, a week or two ago, she came to my residence, complaining of her womb coming down, and to such an extent that the cervix was slightly protruded through the vulva.

Now, in this second case, the child's head was certainly not larger than in the first; and the question rises in my mind—whether, had I used forceps, I might have saved the laceration of the perineum? I should be glad to learn the experience of any other member of the Association in such cases.

M. GREENWOOD, jun., 18, Queen's Road, E.

ST. JOHN AMBULANCE ASSOCIATION.—It was reported at a meeting of the Central Executive Committee on January 27th, that four well-attended classes for women and one for men have been opened at Cannes, where an inaugural public meeting was held on the 21st. The lecturer is Surgeon-Major F. B. Baker, Grenadier Guards, one of the head-quarter staff, who has been sent out for this special purpose. Classes have also been formed at Nice and Mentone, where Dr. Armand Leslie formerly on the staff of the National Society for Aid to the Sick and Wounded in War, will lecture; while other classes have already been commenced at Malta, long the principal stronghold of the order of St. John. The Metropolitan Railway has purchased several of the Furley pattern stretchers for deposit at their stations; and the London and North-Western Railway Company has ordered one of the "Ashford Litters" on trial.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 7TH, 1881.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

Addison's Disease, with Fibroid Degeneration of the Suprarenal Capsules.—The PRESIDENT and Dr. GOODHART showed the suprarenal capsules from a well marked case of Addison's disease in a young man. The disease had lasted about two and a half years. The diaphragm and all the adjacent organs were removed *en masse*, and it was found that the suprarenal capsules were represented by a thin band of fibrous tissue. The semilunar ganglia showed, Dr. Goodhart thought, increase in the amount of fibrous and nuclear tissue, with diminution in the number of the nervous elements. Dr. Goodhart remarked that Addison had, in his later years, believed that there was only one morbid change which could produce the disease, and this view had been adopted by the President and by Dr. Greenhow, though Virchow held the opposite opinion. It was known, however, that, in some cases, the capsules were destroyed at an early period of the disease, while in other cases they were not attacked at all. It was evident, therefore, that the cheesy change was not the essential point in the disease, but rather that that was to be found in some diseased condition of the abdominal sympathetic; in a chronic neuritis, in fact. This case, if, as he supposed, it was an instance of subchronic neuritis, lent support to the theory that any condition—tubercle, no doubt, in the greater number of cases—that could set up this chronic inflammatory condition in the sympathetic, would lead to the bronzing and characteristic cachexia. In some instances, chronic cheesy changes in the abdominal glands had led to more or less well marked symptoms of Addison's disease. Dr. Davy of Exeter, Dr. Goodhart added, had met with a similar case. The patient was a man, aged 25. At the *post mortem* examination, the suprarenal capsules could not be identified, and it appeared that they had completely wasted away.—Mr. EASTES had had a similar case; this patient suffered from severe melancholia at an early stage of the disease. The suprarenal capsules were so atrophied, that they were with difficulty recognised; they were, in fact, no larger than peas.—The PRESIDENT said that, when Addison first made his observations, he certainly thought that any morbid state of the suprarenal capsules could lead to this disease; and he himself propounded the theory that the symptoms were due to implication of the central sympathetic system. To make Dr. Goodhart's theory complete, it would be necessary to produce a case in which the disease in the sympathetic occurred without any implication of the suprarenal capsules.—Dr. NORMAN MOORE referred to a case published by Dr. Wickham Legg, in which the capsule on one side could not be discovered. He thought the nerve-cells in Dr. Goodhart's case looked remarkably healthy under the microscope. He was, in fact, inclined to doubt whether there were any decided change in the suprarenal ganglia.—Dr. PYE-SMITH said that he had seen Dr. Goodhart's case, which had all the clinical phenomena of well-marked Addison's disease. There were now two or three such cases on record. He thought that it had been pretty conclusively proved that other diseases—for instance, malignant disease—did not produce the characteristic bronzing. The suprarenal capsules were, he believed, of no functional importance during adult life. It would not, therefore, be expected that experimental ablation of the organs would give rise to any symptoms. In some cases, where chronic inflammation was experimentally set up in the capsules in animals, no bronzing followed. Was there, he asked, any case on record of chronic interstitial disease of the capsules without Addison's bronzing? and was there, on the other hand, any case of bronzing without such disease of the capsules? Judging from some observations he had made on ganglia in rabbits, he was inclined to think that the sections of the semilunar ganglion shown were perfectly healthy. Was there any evidence to associate any form of pigmentation from any cause or of any kind with disease of the abdominal sympathetic?—Dr. COUPLAND thought the symptoms of pregnancy afforded an instance of the symptoms set up by disturbance of the sympathetic. The vomiting and the pigmentation of pregnancy might be compared with those of Addison's disease. In one case of Addison's disease which he had seen in a man, vomiting, evidently of a nervous kind, and exactly resembling that of pregnancy, was a prominent symptom. In this case, manifest changes, not only in the capsules, but also in the sympathetic nerves and ganglia in the neighbourhood, were found *post mortem*. He was, therefore, inclined to think that there was evidence in favour of connecting the bronzing and other symptoms of Addison's disease with some lesion of the abdominal

sympathetic.—Dr. CREIGHTON thought that Dr. Pye-Smith was not justified in saying that the suprarenal capsules had no function during adult life. The outgoing blood from the suprarenal capsules differed in its reaction with chromate of potash from any other blood in the body. In such cases as those brought forward, and in most of the "classical" cases, there was such a disturbance of the circulation that there was a practical cessation of the functions of the suprarenal bodies. In cancerous disease, the circulation was not affected; while in an atrophied or caseous capsule the circulation could not go on.—Dr. FOWLER had recorded a case, observed at Cambridge, in which there were well-marked symptoms of Addison's disease without any implication of the suprarenal capsules; but in the abdomen there were large tumours, which pressed upon and involved the sympathetic.—Dr. BEDFORD FENWICK remarked that Dr. Creighton's statement with regard to the function of the suprarenal capsules lent support to the theory advocated by him at a recent meeting of the Society.—Dr. GOODHART, in reply, said that he agreed with Dr. Pye-Smith and other speakers that where, at the bedside, the ordinary symptoms of Addison's disease were met with, it might be confidently diagnosed that the caseous change would be met with in the suprarenal capsules. That was the rule; he wished merely to point out that there were exceptions.—The PRESIDENT said that he was not inclined to call malignant disease involving the capsules disease of the capsules. On *à priori* grounds, he would be inclined to expect symptoms due to interference with the functions of those bodies only where some chronic interstitial change occurred. He was led to take this view from the standpoint of general pathology, and from the analogy of the kidneys and other organs.

Incompetence of Tricuspid Valve.—Dr. BEDFORD FENWICK, after relating the clinical phenomena noted during life, which consisted chiefly in a double cardiac murmur, œdema, and marked cyanosis, said that the mitral orifice was much contracted, while the tricuspid was much dilated. He thought it an instance of secondary tricuspid incompetency. He could only find fifteen such cases so recorded as to be of any use for statistical purposes. He found that stenosis occurred more often in women. He thought that this was due to two causes: first, to the lesser strain on the heart in women, which allowed greater rest to the valves and more prolonged opposition; and, secondly, to the fact that the valves were relatively larger in women.

Congenital Tumour of Neck.—Mr. SHATTOCK showed this tumour, which had been sent to him by Dr. Herman. The tumour was congenital, and bore some resemblance to the congenital sacral tumours, several of which had lately been shown before the Society. This tumour probably originated in some aberrant embryonic structure, and not, as some had supposed in similar cases, from Luschka's gland.—Mr. R. J. GODLEE remarked that this tumour, in naked-eye structure and in situation, resembled those described by Mr. Thomas Smith as cystic fibroma; it was, however, certainly not of that nature. It was interesting to note how closely these congenital tumours could resemble other tumours of a totally different nature; the observation had an important bearing on practice.—Mr. TREVES thought that the tumour was rightly classed with congenital sacral tumours, and pointed out that the occurrence of foetal structures in these latter negatived the theory that the former were connected with Luschka's gland.—Mr. R. W. PARKER said that he had a child now under his care who had a tumour of this nature in the axilla—a very unusual situation, he believed. As to treatment, he remarked that he had succeeded in curing one such case by repeated puncture of the cysts and injection of iodine.

Fracture of Femur in a Puma.—Mr. HENRY MORRIS showed this specimen for Mr. Sutton of the Zoological Society's Gardens. The right thigh had been the seat of an old injury; the acetabulum was occupied by a mass of fibrous tissue; the femur was displaced, and the head of the bone was probably represented by a small bony mass attached to the ilium by ligaments, and still freely movable.

Pneumothorax in a Coati.—This specimen came from the same source. The pleura presented the ordinary appearances of pneumothorax as seen in man. Another coati had recently died in the gardens from the same condition.

Acute Erysipelas in Man.—Mr. HOWARD BENDALL (Birmingham) showed some microscopical sections, and read the notes of the case, which were briefly as follows. The patient, an adult male, was admitted into hospital suffering from an erysipelatous condition of the right foot, and from a number of swellings, varying in size from a pigeon's to a turkey's egg, scattered over the limbs. Two of these swellings, softer than others, were opened; and the pus evacuated was found to contain a considerable quantity of free oil. Three days later, the characteristic pustular skin-eruption appeared, and there was nocturnal delirium. A couple of days later, some pus was seen in the sputum, and there were physical signs of pneumonia at the left base.

fracture could be found, and the effusion of blood was due to the rupture of a vessel at the base of the brain. There was blood-staining of the membranes, more particularly on the opposite side. Dr. Bacon mentioned that the case was peculiar from the suddenness of the death, as, though many died from blows on the head in drunken brawls or from street accidents, very few cases occurred in which death ensued so quickly; and the case had considerable medico-legal importance, as the facts were beyond dispute and the assault was witnessed by competent observers.

REVIEWS AND NOTICES.

NAVAL HYGIENE. By J. D. MACDONALD, M.D., F.R.S., R.N., Ex-Professor at Netley. London: Smith, Elder and Co. 1881.

THIS is a small volume, but we think it eminently calculated to do good service on board all ships of the navy and mercantile marine that carry surgeons. It does not contain such elaborate treatises on every conceivable point of hygienic science as that by the late Professor Parkes, but in it we find very closely packed, instructively told, and well illustrated by diagrams and tables, all that meets the actual requirements of a ship's medical officer; and the navy may be proud of having one who has made himself so proficient to teach a subject on which there are but few authorities.

Dr. MACDONALD has brought up to the level of modern science all his doctrines on the construction and ventilation of ships, whether of wood or of iron, exhibiting the principal facts by an understandable series of diagrams, that will be as instructive to the old officer as much as to one now entering the service. These are so multifarious that the study of them, although foreign to general medical readers, must be essential to all who take to the sea from proclivity or from necessity—the mother of invention; and we would expect to find, within a moderate period, that medical officers of the navy, being so richly instructed, will offer far more suggestions of hygienic value in their sphere than have seen the light in the previous part of the current century, which will demand greater attention from the authorities than has hitherto been the case. We are far from depreciating the works of eminent men who have written earlier on the Diseases of Seamen, their Prevention and Cure, which, if they had fallen on willing ears or hands, would have saved the lives of thousands of sailors. Such literary labours as those of Lind, Blane, and Trotter, in the last century, are classical works in our medical libraries that are still worthy of reprint and of re-editing up to the march of modern science; and we think that a new volume that should condense all these, and give all to be gathered from the ample statistics and papers published in the annual reports of the navy through the last fifty years, would give us an invaluable guide to the hygienic and curative management of dwellers in ships in every climate.

If the suggestions offered by naval medical officers had been received and attended to, the navy would have been purged from scurvy a century and a half earlier. So with regard to contagious fevers: the principles laid down by them, being acted on, would have led to their eradication at least eighty years before they ceased to be the scourge of our fleets; and the same may be said of the phagedænic ulcer, dysentery, and liver-diseases that were, not very long ago, the scourges of our fleet. In truth, hygienic and non-hygienic causes may be said to have been studied, and their sound principles laid down, by naval medical officers, within their sphere, before they were taken up by the general body of the profession.

If proofs were wanted that, at the present moment, the navy possesses a body of accomplished students of all these matters within their sphere, this volume amply affords these in its numerous quotations, raising hopes that the proposals will not be wanting in efficiency when called into action under unusual circumstances.

Concerning the ventilation of ships, this work is replete with information on the various plans that have been proposed since 1736, when the question was first raised; and, strangely enough, all the modern plans in use are only adaptations of the systems of propelling by fanners (the *plenum* system), and that of exhausting by furnaces (the *vacuum* system), which were offered by Desaguliers and by Sutton respectively, when the question was first raised a century and a half ago. There is, however, one plan, not adverted to by Dr. Macdonald, that deserves notice, it being the most recent patent for the *vacuum* process, brought to us from Boston, United States. It consists of a pair of iron cylinders, working in outer cylinders, two-thirds filled with water, resembling a pair of small gasometers, working alternately at the extremities of a long lever beam playing on its centre. To these cylinders valved pipes are fitted, through which the foul air is drawn from every part of the vessel into the cylinders, and then expelled through other pipes into the outer air. It is said to act well at the Criterion theatre, where it is

credited with the out-take of 4,000 cubic feet per minute, worked by a two-horse engine; and it was tried lately at Portsmouth in a screw-vessel, the *Ceylon*, sent out by our Government to chase slave dhows off Zanzibar. The principle is the same as that of Perkins—using a water-medium, in double tanks, for expulsion, but working it mechanically, by steam-power, and not automatically by the roll of the ship, as Perkins's plan does. It seems to be applicable to sailing vessels and to all ships not requiring the fullest *plenum* power, by propelling air into the vessel, which fighting turret-ships must absolutely require.

Dr. Macdonald next affords all the modern teachings concerning purity of water, and the mode of providing it by means of condensation of the steam formerly wasted, which is now provided in ships of war by the complete apparatus of Dr. Normandy; the proper tests for ascertaining impurity having been for many years past, with directions for use, supplied by the Admiralty to the surgeons of their ships. Paramount to these, or, at least, tantamount with them, is the vital question of diet. Although more slowly productive of baneful results, yet it has been the theme of many a chapter since Dr. Cockburn, physician of the fleet, wrote on the subject, so long since as 1696, without any good results in reforming the dietary of the navy. But the question has made such vast strides in the present century, that the ordinary rations now allowed surpass that of the sick in 1800, and may be still open to improvement. Comparing the chemical and the nutritious values of the naval daily rations from 1720 to about the year 1800, with what they are at present, Dr. Macdonald affords data in proof that the nutritive value of the dietary was 24.81 between the former dates, as compared with 33.57 existing now, which shows an improvement of nearly one-fourth in hygienic value. No one can doubt the importance of this fact, which is exemplified in the comparative health-results—if judged by the successive reports on the health of the navy—when scurvy and contagious fevers have disappeared; and dysentery, once common in every channel squadron, is only met with in tropical climates, and there only under special conditions, under which it is found impracticable to supply condensed drinking water to the crew.

By ventilation or supply of fresher air, fevers of contagious character; by fuller and better diet, with lime-juice, scurvy; and by condensed water or a supply of uncontaminated water, dysentery—have all been almost expunged from the reports of the health of the navy; but generations of naval surgeons have had to contend for each of these hygienic measures in turn.

CATALOGUE DES PIÈCES DU MUSÉE DUPUYTREN. Publié sous les Auspices de la Faculté de Médecine de Paris. Tome v. Par M. HOUEL, Conservateur des Collections de la Faculté de Médecine de Paris, Agrégé de la Faculté, Chevalier de la Légion d'Honneur, etc. Paris: Dupont et Masson. 1881.

IN these days of international congresses, technical catalogues and text-books in foreign languages are of great value; for few dictionaries contain a satisfactory assortment of modern scientific terms, and no foreign grammar or exercise-book includes a dialogue between medical men, or enters into the idioms employed in hospital wards or in societies. Such a want may yet be supplied by the production of a work published as a kind of pendant to technical lexicons like those of Drs. Cutter and Fancourt Barnes. This catalogue will teach the English reader a good lesson in medical French. Errors as to the gender of "foie", "cyste", and "vagin" (all masculine) may, by its perusal, be avoided. The first word reminds the Englishman too much of the more familiar term "la foi"; the second deceives many by its feminine appearance and associations; and still more so does the third, which is a curious exception to the rule that French nouns are of the same gender as the Latin words whence they are derived. Then the British reader should remember that "pièce", and not "spécimen", is the right equivalent for specimen. This fifth volume concludes the catalogue, excepting the teratological section. It includes the series of injuries and disorders of the respiratory, genito-urinary, and part of the digestive organs; and the specimens and figures illustrating skin-disease. The description of each specimen is remarkably concise; but there is a great want of histories, and those that are inserted are often too long and full of unnecessary details, for which there is no excuse when reference can be made to complete histories already published elsewhere. The absence of any records of the majority of the specimens is not the fault of M. HOUEL, but of the donors. The compiler's duty was to prepare condensed but comprehensive descriptions of each "pièce", as they say on the other side of the Channel. This duty has been admirably performed; so that the catalogue is of value, through its descriptive merits, even to those who cannot go to Paris to visit the Musée Dupuytren.

BRITISH MEDICAL ASSOCIATION : SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 11TH, 1882.

THE CONVICT WESTBY.

HENRY WESTBY, an office clerk, eighteen years of age, is now lying under sentence of death in Her Majesty's prison at Nottingham; and we do not hesitate to say that another instance will be added to the grievous catalogue of miscarriages of justice should he be left for execution. Condemned for the murder of his father, this youth actually committed two murders on the same day; and the only question really raised at his trial was as to his state of mind when he did so. That he killed his father, and a boy who was his companion in the solicitor's office in which he was engaged, was not disputed; and was, indeed, put beyond doubt by his own full and particular confession made while in prison, and by his plea of guilty when arraigned—a plea which he was only induced to withdraw, after considerable pressure had been brought to bear on him, by the presiding judge and the counsel appointed by the court to defend him; but that he was responsible for his actions when he committed this double murder was denied on his behalf; and much light is thrown on the defence set up for him by the circumstances of the homicides, and the motives which led up to them. As regards the homicides, they were singularly cruel and wanton; and as regards the motives, they were of an unmistakably morbid complexion. Westby beat in the skull and cut the throat of an unhappy boy, who was doing him a little service at the moment; and in the dead of night, in his own home, he shot his father, whom he had decoyed out of bed and within range of his revolver, not once, but thrice. For both of these murders he had made careful preparation, and for neither of them did he subsequently show the slightest compunction. To the scene of the first he returned an hour after its commission, and struck a match that he might gloat over the body of the victim; and with reference to the second, he said, in prison: "I am glad that my father is dead; and were I out to-morrow, and he alive, I should do the same again". An attempt was made to show that he had a grudge against his father, because he was always finding fault with him, and had prevented him from placing a stove which he had purchased in his bedroom, and also because he had given him a severe beating five or six years ago. But such grievances, even if well founded, were surely inadequate to conjure up, in a sane mind, a deliberate scheme for the murder of a father, who, whatever occasional differences might have occurred between them, was shown to have been habitually kind and considerate to him. It is in Westby's confession that these supposed motives for the parricide are discovered; and if the statements of that confession are received as trustworthy in relation to the one crime, so must be its statements relating to the other. What, according to the confession, was the motive for the murder of the boy? "I killed him", said Westby, "just to give me nerve to kill my father"; and atrocity of this kind is inconceivable, except on the hypothesis of blind and reckless madness. Murders for gain, hate, jealousy, and revenge, are familiar enough; but murder for a purely tonic effect is something new in the annals of crime.

Such is the account which Westby gave of his crimes, two days after their commission, when he became confidential with the policeman who was shut up in his cell with him, and felt doubtless the necessity of

giving some kind of logical coherence to his extraordinary narrative. But such is not the view that will be taken of them by anyone possessing an acquaintance with the workings of the insane mind, who examines them narrowly. Dr. Powell, of the Nottingham Asylum, who has, of course, a practical knowledge of insanity, and who had a long interview with Westby shortly before his trial, readily laid bare the true springs of action, which forced him into the perpetration of a double murder. These were delusions—insane delusions of a well-recognised type, characteristic of a variety of mental disease known as the monomania of suspicion. He told Dr. Powell that he was persecuted, and had not a day's peace; that, when he was in the office, the people who passed outside made noises, which annoyed him very much; that, when he was in the street, the passers-by pointed at him and spat on the ground, as if in derision of him; and that his father and the boy had so joined in the system of harassment to which he was subjected, that he thought they deserved to be killed. He repeated, in fact, that tissue of delusions which every asylum medical officer will recognise as typical of that kind of insanity with which homicidal propensities are most frequently associated. There is not an asylum in this country in which lunatics, with delusions precisely similar to those of Westby, are to be found; and everywhere such lunatics are regarded as exceptionally dangerous, and are kept under special supervision.

It cannot be suggested that Westby was feigning insanity during his interview with Dr. Powell, and was merely assuming delusions to escape punishment. The very moderation of his delusions, and their resemblance to what might have been reasonable beliefs, negative that supposition; for counterfeit delusions are always of a pronounced and extravagant nature. But, more than that, it is clear that Westby had no desire to avoid the penalty attaching to his acts. One of the motives which he assigned for committing the murders was, that he was tired of his life, which had been made insupportable to him; and the same feeling induced him to make his confession, to plead guilty, and to receive his sentence with equanimity. These arguments against the theory of malingering appeal to the popular mind; but there are other arguments against it, which can only be appreciated by the expert. These have reference to the language in which the delusions are expressed, which has the indescribable but genuine ring about it, the grouping of the delusions, and the pathological history of the case. Who that has had much intercourse with lunatics has not heard the very form of words which Westby employed in describing his delusions of persecutions, and has not met with the same morbid ideas which he developed to Dr. Powell, arising in the same order? And who that has studied the evolution of insanity, has not watched morbid ideas, identical with those of Westby, growing up in the mind of a patient who, after a fever, has manifested a change of character and eccentricities of conduct, with long-continued despondency of spirits, frequent headaches, and a disposition to lead a retired and solitary life? Few, if any, medical psychologists—or, indeed, medical men—will hesitate, after reading a full report of his trial, to pronounce Westby a lunatic; and we can scarcely believe that those laymen, who were present at his trial, and who heard the history of his career, and of his unnatural crimes, had not some misgivings as to his mental soundness.

But it may be said this youth, although not perhaps of strong, sound, or well-regulated mind, and perhaps even a little insane, was sane enough to know what he was doing, and so was properly condemned, and will be justly executed. Specialists may call him a lunatic if they please, but he was not legally insane, for he knows the difference between right and wrong, and so is amenable to punishment. Dr. Powell, it may be argued, admitted that Westby knew right from wrong, and so he was responsible for his actions. But, if he made any such admission, Dr. Powell must have been misunderstood; and even supposing that he made it and made it justly, it does not follow that Westby is responsible, even according to the narrow and antiquated legal test of criminal responsibility. That test is not a knowledge of right and wrong in the abstract, or when the prisoner is put on his trial, but a knowledge of right and wrong *at the time of committing the act*;

recent date, but came very near to being carried into effect, and was, so far as our memory serves, only checked by the introduction of some not very important questions of procedure and relative administrative interests. The proposal to which we refer is the amalgamation of the Royal Medical and Chirurgical, the Pathological, the Clinical, and the Obstetrical Societies, upon a sound, extended, and representative basis. There can be no doubt whatever of the great advantages which such an amalgamation would have, and these advantages are all of the larger, more stable, and generous sort; on the other hand, the few reasons which have been urged against it, or those which have seemed to prevail, have been of the smaller and less momentous kind, which, although they prevail often enough for a time, can never have any permanent value, and afford no justifiable obstacle to the carrying out of a palpably beneficial reform. There are very many persons, actively connected with all these societies, who are much interested in the question of amalgamation; and it would be satisfactory just now, if some of them would meet again in voluntary committee, and endeavour, by some sort of simultaneous action in the various societies, to bring about a conference, aiming at such amalgamation which would, it may be hoped, have a happier result this time, and attain the success which it only before missed by so narrow a margin.

CANCER, SARCOMA, AND LOCAL INJURY.

THE relation of local violence to malignant disease is an unsolved question of great importance. No modern authority doubts that the origin of epithelioma is very frequently due to local irritation of the most tangible kind. Every student learns, in his text-books, about cancer of the lip and tongue which may follow the irritation of a pipe; about cancer of an old neglected ulcer of the leg, irritated by dirt and friction; and about cancer once common on the scrotum in chimney-sweeps. The irritation which certain obscure stimuli set up in the mammary gland causes, according to Dr. Creighton and his followers, an imperfect process of secretion, with formation of imperfectly developed cells, very prejudicial to the surrounding tissues; indeed, these cells appear to be the starting point of malignant disease. All these processes by which local epitheliomata and mammary tumours develop are chronic, and are not the result of what an Englishman understands by the word violence. In association, however, with this part of the question, let it be remembered that irritation means chronic injury, violence, acute injury. Irritation may produce well known forms of inflammation; it also causes malignant disease. Violence sets up equally well-known types of the inflammatory process; and Mr. Barwell, at page 187 of this number of the *BRITISH MEDICAL JOURNAL*, brings forward three instances, all well authenticated, of sarcomata following severe blows or fractures. Two were in his own practice, one was under the care of Sir James Paget. We know of a fourth case, where a large subcutaneous extravasation of blood followed a blow on the shoulder. The fluid part of the blood was removed by an aspirator. Within a few weeks, a sarcoma developed in the shoulder, and rapidly recurred after removal. In fact, the case precisely resembled one described by Mr. Barwell. That gentleman shows, in the paper to which we have referred, that the relation of the violence to the growth of the tumour cannot be mere coincidence. It is absurd to suppose that, in his case of a youth who died after recurrence of a sarcoma which appeared on the shoulder a few weeks after receiving a blow there, malignant disease happened to be on the point of development when the injury occurred; and, if such an extraordinary coincidence could explain this case, it is otherwise with the second related by Mr. Barwell. A stevedore bruised his left side in a fall down a ship's hold; within a few weeks, he died of that comparatively rare disease, sarcoma of the lung and pleura, the left lung being the most involved. Mr. Barwell terms this condition acute traumatic malignancy.

Inflammation is, in these days, usually defined as a series of changes occurring in a part subjected to injury not sufficient to immediately and completely destroy its vitality. On the other hand, this "acute traumatic malignancy" is observed under the same circumstances as those

included as part of the definition of inflammation. The ancients placed cancer among inflammations; many of the physicians and surgeons of antiquity were profound clinical observers, and must have noted some relation between malignant growths and injuries. On the other hand, as we have just indicated, there is a distinct relation between violence and irritation. The latter sets up inflammation, and also may produce malignant disease. The former decidedly causes inflammation, and more rarely, but equally surely, according to the above evidence, it may set up malignant disease as well; others, long before Mr. Barwell, whose valuable clinical records are most welcome, have recognised this fact. According to these data, inflammation and malignant disease would appear to be, very possibly, conditions actually different in every pathological sense, but liable to be produced by the same causes. It seems more probable, however, that this coincidence points to some very intimate relation of the two morbid conditions as yet unknown. In any case, acute traumatic malignancy includes an integral part of the definition of inflammation. Butler observes, in *Hudibras*, that to know what's what is as high as metaphysic art can fly. More, much more, remains to be done in pathological research before the precise nature of inflammation and of malignant disease can be recognised with sufficient accuracy to enable us to determine their precise mutual relation.

COUNTY BOARDS.

THE prominence which is given in the Queen's Speech to the proposed establishment in the counties of England and Wales of local self-government, will be hailed with satisfaction by those who have seen how greatly the country at large suffers from the lack of intelligent county councils for the direction of matters purely local. The block of business in the Imperial Parliament is yearly becoming more acute, and it is manifest that measures must be immediately adopted for its relief from the increasing number of local projects that come before it for decision. The difficulty of local self-government has hitherto been to get men of sufficient culture and breadth of views to take an interest in municipal or district affairs to the extent of assisting in the local councils. The result has been that persons of little knowledge or social position have ruled the destinies of many of the great towns of England, and that an ever-widening breach has occurred between local authorities and those best qualified to compose them. The establishment of county boards, as contemplated by the Government, may be expected to remove many of the grounds for reluctance to assume public responsibilities which undoubtedly weigh with the majority of the more intelligent of the community.

Local Parliaments, as these county boards would in effect be, might safely be entrusted with much of the business of administration which the Imperial Parliament now has, with terrible waste of time, to assume for the whole country. It is as yet too early to speculate on the scope of the reforms which the Cabinet contemplate in this direction. Plenty of time must obviously be given for the consideration of a measure so sweeping in its results as the Government Bill will, from the nature of things, be; and the earlier the Bill is introduced, the greater chance there is of legislation being accomplished this session. The subject is one of sufficient moment to merit the personal direction of the Prime Minister, the more especially as fiscal interests must needs be largely involved. Mr. Dodson, to whom the conduct of the Bill has been primarily assigned, has not yet evinced sufficient grasp of the functions of the department of which he is the nominal head to warrant confidence in his ability to carry through a measure so intricate and so revolutionising, and it is much to be wished that the Bill could be confided to some stronger member of the Cabinet than the President of the Local Government Board. In any case it will behove this Association, to whom, in conjunction with the Social Science Association, belongs the credit of first bringing to public notice the desirableness of county boards, to carefully watch the Government proposals, and to take such action as may seem necessary to give effect to its views.

It may not be inopportune at the present juncture to repeat in this

THE ST. JOHN'S AMBULANCE ASSOCIATION.

THE origin, progress, usefulness, and aims of the above Association, formed the subject of an address given by Major Duncan, R.A., M.A., at a meeting of this Association held at Brixton, on Wednesday last. The formation of classes in this district, for the instruction of ladies and gentlemen in rendering first aid to the wounded was also discussed. The scheme of operations embraces the formation of centres in important towns and districts, with an organisation consisting of a local committee and staff of officials who perform gratuitous service; and also of detached classes, held in towns or villages pending the opportunity arising for the formation of regular centres. It appears that, towards the close of last year, centres had been formed in the metropolis in ten districts and upwards of 120 other representative towns in Great Britain and Ireland.

POISONING BY LABURNUM.

TWO fatal cases of poisoning by some undetermined portions of this very poisonous tree are recorded as occurring in the practice of Mr. Lascelles, of Slingsby, in Yorkshire. Two children, aged three years and eight years respectively, are supposed to have eaten of the tree at the same time; but there was no evidence as to this, nor as to what portion of the plant was eaten. Presumably, it was the pods or seeds which were partaken of. The elder girl was seized with vomiting and diarrhoea between 1 and 2 A.M. on January 3rd. She complained of her head, and was prostrate. Six hours later, the vomiting and diarrhoea ceased. She then made a noise in her breathing, and continued much in the same state till her death, about fourteen hours after she was attacked. Next day, about 1.30 P.M., the younger girl, aged three years and a half, became tired and sleepy, and she vomited. She then complained of pain in the head. She vomited frequently, and had two motions. Five hours and a half after the commencement of the attack, she was convulsed, and the convulsions continued till her death, eight hours from the commencement of the illness. A *post mortem* examination was made. There were some marks of irritation of the gastro-intestinal mucous membrane. No fragments of any portion of the plant were found in the stomach; but the analyst, Mr. Fairley, detected cytisine in the stomach-contents of each child. The alkaloid was detected by its characteristic properties, and an extract of the stomach of the elder child was given to a mouse with fatal effect.

THE HOSPITAL SATURDAY FUND.

AT a special meeting of delegates of the Hospital Saturday Fund, held at the Royal Hospital for Diseases of the Chest, City Road, on Wednesday, February 1st, Mr. Hamilton Hoare moved the following resolution, which, after free discussion, was passed unanimously:

"That the board of delegates of the Hospital Saturday Fund hereby resolve that the grants to St. George's, West London, and the University College Hospitals be paid. The board are desirous of stating that their proposals having reference to the appointment of life governors were prompted by the belief, that the constitution of the various hospitals sanctioned such a step, especially as the majority of the hospitals have invited such an arrangement. The treasurers of all participating institutions are *ex officio* members of the Hospital Saturday Fund, and we are still of opinion that, in the interests of those classes with whom the hospitals have to deal, it would be fair and expedient that some representation from the board of Hospital Saturday Fund should be accepted. The board of the Hospital Saturday Fund wish distinctly to state that they have never claimed any privilege beyond that accorded to the ordinary subscribers, nor has it been their intention to act in any way contrary to the constitution of the various hospitals and dispensaries."

REMOVAL OF THE UTERUS.

WE are glad to be able to report that the patient is now quite convalescent from whom we recently reported the removal of the uterus by abdominal section for cancer, five weeks ago, by Sir William Mac Cormac at St. Thomas's Hospital. Recovery was delayed by an attack of acute bronchitis, incurred through exposure during a prolonged operation, and also by the suppuration which took place in the abdo-

minal cavity. Sir William Mac Cormac believes it was the free and efficient drainage which, in great measure, saved the patient's life. What, however, the ultimate result may be remains to be seen; though Sir William Mac Cormac is to be congratulated on the successful conclusion of his operation. The case is one of great interest; and we are glad to be able to publish this satisfactory preliminary note. A full report of the case, however, will no doubt be given to the profession in due course.

CORPORATE ENTHUSIASM FOR SOCIAL SCIENCE.

A PUBLIC meeting, for the purpose of making preliminary arrangements for the Annual Congress of the Social Science Association at Nottingham next autumn, was held in the Exchange Hall of that town on Monday, under the presidency of the mayor. Mr. Hastings, President of the Council of the Association, said that the corporation of Nottingham, in voting a sum of money to defray the expenses of the Congress, had performed an act of munificence unknown in the previous history of the Association. He had that day visited the Nottingham University College, and thought that the building supplied everything that was needed for the meetings of the Congress and the reception of the members. A large general committee, with honorary secretaries, were appointed to make the necessary arrangements for the Congress. The Nottingham Corporation has, we believe, voted £1,500 out of the corporate funds to defray the expenses of the meeting—a piece of munificence quite unexampled, and not always permissible by by-laws, but a most happy precedent, which our local organising committees will do well to bear in mind for future use.

ANNUAL MEETING AND CONVERSAZIONE OF THE HARVEIAN SOCIETY.

ON January 19th was held the annual meeting of the Harveian Society. The reports of the Treasurer and Secretaries showed that the Society was in a flourishing condition. A hearty vote of thanks was given to the officers of the Society, especially to Mr. Henry Power, who had ably filled the chair for the past two years, and to Mr. George Field, the retiring Secretary. The officers who had been nominated, and whose names appeared in the BRITISH MEDICAL JOURNAL for December 24th, were unanimously elected. Mr. Power then delivered his retiring address. He first referred to the unavoidable absence of his successor, William Hickman, M.B., owing to the illness of a near friend; then, in feeling terms, alluded to the loss the Society and science had sustained in the death of Professor Rolleston, a corresponding member of the Society, and spoke of his early rising and industrious habits; next, he passed in review the progress medicine had made since the time the Harveian Society was formed, and pointed out how many more drugs had been brought into use. Mr. Power mentioned the International Medical Congress as the medical event of the year, and noticed with approval the fact that a statue of Harvey had at length been unveiled in his native town, a project initiated and brought to completion by Mr. Eastes, a member of the Harveian Society; and he concluded an eloquent address by referring to the recent success of the Society as in a great measure due to the exertions of the retiring Secretary, Mr. George Field. The meeting then resolved itself into a *conversazione*, and a most enjoyable evening was spent by the members and their friends. The Stafford Rooms had been converted into a drawing-room by the kind help of Messrs. Gillow and Co., who exhibited the beautiful cartoons designed by Mr. T. W. Hay for Windsor tapestry. Messrs. Dowdeswell and Dowdeswell kindly lent many etchings, among which were some charming ones by Messrs. Seymour Haden, A. Evershed, and Probert, members of the profession. Dr. Heneage Gibbes showed some excellent microscopical specimens; among others, a section of cornea showing corpuscles with stereoscopic effect, and one of lung containing *Bacilli anthracis* in blood-vessels. Dr. Hare exhibited a model of the Place Vendôme; Dr. Galton and Dr. Mahomed, photographs; Dr. E. Hart Vinen, numerous fine engravings; also the skull of the cave bear, and choice fossils from the South Yorkshire coal measures and the Suffolk crag. Mr. Ernest Hart showed the original drawing by Mr. Tenniel for the *Punch* cartoon on the vivisection craze,

will be found in another column from Dr. Allfrey, in which he seeks to lay claim to be the originator of the system, in virtue of a resolution laid quite recently before a meeting of the St. John's Ambulance Association. This occurred, however, not only after the publication of Dr. Howard's detailed suggestion, but some months after that gentleman had been in continuous and active communication with the heads of the police and the hospital authorities of the metropolis, and even after his ambulance had been made and completed, and arrangements had been made for the public meeting lately held. Any claim of priority is extremely out of place in such a matter; for, even if any priority were sought, it would be found much further back than the details of the facts we indicate. That the new committee would gladly welcome the co-operation of the St. John's Ambulance Association, was evident from the presence of Sir Edmund Lechmere and Mr. Duncan, of the St. John's Ambulance Association; and we earnestly hope all who are interested in this question will combine to work without any of the petty jealousies, of which the germs have unfortunately been manifested on more than one occasion in the progress of this movement. The committee formed is a very influential and a very representative one; it is quite capable of performing the work it has undertaken. It is much to be hoped that it will not fail to secure the assistance of the St. John's Ambulance Society, of the police, and of all who are likely to be most conducive to the success of the movement, and that it will be willing, if necessary, to merge itself in any organisation which may have superior facilities for carrying out or maintaining the work. It should not be forgotten, however, that for the present the whole expense of the transport of patients found in the street is borne by the police, for all such persons are conveyed to the hospitals in cabs, and the cost of the cabs falls upon the police authorities. There is, therefore, a considerable public expenditure on this matter; and this should not be lost sight of when the question has to be considered where the funds are to come from for these ambulances, and the system with which they will be connected and be maintained. The new committee is intended to include representatives of all the great hospitals and the police authorities, the St. John's Ambulance Association, together with a number of influential individuals whose experience or connections promise to enable them to assist the work.

THE NEW MONTEFIORE PRIZES AT THE ARMY MEDICAL SCHOOL.
 THE following account of the Montefiore medal and prizes, which have been given for the first time at the late session of the Army Medical School, at Netley, was read by Professor Longmore, at the closing meeting on the 6th instant. In the spring of the year 1881, Mr. Nathaniel Montefiore, F.R.C.S., having observed that no prize was given at the Army Medical School in the department of military surgery, although prizes were awarded in the sections of hygiene and military medicine, and being desirous of stimulating practical study and improvement in this branch of professional duties of military surgeons, offered to fund a sum of two thousand pounds for the purpose of establishing a prize to be competed for in the military surgery class at the school. This generous offer was submitted through the Director-General of the Army Medical Department for the consideration of the Right Honourable the Secretary of State for War; and the Secretary of State was pleased to accept the offer, and expressed to Mr. Montefiore, by letter, his appreciation of the patriotic motives which had prompted the gift, and his gratification in the acceptance of it. Mr. Montefiore left the arrangements for the disposal of the fund to the governing body of the army medical school. After due consideration, it was determined to appropriate the proceeds of the fund to two prizes: the first to consist of a bronze medal and sum of money; the second, of a selection of books relating to matters connected with military surgery. The subjects to be engraved on the proposed medal were arranged and designed at Netley. One face of the medal is intended to illustrate a military surgeon's duty in attending to wounded men in the field, and to represent some of the principal articles of modern field-hospital equipment; the other face bears the arms and name of the

founder of the prize, and the date of its foundation. As soon as the drawings for the medal were completed, the work was submitted to a leading English medallist for execution; but the designs, as proposed, being declared unsuited for medallion effect, it was then offered to an eminent French medallist, M. Dubois, of Paris, who both expressed his approval of the plan, and at once offered to undertake the execution of it. The plaster cast of the model of the principal face of the medal, triple the size of the intended medal itself, has been recently received from M. Dubois, and has been regarded, by all who have seen it, as most artistic and satisfactory. In order that no delay might occur in giving the prize, Mr. Montefiore has, with still further liberality, undertaken to defray the cost of the medal. It would have taken more than a year and a half to pay for it, if its cost had to be met by the interest accruing from the sum originally funded by Mr. Montefiore. This has enabled the prizes for military surgery to be given during the present session. The first prize this session consists of the medal and twenty guineas; the second, of four books. As the medal is not yet completed, it will be forwarded to Mr. James Barry Gibbons, of Her Majesty's Indian service, who has gained it, as soon as it is received from Paris, and the successful competitor's name has been engraved on it.

THE DUCHESS OF CONNAUGHT.

WE understand that the Duchess of Connaught's sudden removal on Sunday from Bagshot to Windsor was in consequence of the unsatisfactory state of the sanitary arrangements at Bagshot Park. For some weeks, very offensive smells have been observed about the house, and several of the inmates have suffered from obscure forms of indisposition. Her Royal Highness had made an excellent convalescence for nearly three weeks after her confinement, when she developed symptoms which were thought to depend on poisoning by sewer-gas. On investigation, it was found that a large soil-pipe from a disused closet had been simply cut through by a careless workman, and its open end, leading directly into the main drain, was left immediately under the flooring close to the central hall, and thus a continuous stream of sewer-gas was poured into the house. Dr. Playfair advised that Her Royal Highness should be removed to Windsor without delay, to get her out of the infected atmosphere. On Sunday, Sir William Jenner met him in consultation, by Her Majesty's command, and completely concurred in this view. The removal was therefore at once effected. Happily, a very decided improvement in Her Royal Highness's condition is already apparent, and her symptoms no longer cause serious anxiety.

METROPOLITAN FOG-MORTALITY.

THE metropolitan death-rate in the fortnight ending the 4th instant showed a marked increase upon that which prevailed in the two preceding weeks. This increase is the more noteworthy, since no corresponding increase is recorded in the death-rate of the twenty-seven provincial towns. During the first three weeks of this year, the annual death-rate was equal to 23.7 per 1,000, both in London and in the twenty-seven provincial towns. In the following fortnight, ending the 4th instant, the death-rate in London rose to 26.8; while, in the provincial towns, it slightly declined to 23.3. It would be interesting to know what caused an increase of more than one-seventh, or 13 per cent., in the London death-rate, while the death-rate in the provincial towns had declined. Had the increase not been confined to London, it might have been mainly attributed to the lower temperature that prevailed; but as a similar fall of temperature prevailed in the provincial towns without any increase of mortality, it is necessary to seek for some other cause for the marked rise in the London death-rate. The dense fog that hung over the metropolis, with little intermission, during the past fortnight supplies a reasonable and probable explanation of this excessive mortality. Next to intense cold, fog invariably exercises a more certain and fatal effect upon the metropolitan death-rate than any other meteorological condition. As regards age, the largest increase of mortality has occurred among children aged between one and

five years, and among adults aged upwards of sixty years. The greater mortality among children aged one and under five years, was entirely due to a marked increase in the fatality of whooping-cough—a result which may be attributed to the combined effect of low temperature and fog. The increase of mortality among persons aged upwards of sixty years was almost entirely attributed to diseases of the respiratory organs. The deaths at all ages from these diseases, which had been 1,872 in the fortnight ending January 21st, rose to 1,190 in the following fortnight, ending Saturday last, the 4th instant; this increase being equal to 35 per cent.

FURTHER POISONS FOR THE SCHEDULE.

By the second clause of the Pharmacy Act, the Council of the Pharmaceutical Society has the power to schedule any given article as a poison within the meaning of the Act, and such schedules require approval by the Privy Council. When such approval has been given, such articles may not be sold by any other person than a pharmaceutical or a registered chemist and druggist, and then only under the regulations and precautions laid down by the Act. At the last meeting of the Council of the Pharmaceutical Society, it was resolved to add the following articles to the list of poisons in the second part of Schedule A of the Pharmacy Act: Sulphuric acid, commonly called oil of vitriol; hydrochloric acid, commonly called spirits of salt; nitric acid, commonly called aqua fortis; solution of chloride of antimony, commonly called butter of antimony; carbolic acid; hellebore; nux vomica and its preparations; vermin-killers containing phosphorus. This resolution will require approval by the Privy Council, and will then come generally into force. It will probably give rise to some protestations on the part of various traders who have been in the habit of supplying many of these things as ordinary articles of trade in villages for the various industrial and household purposes for which they are employed; but, on the whole, we believe it will be generally considered that, unless the Poisons Act does include in its schedule such articles as strychnia, phosphorus, hellebore, etc., it can hardly be said to have any real meaning, or to afford such an amount of protection to the public as a Poisons Act can in any case afford.

LIVERPOOL ROYAL INFIRMARY.

At the annual meeting of the Royal Infirmary, the oldest medical charity in Liverpool, on Monday, January 30th, its reconstruction was strongly urged by the managing committee and medical and surgical staff. As the present buildings were erected more than sixty years ago (with the exception of the Thornton wards, built in 1863), it is obvious that they must be defective in all those sanitary and other improvements which are to be found in all modern hospitals. Circumstances have hitherto retarded the proposed rebuilding, but now a favourable opportunity has presented itself, the committee having acquired a sum of £25,000, which, it is believed, can be devoted to the purpose, and further aid is expected from the Liverpool Corporation. The total sum required will probably be £100,000, and it is confidently expected that it will be raised. The Liverpool Royal Infirmary is a large hospital, receiving patients from all parts of Lancashire and the north, from Wales, the Isle of Man, and other distant places. Hence the importance that it should be, in all respects, fully provided with every modern improvement, and that its claims should be recognised by all the localities from whence patients are derived.

POISONED MEAT.

ON Friday, February 3rd, at the Chelmswell Police Court, Mr. Tarrant, a well-known justice on a general dealer and meat-seller, who was represented by George P. F. Tarrant, Esq., on behalf of the High Court of Wards, for having unlawfully deposited at the Chelmswell House, St. Sepulchre's, two portions of beef and mutton, which were diseased and totally unfit for human food. A witness who charged him with exposing, at the same place, the carcass of a diseased pig for sale. The meat was in

an advanced stage of putrefaction when seized, and the salesman at Charterhouse Lane had received the following interesting epistle from the defendant. "Sir,—I send you one nice body of beef and one pig from Bury. Plain cows are scarce. I shall send you another package to-morrow, as the markets are shut up, and you know all about it. P.S. We cannot get much; you will have what we can get." The bullock had evidently died a natural death, and its meat had not been dressed for two days afterwards; the pig had died from measles or small-pox. The worst feature in the case was, that the defendant was a most experienced judge of meat. Mr. Darstow said that his offence could not be adequately punished by a money penalty. The defendant had not cared how many people he might have poisoned, so long as he could make a small profit out of his bad meat. The magistrate therefore sentenced him to six weeks' imprisonment with hard labour. We trust that other boards of works and other magistrates will be as active in shielding the public from having what dishonest salesmen can get when "plain cows are scarce", especially as those gentlemen appear to "know all about it".

MANCHESTER MICROSCOPICAL SOCIETY.

At the annual meeting of the Microscopical Section of the above Society, which was held at the Owens College on the 31st ultimo, the following were elected officers for the ensuing year. *President*: Dr. Dreschfeld. *Vice-President*: Dr. Leech. *Treasurer*: Dr. Ashby. *Secretary*: Mr. A. H. Young. *Committee*: Mr. J. Broadbent, Dr. Bury, Dr. Edge, Mr. E. H. Howlett, Dr. Dixon Mann, Mr. Southam.

ST. MARYLEBONE GENERAL DISPENSARY.

At a meeting of the directors of this dispensary held on February 1st, 1882, the principle of payment of the medical and surgical officers to the institution was unanimously admitted and approved. The consulting staff (medical and surgical) here had been in complete accord with the lay governors. At the expiration of the present financial year, a meeting of the directors will be held; and such sums as in their judgment are fairly available will be apportioned amongst the working staff of the dispensary. We are pleased to see that the directors of this institution (the oldest but one in London) are so practically willing to recognise the just claims of their professional staff.

PROTECTION OF INFANT LIFE.

A PARIS society quite recently organised, called Société des Enfants nouveau-nés (Society for Newly Born Infants), has published its regulations in a Paris paper. They are as follows. 1. The Society, to prevent infanticide, receives into the "Home of Newly Born Infants" children of all religions and of any origin, and brings them up gratis, until they attain the age of three. 2. The mothers are allowed and encouraged to see their children as often as they please. 3. The Society aids unhappy mothers without means of gaining a living. 4. It is intended to utilise the Home as a "Maternity Home", and print by the staff of mother and young child to assist them how to tend and bring up babies, thus awakening in them an active interest in their children.

THE VIVISECTION QUESTION IN THE BRITISH PARLIAMENT.

At its sitting on January 23rd, the German Parliament took into consideration the report of a committee on vivisection appointed from 1876, and from private individuals, in favour of the restriction or prohibition of vivisection. The report was presented, on the part of the committee, by Professor Hesse, Deputy for Saxony; and on it was founded a motion that, considering (1) that, in the interest of science, vivisection appears to be necessary in the present situation; (2) that changes in the penal statutes in the direction desired by the petitioners have not been shown to be necessary; (3) that the petitioners have the opportunity of having their complaints of any abuses in regard to vivisection before the local authorities who have the regulation of the teaching institutions in the hands; and to the order of the day. Two of the members of the commission had expressed them-

selves as unfavourable to vivisection, and had proposed that all experiments on animals attended with suffering, unless they served highly important scientific purposes, should be punished with a fine of 600 marks (£30), or a corresponding term of imprisonment. In the discussion in the House, Herr von Minnigerode proposed as an amendment that the petitions should be referred for consideration to the Imperial Chancellor. Professor Virchow denied the correctness of the statement made by the petitioners, that experiments were performed in the universities to a great extent by students. He proceeded to show that vivisection was indispensable to the progress of medical science. The Minister of Instruction, Herr von Gossler, made a few sensible remarks as follows:

"I have endeavoured to form an opinion from the perusal of scientific books. As the result of these studies, I can only recommend you to accept the motion of the committee. It must be acknowledged that a great part of the horrors of vivisection have no foundation; most of the public do not clearly understand what are the results of experiments on animals. Medicine cannot dispense with these experiments. It is, however, the most sacred duty of those who superintend the institutions, to limit them as much as possible; and an honourable attempt is made to perform this duty. Do not introduce among us the conditions which exist in England. In North Germany, the experiments are established by the State authority, and are carried out under the superintendence of distinguished persons, of whom the Fatherland may be proud. In Prussia, no complaint has been made. There can be among us no such public exhibitions of suffering animals as have been described in England; and if there were, a reaction against them would arise on the part of science itself. I will only say this: if you determine to refer the petitions to the Chancellor for consideration, good—you will believe that you have performed a duty; if you decide the contrary, you may be assured that, so far as I can form an opinion, we may have full confidence that all excesses will be suppressed by means within the territory of science."

The amendment of Herr von Minnigerode was rejected, and the motion of the committee was carried, by a large majority.

BRITISH AND AMERICAN PHYSICIANS IN PARIS.

WITH a view to promote social intercourse and maintain good fellowship between British and American physicians, a society has been formed under the name of the "British and American Medical Society of Paris". Membership is limited to British subjects and citizens of the United States of America legally entitled to practise as physicians in Paris, and actually doing so. A certain number of dinners are appointed to be held annually; the first took place on February 1st. Among the members who form this society are Dr. McCarthy, Sir John Rose Cormack, Dr. Thomas Bishop, Dr. the Hon. Alan Herbert, Dr. Pratt, Dr. Marion Sims, Dr. Johnston, Dr. Faure-Müller, Dr. Jennings, Dr. Murray, Dr. Pepper, Dr. Rowlatt, and Dr. Loughnam, etc. The President for 1882 is Sir John Rose Cormack, and the Vice-President Dr. Bishop.

ANIMAL VACCINATION IN ITALY.

WE are informed that the Italian military authorities have determined to revaccinate the soldiers of the garrison of Rome with lymph direct from the heifer. The Committee for Animal Vaccination, presided over by Dr. Sinliani, have already vaccinated more than five hundred men of the Third Regiment of Infantry, stationed at present in the Cimarra barracks.

THE FRENCH MILITARY HOSPITAL SERVICE.

COPIOUS information was recently published in an English newspaper as to the state of the Carthage Hospital in Tunis, and the revelations made were unfortunately of a kind equally distressing to the public mind, and discreditable to the French military intendants. A formal inquiry was held with the object of ascertaining the authorship of the letter in question, which was subsequently avowed by a surgeon-major attached to the hospital. The officer in question will, it is said, be immediately placed *en disponibilité*, or dismissed the service. Meanwhile, the establishment which had acquired such unenviable notoriety was practically broken up. A large number of invalids were sent to France

by every boat. Eight of the wooden sheds recently erected were condemned as infected by diphtheria, just as the main building was infected by typhoid fever. Fatal cases of diphtheria are reported to have been numerous. An exhaustive report on this subject, drawn up by Dr. Pozzi, is in the hands of the French Government, but has never been published. The military station at Fernana, established last June, has at length been removed. The garrison numbered eight hundred men, under the care of a single medical man, who had no apothecary to assist him. The camp was pitched on the borders of a marsh. Typhoid fever almost immediately appeared. About ten per cent. of the total strength of the garrison died. A much larger number of soldiers were invalided, and not a single individual escaped an attack of fever. It was not, however, we believe, till October, that beds and bedding were sent to Fernana. Till then, the sick and healthy alike slept on straw.

SCOTLAND.

COMEE LECTURES IN ABERDEEN.

THE fourth lecture was delivered by Dr. Stirling in Aberdeen on Saturday evening. The subject of lecture was the Process of Digestion. The lecturer sketched the process as it occurs in some of the simplest animals, but the chief part of the remarks was devoted to a consideration of the digestive process in man. The preparations which were used to illustrate the structure of the mouth, gullet, and stomach, were all of a simple kind, and such as anyone may obtain at a butcher's shop; and the lecture was specially designed to show how much physiology may be taught, especially by science masters in schools, by comparatively simple means. One of the most instructive parts of the lecture was the description of the reciprocal relations of the nervous and digestive systems. The influence of the former was illustrated by many pointed remarks, as to the influence of the emotions and grief, as in a passage in the *Vicar of Wakefield*—and the practical applications of these facts in the Indian rice ordeal. The effects of the influence of the digestive organs on the nervous system were similarly illustrated by our proverbial philosophy, and by facts from our every-day experience.

THE BURNETT FUND OF ABERDEEN.

THE trustees of this fund have appointed Professor George G. Stokes, Lucasian Professor of Mathematics, Cambridge, to deliver the Burnett lectures. Professor Stokes has chosen for his subject "Recent researches into Physical Science". These lectures are to be delivered in connection with Aberdeen University; and each lecturer may hold the lectureship for three years.

ALLEGED IRREGULARITY AT GREENOCK INFIRMARY.

THERE has just been made public, in connection with this institution, an occurrence very similar to that which has recently taken place at the Sheffield Workhouse. It appears that, last November, there died in the Greenock Infirmary a man named Sinclair, and, after a *post mortem* examination had been made, his body was removed to the mortuary, to be handed over to his friends for burial. By some mistake, however, the body was taken away and buried in the common ground of the cemetery, in place of another man, who had also died in the infirmary. The relatives of Sinclair have now raised an action against the directors of the infirmary, to compel them to have the body exhumed, in order that it may receive decent burial at the hands of the relatives, as was originally intended. How the matter will end, it is not easy to tell. Seeing the time that has elapsed since the burial has taken place, and that it was in a common burying-ground, it will be almost impossible to carry out the wishes of the relatives. These latter seem to be agitating in the matter from some apparently unfounded suspicions that the body has been made away with for dissection or other purposes, but there seems to be not the slightest ground for so thinking. Undoubtedly, a mistake has been made, and one painful to the relatives; but there the matter should rest, serving only as a lesson to the officials of the infirmary to exercise more care and

Mark's (Ophthalmic), £115 13s. 9d.; National Eye and Ear Infirmary, £49 5s. 6d.; Convalescent Home, £145 1s. 3d.; Cork Street (Fever), £283 3s. 9d.; Adelaide, £835 6s. 4d.; Monkstown, £191 1s. 5d.; Orthopaedic (Usher's Island), £91 15s. 8.; National Orthopaedic and Children's, £78 16s. 1d. Total, £3,750. Before the adoption of the report, Dr. Jacob criticised the mode in which the distribution of the fund was made. The fund is divided by the Distribution Committee into three portions; two portions are allotted to hospitals in proportion to the subscriptions they receive, and the other portion is allotted according to the work done. Dr. Jacob maintained that the former arrangement is faulty, because, he said, the money goes to the institution which begs most successfully; and the latter, because the work is estimated, not upon the benefits conferred on the poor, but by the number of beds maintained (often at an extravagant cost), which he contends, is a fallacious method of judging of hospital work. The extern work went for nothing at all as work done; and an institution in a poor and unfashionable neighbourhood, which did a great deal of external work, did not get a fair share of the money.

KING AND QUEEN'S COLLEGE OF PHYSICIANS.

AT the last meeting of the King and Queen's College of Physicians in Ireland, Dr. Arthur Wynne Foot was elected a Censor of the College in the room of the late Dr. Reuben J. Harvey. At the same meeting, the College resolved to take the opinion of eminent counsel as to the legality of the following resolution of the College, passed on February 21st, 1868; namely, "That in future no King's Professor in the School of Physic shall be allowed to hold an appointment as medical officer to any clinical hospital other than that of Sir Patrick Dun".

THE QUEEN'S UNIVERSITY IN IRELAND.

THIS University, after an existence of thirty-one years and a half, was dissolved by proclamation in the *Gazette* on Friday last, the 3rd instant, to make room for the new Royal University of Ireland. The final meeting of the Senate of the Queen's University was held on the 1st instant. His Grace the Duke of Leinster, Chancellor of the University, who presided, delivered a valedictory address, and afterwards proceeded to confer a large number of honorary degrees on its graduates and on its professors and senators. We are sorry to notice that the medical graduates, who have done more, perhaps, than those of any other profession to raise the character of the Queen's University, have met with but scanty recognition in the rather lavish bestowal of honours on this occasion. Only one of the many distinguished graduates of the University practising in Dublin received an honorary degree; and the grounds on which the gentleman we refer to is stated to have received the degree he so well merits for his professional eminence alone, is that he was a member of the Committee of Convocation of the defunct University. The following appear to be the only medical men selected, all of whom, with one exception, received the honorary degree of D.Sc.: *Senators*: Sir Robert Kane, Professor Redfern, and Dr. Banks. *Professors and Ex-Professors*: Dr. Croker-King, Professor Alex. G. Melville, Professor R. O. Cunningham, Professor Charles, Professor Pye, and Professor H. Leith Adams. *Members of the Committee of Convocation, and of Local Committees of Graduates*: Dr. Corley, Sir William Mac Cormac, and Professor Matthias O'Keefe. *Other Graduates*: Professor James Canning. Dr. M'Mordie received the honorary degree of M.Ch.

THE COMPULSORY VACCINATION ACT.

IN the JOURNAL for December 31st last (p. 1067), we alluded to a decision of a magistrate against the Belfast Board of Guardians, who had prosecuted a Mr. Strain for refusing to have his child vaccinated, and gave twelve shillings and sixpence costs against the board. In consequence of this, the guardians passed a resolution which they forwarded to the Local Government Board, in which they pointed out that the decision of the magistrate in this case would entirely frustrate future

prosecutions of defaulters under the Compulsory Vaccination Act, unless the legality of the decision was tested by the Local Government Board taking the necessary steps for an appeal. On Tuesday last, the 7th inst., a letter was received by the Guardians on the subject, which stated that the question raised being one of importance affecting the general administration of the Vaccination Acts, the Board placed the report of the Belfast solicitor, who had charge of the prosecution, before their legal adviser for his opinion. He considers that the grounds on which it is alleged the case was dismissed, are not valid or sufficient, and adds that the six months' limit fixed by the Petty Sessions Act does not apply to a prosecution for a continuing offence. Further, he is of opinion that Mr. Strain may be proceeded against successfully under the provisions of the 14th Section of the Public Health (Ireland) Act, 1878. That section is copied from the 31st section of the English Vaccination Act of 1867, which was considered fully by the Court of Queen's Bench in 1870. The Court then held that a parent previously fined for not having his child vaccinated can be proceeded against and fined under the provisions of the 31st Section, and that the process can be repeated indefinitely so long as the neglect continues. The 147th Section of the Public Health Act of 1878 points out the preliminary steps to be taken. If, ultimately, the magistrate decline to impose a fine, he may be required to state a case for one of the divisions of the High Court in Dublin, in pursuance of the 20th and 21st Vic., cap. 43. On receiving this communication, the Guardian resolved to proceed against Mr. Strain without delay.

CORK DISTRICT LUNATIC ASYLUM.

LAST Tuesday week, a performance of the opera *Patience* took place at this asylum, and was most successful. It was acted by amateurs for the benefit of the patients, of whom six hundred had an opportunity of enjoying the music, etc. Great credit is due to the efficient superintendent, Dr. Eames, for the time and trouble he has expended in contributing to the welfare of the patients under his care.

HEALTH OF DUBLIN.

WE regret that the roseate anticipations the Superintendent Medical Officer of Health of Dublin published some months, as to the improvement in the health of the city, have not been realised. For the week ending January 28th, the death-rate in Dublin was 36 per 1,000, and, as the Dublin Sanitary Association points out, consequently nearly 90 per cent. over that of Edinburgh, and 35 per cent. over the rate in London. In Dublin city, the death-rate for the month of January has averaged 39.7 per 1,000, which has been the highest rate recorded for any month since last February. The zymotic death-rate has averaged during the same period 8.8 per 1,000, which is considerably more than three times the rate from this class of diseases during the entire of the year 1881. Measles is still very prevalent; forty-seven deaths from the disease were registered during the above week, being fourteen over the number for the preceding week. With reference to the extraordinary prevalence of measles at present in Dublin, the Public Health Committee of the Corporation adopted the following resolution unanimously at its last meeting: "That, in consideration of the prevalence of measles, an urgent appeal be made to the medical practitioners of the city to give immediate notice to the Public Health Committee, in order that all the necessary steps within the power of the committee be immediately taken". With a view to obtaining this desirable information, we trust that the Corporation of Dublin, as the sanitary authority for the city, will exert its influence in supporting the Bill to provide for the notification of infectious diseases recently prepared and approved by the Council of the Irish Medical Association, and by that of the Dublin Branch (*vide* JOURNAL, February 4th, p. 174).

AN OLD GUY'S HOSPITAL NURSE.—The proposal to get up a testimonial to Miss Grant—formerly for so many years "Sister Clinical"—has been most cordially received, over £100 having been collected amongst the staff, and the past and present students of the hospital. Miss Grant has been presented with a gold watch and eighty guineas.

date's knowledge on the subjects mentioned below, and no alteration shall be made in the nature of the examination instituted without the previous approval of the Medical Council, who shall have power, from time to time, to alter or modify such examination as to them may seem fit.

Suggestions to Medical Council for Examination of Midwives.—18. The subjects of examination shall be as follows: (a) The symptoms and course of natural labour. (b) The ways in which labour may differ from its natural course; the signs of such differences; the duties of the midwife in the management of labour, how she is to act herself, and when she must send for medical assistance. (c) A general knowledge of the condition and management of the lying-in woman. Under this head the midwife will be required to be acquainted with the use of the catheter, and the manner of administering clysters, and of washing out the vagina. (d) The management and feeding of newborn children. (e) The conditions as to air, food, state of lying-in room, etc., necessary to health. (f) The duties of the midwife with regard to the patient in all respects; and with regard to seeking medical advice.—19. The fee for the examination shall be £2, to be paid before examination, of which sum ten shillings shall be retained for expenses; ten shillings shall be paid as a registration fee to the district registrar; and the remainder shall be divided among the examiners present. Rejected candidates shall have thirty shillings of their fee returned, the sum of ten shillings only being retained, half for expenses, and half to be paid to the registrar.—20. The duties of midwives shall consist in the attendance on women in natural labour, and in the care of them and of their infants during the first week after child-birth.—21. No midwife is authorised to perform operations, or to prescribe or administer medicines (excepting as allowed in Rule xxii), and she is bound to conform herself in all respects to the regulations laid down by the Medical Council, a copy of which shall be given to each midwife on receipt of her certificate.

Suggestions to Medical Council with reference to Duties of Midwives.

—1. The midwife is not to leave the patient until at least an hour after the expulsion of the after-birth, and she must not administer any medicine except a dose of ergot after the expulsion of the after-birth, or a single dose of laudanum not exceeding twenty drops, or a simple aperient, when any of these are necessary.—2. She shall send for the help of some registered medical practitioner in all cases of presentation of any other part of the child except the head or breech, or of the after-birth, or navel string; and in all cases of flooding and convulsions; and also wherever there appears to be any want of room for the passage of the child.—3. She must send for help in all cases of labour lasting more than six hours after the waters have escaped, and sooner if the woman has been delivered by instruments in any former labour; and likewise every other case where any symptom appears indicating exhaustion or threatening danger either to mother or child; and specially in every instance in which the after-birth is not expelled within half-an-hour after the birth of the child.—4. She must further send in every instance where, after delivery, the progress of the woman or child is not satisfactory, to some registered medical practitioner, and must take his advice as to her further attendance upon other patients.

Moved by Dr. C. HOLMAN, seconded by Dr. FANCOURT BARNES, and Resolved: That the scheme of regulations of examination and registration of midwives in England and Wales is in accordance with the previous reports and resolutions of the Committee, and is approved as a basis for legislation.

Moved by Dr. GRIGG, seconded by Mr. SIBLEY, and

Resolved: That this Committee will co-operate with the Obstetrical Society in drafting a Bill on the basis of these regulations, and taking such other steps as may promote early legislation; and that Dr. Grigg, Dr. Fancourt Barnes, Mr. Sibley, and the Chairman, be appointed a subcommittee for this purpose.

The report upon the progress of Local Legislation as to Infectious Diseases, drawn up by the Chairman, was then considered. It was as follows.

The progress of local legislation in matters affecting the public health is becoming so remarkable and widespread, as to merit the very earnest attention of the Legislature. The anomaly of a town which can afford the expense of a local Act being allowed, without apparent let or hindrance, to override the general statute law in favour of one that its local legal advisers think better, has already been commented on in the JOURNAL. There is nothing new to be said on the subject, except that the local alterations in the Public Health Act are yearly becoming bolder and more general. It behoves the Government seriously to consider whether legislation as regards the health and comfort of the community can be allowed any longer to remain on its present most unsatisfactory footing. Either the Public Health Act is sufficient for the pur-

pose, or it is not: if the latter, the alterations and additions required are equally necessary for one town as the other, and piecemeal legislation of the kind now practised will only complicate the position, and make general reform more difficult.

The new local bills proposed to be submitted for the approval of Parliament during the coming session, will come in due course under the notice of Committee; and it is not now necessary, therefore, to do more than glance at their chief provisions, without comment on the several proposals. Reference to the new Bills may, however, be usefully prefaced with an allusion to the ultimate disposal of the eight Bills of last session dealing with infectious disease. Of these eight bills, six, viz.: Aberdeen, Barrow-in-Furness, Birkenhead, Bradford, Reading, and Stalybridge, actually received the royal assent, the Lincoln and Salford Bills not being proceeded with.

No alteration has been made in the provision of the Aberdeen Bill, requiring medical practitioners to report to the town council cases of infectious disease coming to their knowledge. Nor has any substantial change been made in the Barrow-in-Furness Act as it received the royal assent, except that the power to close places of public resort other than schools, has been expunged. In all other respects the bill, as sketched in my report to the Parliamentary Bills Committee (see BRITISH MEDICAL JOURNAL, vol. i, 1881, pages 375 *et seq.*) remains unaltered.

In the Birkenhead Act, on the other hand, there have been substantial alterations and additions. The corporation are now empowered to enforce the notification to them of any case of "small-pox, fever, cholera, or any other dangerous infectious disease," the particular diseases not being more definitely specified. In a circular, however, which has just been addressed to his fellow-practitioners by Mr. Vacher, the medical officer of health, the diseases about which information is "for the present" required, are stated to be "small-pox, measles, scarlatina, diphtheria, fevers, and cholera." The penalty for failure to notify has been altered from £10 to £5, with £10 for a second or continuing offence. Nurses, and not "female nurses" only, may now be provided by the Corporation for infectious cases. The Corporation can close schools in neighbourhoods affected by dangerous infectious disease, but cannot, as proposed in the bill, close them when the neighbourhood is only "threatened with" such disease, nor can they close "other places of public resort". By the bill they were authorised to establish a temporary hospital or ward "in the event of the prevalence in the borough of any contagious or infectious epidemic or other disease"; but this limitation is now done away with, and the corporation may provide such hospital at any time. Two most important clauses not included in the original Bill appear, moreover, in the Act. The one alters the procedure with regard to the compulsory removal to hospital of cases without proper lodging or accommodation, and makes clear the point which section 124 of the general Public Health Act leaves doubtful, that persons may be removed who are without proper lodging or accommodation, enabling the case to be properly isolated, so as to prevent the spread of the disease, or to be properly treated. (See on this subject JOURNAL, Vol. i, 1881, p. 380.) The next clause, which is practically entirely novel, imposes the penalties of section 126 of the Public Health Act, with regard to the exposure of infected persons or things, upon any person in charge of any infectious dead human body who exposes such body.

In the Bradford Act, the power to close "shops" or other places used for the storage of "provisions, clothing, or other articles liable to retain infection", has not been granted, whilst the diseases to be notified are now "small-pox, cholera, typhus, typhoid, scarlet-fever, scarlatina, or diphtheria" (relapsing fever being omitted). The obligation of the householder to report the existence of cases of infectious disease on his premises now extends to all cases, and not only to those where "no medical practitioner is attending on or has been called in to visit" the sick person. The fee to be paid to medical practitioners is now half-a-crown for each case, without limitation as to cases occurring in the same building. The clauses empowering the Corporation to secure the more prompt isolation in hospital of persons without proper lodging and accommodation (the "Warrington" clauses) have been altogether expunged.

In the Reading Act the power to close places of public resort, other than schools, has not been granted. No bedding, clothing, or other articles, may be removed from an infected house without proper disinfection, or without proper precautions, and to the satisfaction of the medical officers of health, instead of to that of the Corporation. The unnecessary clause giving power to establish a temporary hospital and fittings has been expunged, section 131 of the general Public Health Act being amply sufficient for the purpose. The occupier of a dwelling must now give notice of the existence of infectious disease in his house in any event, and not only if no medical practitioner has been called in. There is no longer any obligation on the sufferer himself to give

poration to use vessels entering or placed within any of the docks within the port of Hull, having any of the crew or other person on board suffering from any infectious disease, to be removed and placed in the river Humber or elsewhere, in such situation and place, and for such period, as the Corporation shall direct. The Corporation also wishes to make further and better provision for closing houses unfit for human habitation, and for enabling them to remove, dispose of, or otherwise deal with, any houses so closed; and, for such purpose, to amend any enactments, either public or local, relating thereto.

The *Liverpool* Corporation asks that further powers may be conferred upon them with reference to the following matters (*inter alia*) connected with the improvement and good government and regulation of the city:—(a) The occupation of premises not fit for habitation, or not in conformity with the requirements of the Acts in force in the city relating to dwelling houses; (b) The providing and erecting of privies, urinals, etc., and the enforcing of by-laws for the better regulation thereof. It also desires to make provision for the better detection and prevention of infectious and contagious disease; the better protection of the public health; the closing of any school in any neighbourhood threatened with or infected by any such disease, and also of places used for sale of milk, fruit, confectionery or food, or for the sale or making up of wearing apparel where such disease exists; and enforcing the removal into hospital of persons suffering under any such disease not having proper accommodation for isolation, and otherwise for the regulation, registration and isolation of cases of infectious or contagious disease.

The *Macclesfield* Corporation wishes to make further provisions with respect to the prevention of infectious and other diseases; for the giving of notice as to infected persons, the providing of hospitals for infectious diseases, the removal of infected persons to hospitals, removal of dead bodies, prohibition of the use of public conveyances for the removal of infected persons or dead bodies, and letting of infected premises;—to extend the provisions of the "Public Health Act, 1875," in relation to privies, water closets, ashpits and drains in houses, to factories, shops and other buildings;—also to make provisions for closing of polluted wells, and other provisions for the abatement of nuisances and for the sanitary improvement of the Borough.

The *Manchester* Corporation, which last year obtained power to require the compulsory notification of infectious cases by means of a provisional order of the Local Government Board (see JOURNAL, vol. i, 1881, p. 857), now seeks to provide that all houses in which members of more than one family reside shall, after notice to the occupiers thereof, be subject to the provisions of Section 90 of the Public Health Act, 1875, which gives the local authority power to make by-laws "as to houses let in lodgings", and to empower the justices to grant an order for inspection of any such house at any hour, where it is suspected that such provisions are not complied with.

The *Newcastle* Corporation desires to make provision for the prevention of the spread of infectious and contagious diseases, and especially by enabling the corporation to compel the removal to hospitals of persons suffering from such diseases; by compelling notice to be given to the corporation of such persons; by closing schools and shops, and buildings used for the manufacture or sale of articles liable to communicate or retain infection; by compelling isolation of such persons, and the disinfecting of them, and of persons attending on them, and of their dwellings, and of infectious matter; by prohibiting the sale of articles liable to communicate or retain infection coming from infected places, and enabling the corporation to obtain information as to persons supplied with such articles; and by regulating the retention, disposal, and burying of corpses.

I do not propose to offer any commentary on these several Bills till the actual text of the proposed clauses is before us; but the general tenour of them is sufficient to indicate unmistakably the necessity that exists for the Local Government Board taking up without delay the whole question of the amendment and amplification of our present Public Health Act.

BRITISH MEDICAL BENEVOLENT FUND.

THE following is a list of subscriptions and donations collected from members of the Metropolitan Counties Branch of the British Medical Association during January 1882, as the result of an appeal made by the President and Secretaries. Nearly all the annual subscribers are new.

Donations.—Allingham, W., Esq., Grosvenor Street, £1 1s.; Armstrong, W., Esq., Grosvenor Street, £1 1s.; Armitage, C. T., M.D., Upper Clapton, £1 1s.; Barker, A. J., M.D., Hornsey Road, 5s.; Bartlett, E., Esq., Elgin Road, 20s. 6d.; Batterbury, R. L., M.D., Berkhamsted, 10s. 6d.; Beveridge, J. S., Esq., Palace Gardens Terrace, 6s. 6d.; Blackmore, G. H., Esq., Hammersmith, 5s.; Blackstone, Joseph, Esq., Albert Terrace, £1 1s.; Bowkett, T. E., Esq., East India Road, £1; Brace, W. H., M.D., Queen's Gate Terrace, £1 1s.; Brunt, T. Lauder, M.D., F.R.S., Welbeck Street, 5s.; Cheyne, R., Esq., Romley, Esq., 27, Nottingham Place, £1 1s.; Christie, T. B., M.D., Ealing, 10s. 6d.; Cobbold, C. S. W., M.D.,

Colney Hatch, 10s.; Cockburn, Surgeon-General R., Leamington Road Villas, 10s.; Coombs, R. Gorton, Esq., Burnham, 5s.; Coombs, R. Gorton, jun., Esq., Tillingham, 5s.; Cooper, F. W., Esq., Leytonstone, 10s. 6d.; Day, W. H., M.D., Manchester Square, £1 1s.; Davidson, Charles, Esq., Cassland Road, 10s. 6d.; Davis, Maurice, M.D., Brunswick Square, 5s.; De Brent, M. J., Esq., Aveley, 5s.; Dingley, W., Esq., Argyll Square, 5s.; Dixon, James, Esq., Dorking, £1 1s.; Durham, Arthur E., Esq., Brook Street, £2 2s.; Durham, Frederick, Esq., Brook Street, £1 1s.; Eady, G. J., Esq., Caterham, 5s.; Forbes, John, M.R.C.P., Jersey, £2; Fotherby, H. I., M.D., Finsbury Square, 5s.; Fowler, Trevor, Esq., Epping, 5s.; Garlick, W., Esq., Great James Street, £1 1s.; Grigg, W. C., M.D., Curzon Street (1881 and 1882), 10s.; Gross, C., Esq., St. Saviour's Infirmary, £1 1s.; Gray, J. H., M.B., Bollingbroke Hospital, 5s.; Hall, F., Esq., Jermyn Street, 7s.; Hamilton, J. Lawrence, Esq., Gloucester Terrace, £1 1s.; Harris, C. J., Esq., Kilburn Priory, 5s.; Hawksley, T., M.D., Grosvenor Street, £1 1s.; Henry, Alexander, M.D., Highbury Hill, 5s.; Hickman, W., M.B., Dorset Square, £2 2s.; Higginson, A., Esq., Tulse Hill, 10s.; Hope, William, M.D., Curzon Street, 5s.; Houghton, W. B., M.D., Cavendish Square, 10s.; Jackson, J. Hughlings, M.D., F.R.S., Manchester Square, £2 2s.; James, J. B., Esq., Jamaica Road, 5s.; Lamb, W. H., M.B., Kensington Park Gardens, 5s.; Lamb, William, M.D., Lewisham, 5s.; Lawrence, H. Cripps, Esq., Oxford Terrace, £1 1s.; Leonard, H. J., Esq., Camden Road, 5s.; Loane, J., Esq., Dock Street, £1 1s.; Marshall, J., Esq., Grange Road, 10s.; Musgrave, J. T., Esq., Finchley Road, £1 1s.; Owen, Isambard, Esq., Gloucester Gardens, 5s.; Paramore, R., Esq., Hunter Street, 5s.; Patten, C. A., Esq., Ealing, 10s. 6d.; Paul, J. L., M.D., Queenborough Terrace, £1 1s.; Pope, Edward, Esq., Tring, 5s.; Potter, G. W., M.D., Grosvenor Street, Highbury, 5s.; Power, Henry, Esq., Great Cumberland Street, £1 1s.; Pritchard, Urban, M.D., George Street, £1 1s.; Quain, Richard, M.D., F.R.S., Harley Street, £1 1s.; Richards, J. P., Esq., Hanwell, 5s.; Rogers, G. H., Esq., Clifford Street, £1 1s.; Rogers, Joseph, M.D., Soho Square, 10s. 6d.; Seaton, Joseph, M.D., Sunbury, £1 1s.; Semon, F., M.D., Welbeck Street, 6s. 6d.; Shillitoe, Buxton, Esq., Frederick Place, £1 1s.; Shillitoe, Richard, Esq., Hitchin, 10s. 6d.; Slyman, W. D., Esq., Caversham Road, 5s.; Smart, J., Esq., Victoria Park Road, 10s.; Taylor, T., Esq., Bocking, Braintree, 10s.; Thomas, G. Danford P., M.D., Paddington, £1 1s.; Timms, Godwin W., M.D., Wimpole Street, 5s.; Toulmin, F., Esq., Upper Clapton, 10s. 6d.; Tucker, A. C., Esq., Richmond Road, 5s.; Turner, F. C., M.D., Finsbury Square, £1 1s.; Vasey, Charles, Esq., Cavendish Place, £1 1s.; Venning, Edgecombe, Esq., Sloane Street, £3 3s.; Wakefield, T. M.B., Nottingham Place, £1 1s.; Walker, A. D., M.D., Ladbroke Grove Road, £2; Walsh, W. H., M.D., Hyde Park Square, £1 1s.; Watson, John, M.D., Southampton Street, £1 1s.; Weber, F., M.D., Green Street, £2 2s.; Welch, C., Esq., Hackney Road, £1 1s.; Woodhouse, R. H., Esq., Hanover Square, £1 1s.; Wright, F. J., M.D., Northumberland House, £1 1s. Total Subscriptions, £63 17s.

Donations.—Adams, James E., Esq., Finsbury Circus, £5; Adams, J. O., Esq., Clapton, £5 5s.; Bantock, G. G., M.D., Granville Place, £1 1s.; Bishopp, J., Esq., Tunbridge Wells, £1; Boulton, Percy, M.D., Seymour Street, £1; Clarke, Benjamin, Esq., Upper Clapton, 6s. 6d.; Croft, John, Esq., Brook Street, £1 1s.; Davies, Gomer, Esq., Pembroke Villas, 6s. 6d.; Durham, A. E., Esq., Brook Street, £5 5s.; Easton, J., M.D., Norfolk Crescent, £2; Erichsen, J. E., Esq., F.R.S., Cavendish Place, £10 10s.; Gimson, T. S., Esq., Fitzroy Square, £1 1s.; Gordon, Surgeon-General C. A., M.D., Westbourne Square, 10s.; Goulet, A. P., Esq., Finchley Road, 10s.; Hess, A., M.D., City Road, £1 1s.; Hinds, James, M.D., Halstead, 5s.; Holding, C., Esq., Victoria Street, £1 1s.; Inglis, C., M.D., Albert Mansions, £3 3s. 6d.; James, W. Culver, M.D., Marloes Road, 5s.; Johnston, W. W., M.D., Tunbridge Wells, £1; Ligertwood, T., M.D., Royal Hospital, Chelsea, 10s. 6d.; Longhurst, A. K., Esq., Hammersmith, 5s.; Maclaren, A. C., Esq., Harley Street, £10 10s.; Maudsley, H., M.D., Hanover Square, £1 1s.; Pollock, R. J., Esq., Wimbledon Park, 7s. 6d.; Richardson, T., Esq., Commercial Road, 5s.; Sanderson, J. Burdon, M.D., F.R.S., Gordon Square, £3 3s.; Saunders, Deputy Inspector-General, C.B., M.D., Colville Terrace, £1 1s.; Taylor, C., M.D., Camberwell New Road, £1 1s.; Tomes, C. S., Esq., Cavendish Square, £1; Toulmin, F. J., Esq., Thurlow Square, £1 1s.; Weaver, Lavaine, Esq., Clapham Road, £1 1s.; Wells, Deputy Inspector-General S. S. D., R.N., Haslar, 10s. 6d.; Woodhouse, John, M.D., Hertford, £1 1s. Total Donations, £64 6s.

THE DUKE OF CAMBRIDGE AT NETLEY.

THE winter session of the Army Medical School, at Netley, was concluded on the 6th instant. The prizes were delivered to the successful competitors by Field Marshal H.R.H. the Duke of Cambridge, who left London by an early train, travelling by the London and South Western railway for the purpose. On reaching Netley the Duke was received by H.S.H. Prince Edward of Saxe Weimar, commanding the southern district, and staff, together with the military and medical officers of the Royal Victoria Hospital, and professors of the Army Medical School. The surgeons on probation, and a number of visitors, were assembled in the principal lecture room. Some ladies, including the Princess of Saxe Weimar, were also present on the occasion.

As soon as His Royal Highness and staff had taken their seats in the lecture-room, a report was read by Professor Longmore on the results of the session; and the names of the gentlemen who had gained the prizes were announced. An account was also read of a new distinction which has been recently added to those previously in the gift of the school, viz., a prize which has been opened for competition in the department of military surgery, and for which the school is indebted to the liberality of Mr. Nathaniel Montefiore, F.R.C.S. A description of this prize appears on another page.

On the preliminary business being concluded, the Duke of Cambridge handed the prizes successively to the gentlemen who had won them, and then addressed the army surgeons on probation in a speech of considerable length and interest. His remarks were highly complimentary to the officers of the military medical services. After some general observations on the progress of the Army Medical School and the instruction given in it, His Royal Highness spoke as follows.

AMBULANCE SERVICE.

SIR,—At the recent meeting at the United Service Institution, I ventured to make a few remarks advocating the extension of the proposed organisation to the whole of the metropolitan police district, so as to include the cottage hospitals of the outer ring as well as the great London institutions. This would, I think, be generally advantageous, but I am especially interested in it with the view of rendering more widely available and useful a cottage hospital which the Chislehurst, Sidcup, and Cray Valley Medical and Surgical Aid Society is about to establish. The consideration of the actual provision of the means of transport is, for our purposes, of minor importance, our society will probably be ready to undertake that part of the work for its own purposes—and indeed it is probable that the same system will not be applicable to the whole district even in London itself—but I regard it as very essential that the whole of the metropolitan police stations should be placed in electrical, and preferably telephonic communication with each other, and with the hospitals in their neighbourhood. A resolution to this effect was on my motion passed at a recent meeting of the St. John's Ambulance Association, to which I, although not a member, was invited in my capacity as a divisional surgeon of police. I cannot help expressing my regret that, at the more public meeting of the 2nd inst., none of the speakers except Mr. Holmes and Sir Edmund Lechmere, chairman of the St. John's Ambulance Association, laid any stress on the good work done by that useful body. The Association, at the meeting referred to, expressed its willingness to undertake the organisation of a more general ambulance system. It possesses the confidence of the public, and, having an excellent organisation well adapted for the purpose, would probably do the work efficiently and economically. It is not too late even now; and I think it would be a graceful act on the part of the newly formed committee, if, as the result of their deliberations, they were to entrust the work of maturing and carrying out a scheme to the association which has already taken the initiative in the matter, and which has deserved so well of the public. —I remain, sir, yours faithfully, C. H. ALLFREY, M.D., F.R.C.S.

SUNSHINE IN THE ISLE OF WIGHT.

SIR,—As an important addendum to the Forty Years' Consecutive Meteorological Observations, with reference to the climate of the Undercliff, Isle of Wight, published by Dr. Whitehead during last autumn, I would ask you to insert in an early number of the BRITISH MEDICAL JOURNAL the following summary of bright sunshine recorded there during the past year, as compared with that given in the *Times* as recorded at Kew. It is to be regretted that it only extends over one year; but that is unavoidable, as the observations are recent. I am anxious to express the obligation I am under to Mr. Kilburn for placing his sun-record at my disposal.

Monthly Summary of Bright Sunshine recorded by W. E. Kilburn, Esq., at St. Lawrence, Undercliff, I. W., as compared with that at Kew, derived from the "Times".

ST. LAWRENCE.	Hrs. Mins.	Kew.	Hrs. Mins.
January	39—35	January	23—38
February	58—24	February	26—45
March	151—26	March	103—
April	124—3	April	128—30
May	186—39	May	202—30
June	185—38	June	236—30
July	202—34	July	242—30
August	196—6	August	176—
September	152—	September	86—
October	143—9	October	106—
November	83—14	November	76—30
December	61—32	December	41—30
	1,605—28		1,451—23

In considering the foregoing tables, it is necessary to bear in mind that they contain the record of bright sunshine, and not what might otherwise come under the category of "sunny days".

The record is obtained by the rays of sun passing through a sphere of glass, and burning their course on a slip of card, on which the several hours of the day are carefully divided; but, in order to effect that, the atmosphere must be clear—haziness or very thin cloud dispersing the focus, and thus interfering with the action of the instrument: a fact which tells somewhat disadvantageously as regards the Undercliff during the summer months, in consequence of haze, which occasionally develops itself during the finest weather, from the sea-board.

Another circumstance which limits the action of the instrument at the Undercliff during summer, is the shade in which it is thrown from

the Downs and range of cliffs which bound it to the north and east; the early rays of the sun in May, June, July, and August, are intercepted by the high land at Dunnose in the early morning, while the Undercliff itself falls into shadow as the sun wends to the westward, soon after 6 P.M., a circumstance which tends materially to limit the action of the recording instrument, and accounts, in a great measure, for the apparent deficiency of sunshine during the summer months, as compared with that recorded at Kew. Probably, in future tables, some approximate estimate may be made of the loss of recorded sunshine, in consequence of the position of the Undercliff just alluded to. —I am, sir, your obedient servant, J. B. MARTIN, M.R.C.S.

Ventnor, January 26th, 1882.

SPECIAL CORRESPONDENCE

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

Diseased Meat in Glasgow.—Glasgow Science Lectures.—Annual Meetings of the Charities.—Glasgow Training Home for Nurses.

THE report which has just been issued by the medical officer of health on the subject of diseased meat in Glasgow, will be read with a good deal of interest, for it unfortunately confirms the very unpleasant and alarming disclosures that have recently been finding their way into the public papers as to the importation of bad meat into Glasgow, and its distribution over the city; and it brings out the weak points in the arrangements that now exist for the protection of the dead meat market. According to the present system, the corporation appoints an inspector who devotes all his time to attending the market, and seeing that no bad or diseased meat, which may be exposed, is allowed to get into consumption. Of course, this is only as it should be, and on the face of it it would not seem possible for diseased meat to get into use; but recent events have shown that these precautions are not sufficient. They do not meet the case of dead meat sent into the city from the country, against which there is almost no safeguard, and in which very often mischief lies, for many an animal is slaughtered when suffering from some obscure disease, should it seem likely to die, and its carcase sent in, all ready dressed, into the market. It is impossible often for the inspector under these circumstances to recognise anything wrong with the flesh, and it is forthwith taken into the market and disposed of for food. The most glaring instance of this kind, and the one which has called forth the present report on the part of Dr. Russell, took place a few weeks ago, when the carcases of about sixty cows, which had been killed when in a dying state from some obscure disease, were sent in from a Renfrewshire dairy to the dead meat market here and were sold for food, having all passed the inspector. It appears now that the disease from which these animals suffered was that known as "splenic apoplexy", for a drop of blood taken from the centre of the spleen teemed with the "bacillus anthracis", a rod-shaped organism, which is the specific poison of that so-called malady. As yet, it seems that no fatal results have been known to arise from this unfortunate state of things, but these disclosures cannot but cause a wide spread feeling of alarm and also indignation among the general public. Apart from the question as to whether some steps should not be taken to severely punish persons who thus knowingly send diseased meat into the market and endanger the lives of the community, it behoves the authorities to lose no time in drawing up such rules as would prevent in future the possibility of such an occurrence. Dr. Russell has thrown out some suggestions to meet the requirements of the case, and which he thinks, if properly carried out, would render the present official inspection more efficient. Not a day should be lost in sanctioning these proposals, or even more stringent ones, if they should be deemed necessary.

In striking contrast with this unfortunate episode, where we find a few unscrupulous individuals, for the sake of gain, spreading disease of a virulent character among the community, is the lecture recently delivered in our city hall, under the auspices of the Glasgow Science Lectures. Here we have another notable example of the disinterested efforts that are now being made by the medical profession for the prevention of disease and the spread of a better knowledge of the laws of health among the masses of the people. The subject of the lecture was, "The Antiquity of State Medicine: a Lesson for the Future." The mediæval, to say nothing of the Mosaic, practices, with regard to infectious diseases, have a remarkable bearing on modern investigations and preventive measures; and the whole facts bearing on the matter were ably marshalled and dwelt on by Dr. Fergus. He gave in his firm adhesion to the germ theory in connection with zymotic diseases,

the Lock Hospitals on that station and in Japan. His promotion to Deputy-Inspector took place in January 1878, and his subsequent service was at Haslar, until sent out to Malta as the successor of Dr. Irwin.

THE TRAINING OF NAVAL MEDICAL OFFICERS AT NETLEY.

SIR.—It is not my intention to trouble you with any remarks directed to the person mentioned in the letters of your correspondent "Medicus Navalis". It is of no interest who I may be, or what position I hold in the service; suffice it to say that I had grounds for making the statement I did. My intention rather is, with your kind permission, to refute the unmerited obloquy cast on our predecessors, as well as ourselves, by "Medicus Navalis" in your copy of January 28th. The navy can boast of such names as Sir J. Clark, Sir J. Hooker, Spencer Wells, and Christopher Heath—a few only who belong or belonged to our own times. I do not wish to draw any invidious comparisons, but merely to show the utter groundlessness of your correspondent's statements. There is an old proverb with regard to birds of a certain class, and I fear the incubating process at Netley has supplied us with a goodly brood.—I am, etc., R. N.

The above should here close.

A NAVAL COURT-MARTIAL.

SIR.—In your recent remarks on "A Naval Court-martial", I think you scarcely estimate fully the amount of punishment awarded the unfortunate officer for an offence which was "not fully proved". In the first place, all courts-martial are ordered by the Commander-in-Chief, on application of the commanding officer of a ship. Officers so tried on a foreign station for a breach of discipline are scarcely ever acquitted; and, in fact, it is generally understood that the members of the court, in this manner supporting each other, will condemn a man whatever the evidence may be. It is also well known how difficult it is on board-ship to obtain evidence against that of the commanding officer. With reference to the constitution of the court, it may be pointed out that, if it is of consequence in matters of discipline that officers of the civil branches should be represented when anyone of their particular department is being tried, such a representation is still more important when the charge advanced is one requiring special knowledge for its due consideration.

Dismissal from a ship in Japan is a much more serious matter than the same sentence passed in England. It entails, amongst others, the following results: No pay till arrival in England, and then only, and such an amount of half-pay as may be decided by the Admiralty; passage found by the dismissed at his own expense (from Japan about £100), or, if allowed in a man-of-war, which might not leave for months, with only subsistence-allowance of food, two-thirds of an able-bodied seaman's portion, and perhaps the privilege of slinging a hammock amongst the subordinate officers; and continuance of half-pay in England for an indefinite time, which it is impossible to utilise properly, as its duration is uncertain. In the present case, the length of time will probably depend on the number of candidates that may come forward at the next examination greater than the half-dozen advertised for.

It is also a somewhat sanguine view of the victim's position to suppose that he will be promoted to a senior rank after completing fourteen years' service. Such has not been the custom heretofore in the case of an officer tried by court-martial, unless he have been lucky enough to get the opportunity subsequently of distinguishing himself. The wording of the recent warrant is not such as to raise any hope of a change in this respect, for it is expressly provided that an officer must be recommended by the Medical Director-General.—I am, etc., NAUTILUS.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

THE LOCAL GOVERNMENT BOARD AND MR. DONAHOO.

IN the High Court of Justice (Chancery Division) a motion to restrain the defendants, the Local Government Board, from removing Mr. Donahoo from his appointment as district medical officer of St. Saviour's Union, came on for argument. Mr. Donahoo some weeks ago was suspended from his office. Subsequently his conduct became the subject of a Poor-law inquiry, conducted by Mr. Hedley, one of the inspectors of the board.

It was alleged on the part of Mr. Donahoo that the inquiry was incomplete, inasmuch as the defendant, Mr. Donahoo, had not had the opportunity of calling witnesses for his defence; and at the inquiry, was further surprised at finding that allegations were made and evidence offered, of which he had received no previous information, and which, therefore, he was not able effectually to rebut. The Local Government Board had, on the information of their inspector, called on Mr. Donahoo for his immediate resignation; and this, this gentleman had resisted, asking for the Court to intervene.

His lordship, however, in giving judgment, stated that the motion had entirely failed, and must be refused.

We sympathise with Mr. Donahoo, as we consider that he has been hardly used. His case, however, presents another instance of the manner in which Poor-law medical officers are too often treated in any dispute which may arise between them and their respective boards.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of the Council of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt Court, Fleet Street, February 7th, the recent Poor-law inquiry at the Birmingham Workhouse was brought

under their consideration, together with the comments of the local press thereon, when it was unanimously resolved that the sympathy of the Association be accorded to Dr. Simpson in the unmerited persecution, expense, and anxiety to which he has been subjected at the instance of the Chairman of the Visiting Committee and others of the Birmingham Workhouse. The Council also wish to express its unanimous opinion that the requirements of this huge workhouse hospital cannot be efficiently rendered by the very limited staff provided by this parsimonious board of guardians.

At the same meeting, it was also resolved that, having regard to the reply made by Mr. Forster, Chief Secretary for Ireland, to a deputation of the Irish Medical Officers' Association, that it was his intention to bring in a Bill to provide for the more efficient and satisfactory arrangements for superannuation of Poor-law officers engaged in the administration of relief in Ireland, that the Council have determined at an early date to apply for an interview with Mr. Gladstone, for the purpose of soliciting from that gentleman his assent to the introduction of a similar measure in the interests of the Poor-law officers for England and Wales.

HEALTH OF BIRMINGHAM.

THE report of Dr. Alfred Hill, for the quarter ended December 31st, 1881, states that the number of births was 3,590, consisting of 1,822 males and 1,768 females, against 3,471 in the fourth quarter of 1880. This gives a birth-rate of 35.7 per 1,000 per annum, as compared with rates of 39.4 and 35.2 in the autumn quarters of 1879 and 1880 respectively. The deaths last quarter amounted to 2,111, comprising 1,044 males and 1,067 females, and are equivalent to an annual death-rate of 20.99 per 1,000 persons living. The death-rate for the fourth quarter of 1880 was 18.87, and for the corresponding period of 1879, 22.64. The higher death-rate of the quarter was owing partly to the greater fatality of most of the principal zymotics, but also in a great measure to augmented mortality from the majority of the local diseases. The seven principal zymotic diseases resulted in 317 deaths, a number comparing very unfavourably with that for the previous autumn quarter, when the deaths from these diseases were in the aggregate only 199. The zymotic death-rate in the past quarter was 3.1 against rates 3.5 and 2.0 in the corresponding periods of 1879 and 1880. All the chief infantile zymotic diseases, except diarrhoea, showed an increase during the quarter. Whooping-cough continues to be very prevalent, and is the most serious factor in the higher zymotic-rate, having caused 87 deaths, as compared with 47 in the fourth quarter of the previous year. Measles stand next in order of fatality with as many as 75 deaths, and the mortality was on the increase during the latter part of the quarter of 1880, only 6 deaths from the disease were recorded. Diarrhoea, which in the autumn quarter of 1880 was the most destructive of the chief zymotics, and was certified as the cause of death in 85 instances has, during the quarter under notice, owing principally no doubt to the low temperature, occasioned only 58 deaths; while those from scarlatina, which in the previous autumn quarter were only 25, amount this quarter to 54. This zymotic, like measles, appears to have prevailed more extensively in the sub-district of Deritend than elsewhere. The deaths from diphtheria have increased from 15 in the fourth quarter of 1880 to 25 this quarter, while those from fever have declined from 21 to 18. Small-pox has, as in the two preceding autumn quarters, caused no deaths, and not a solitary case has been reported to the medical officer. So many as 129 cases of scarlet fever have been removed to the borough hospital during the quarter. The patients admitted in the corresponding period of 1880 numbered 65, of whom 62 were suffering from scarlet fever, and the three other from small-pox.

SIR.—Can any of your readers inform me of the name and address of the manufactory of Harescough's excreta pail, with patent spring lid?—I am, etc., J. H. T.

DR. J. C. REID (Newbiggin-on-Sea).—The prevention of the spread of small-pox in every possible way is, of course, a proper matter for the attention of the medical officer of health. Whether the closing of the school was, in the circumstances referred to, the best course to adopt can hardly be decided without local knowledge. There do not seem to be any grounds for supposing that the pupil-teacher was a carrier of infection; but Dr. Reid has, no doubt, satisfied himself that the children associated with him are, as a matter of precaution, thoroughly well protected by vaccination.

POTABLE WATER AND LEAD PIPES.

SIR.—I have seen several cases of lead-poisoning lately, and want to allude to them in my annual report, as two or three of them have been caused by the drinking-water being conveyed through lead pipes and pumps. This place is so out of the world, that I cannot get access to modern books, and do not like to trust to memory, except with trustworthy confirmation. Will some of our associates deny or affirm the following opinions, and answer the following questions? 1. Very soft water becomes impregnated more easily than hard, with, perhaps, a slight excep-

[illegible]

MANAGEMENT OF CHILDREN.

Str.—In your last issue you state, in one of the paragraphs under the leading articles, "The following are the names of those who have been elected members of the Association." In the list of names which follows there is no name of Mr. J. Comyns Leach. I am informed by Mr. J. Comyns Leach, M.D., B.Sc., S. Sc. C. Camb., that he has been elected member of the Association, and that his name has been placed at the head of the list of names published in your issue of the 10th inst. I therefore beg to ask you to publish the following list of names as the correct one:

J. COMYNS LEACH, M.D., B.Sc., S. Sc. C. Camb.

THE FIRST SEVERAL HOURS OF LUNACY

I have been thinking about you and your family a great deal lately. I hope you are all well and happy. I have been very busy with my work, but I always find time to think of my friends. I am sure you are all doing well. I have been thinking about you and your family a great deal lately. I hope you are all well and happy. I have been very busy with my work, but I always find time to think of my friends. I am sure you are all doing well.

CONTENTS OF THE JOURNAL—AIDS AND MIDWIFERY 111

[illegible]

OBITUARY.

SIR ROBERT CHRISTISON, BART., M.D., D.C.L., LL.D.,
PHYSICIAN IN ORDINARY TO THE QUEEN IN SCOTLAND : VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION. ETC.

ON Wednesday, February 1st, the New Calton Cemetery received the remains of Sir Robert Christison, Bart., M.D., Emeritus Professor of the University of Edinburgh, a man whose name for more than fifty years took a chief place in the most brilliant epoch of that renowned school of medicine—an epoch also adorned during periods of greater or less duration by other great men now no more, among whom were Alison, Charles Bell, James Syme, James Simpson, Hughes Bennett, and John Goodsir. After an illness of little over a month's duration, and in his eighty-fifth year, Sir Robert died on the 27th of January 27th, full of years well spent in the service of humanity, and his merits acknowledged by every token that the Sovereign, the profession, and the public could bestow.

Born in Edinburgh in 1797, and the son of a Professor of Humanity in the University, he received his education at the High School, and in the arts classes in the University. Having obtained a solid and general education, he entered thoroughly into that of medicine, and graduated as Doctor of Medicine in 1817. Soon after he had long experience as resident physician and surgeon in the Royal Infirmary, he went abroad, and, under Robiquet and Orfila, extended his study of chemistry and toxicology, the latter subject he afterwards taught and he wrote with him, and destined to yield him the greatest of all public benefits, and to himself much enduring fame. In 1822, when only twenty-five years of age, he was appointed Professor of Medical Jurisprudence in his own University; his tenure of this office lasted but ten years, and, during that time, so thoroughly was his work performed in the teaching aspect of his professoriate, that he left the class a dozen times as long as he found it; while he produced a *Précis de Médecine Légale*, an ample evidence of his research and a valuable addition to the subject. In 1832, he was appointed to the chair of Materia Medica, and, as such, also acted as a Professor of Clinical Medicine in the Infirmary. For forty years he held the chair of Materia Medica. He added much lustre to it by his teaching, by such writings as his *Pharmacology*, and by the experimental researches he conducted—researches which were frequently made on his own person, and sometimes at imminent risk to himself, while he left it enriched, not only by all the traditions of his own teaching, writing, and research, but also by an extensive museum of materia medica and pharmacology. As a Professor of Clinical Medicine, Dr. Christison will be remembered by many of the seniors of the profession; while, in his work on *General Principles and Practice of the Knowledge and Management of the Diseases* to medical literature, may be seen how profitably he availed himself of his opportunities of clinical research.

As a consulting physician, he was accepted, as a rule, and as a friend. In his later years, Dr. Christison's position was somewhat peculiar, that it was not to do more than glance at the most important phases, as there was scarcely any professional or public movement of importance with which he was not a contributor, and of which he was not an important moving factor. A Fellow of the College of Physicians of Edinburgh, in 1823, he was subsequently President, and had the rare honor of re-election, while, no person was permitted to succeed him, he presided for years almost exclusively. A member of the Board of Health in Edinburgh, he was also a member of the Medical Council, a Vice-President, and for five years President. For the same year he was elected to the General Medical Council, but he was not in matters that Dr. Christison found his greatest employment, whether the work to be done related to the founding of a new school, the building of a new hospital, or for the carrying out of the University of London, or the furtherance of the efforts of an athletic club, or a voluntary fire engine, his ready assistance could be counted on, and he was not in any case without a ready and ready way of working out his plan.

See H. J. A. Grooten, *Levens van de leden van de Vereniging van de Transvaal van de British Medical Association*, 1917, p. 149, paragraph 1, 1878 and 1925. On the latter occasion, he was treasurer and, in his closing address, gave an elaborate account of his services to the profession of his University in regard to his education. He was also President of the Transvaal Association for the Advancement of Science in its meeting in Johannesburg, 1921, by personal advice, and not otherwise the choice of president.

Following the attack on Cape Cod, he had the satisfaction of receiving many testimonials of the high estimation in which he was held, and, it is pleasant to think, while he was yet a young man. His Majesty the Queen conferred on him in 1871 a baronetcy, and to her he was

Physician in Ordinary for many years; his own University made him an LL.D., and Oxford made him a D.C.L. His bust, by Brodie, has for years been in the library hall; and, on his jubilee day as a professor, he received a splendid ovation in token of the regard in which he was held by the public and profession.

As a man, one could write much of the deceased. Physically, he was well endowed; and the man who, when seventy-eight years of age, twice climbed Ben Voirlach, had no reason to upbraid nature. Strong in body, he was also strong in mind; he had an almost inflexible will, and pursued his course, when he had determined upon it, with a resoluteness that defied resistance and scorned criticism. His integrity was above all doubt; and, although many differed from him on essential points, no one considered that he was ever actuated but by a strong desire for what he considered the good of the object in view. In the University Court, in the Senatus Academicus, and in the Infirmary Management, his counsels were sagacious, and were received with much respect.

Sir Robert Christison had at times a manner which could be considered cold and even imperious; and doubtless a man who has held such positions of power is apt to develop this characteristic, especially when he is not satisfied with the objects of the individual to whom he is so. But the writer of this imperfect notice can testify how thoroughly consistent a friend the late baronet proved to anyone in whom he was interested, and how he did not allow differences in political opinion to weaken his kindly offices when they were needed. Many wondered why he did not enter Parliament; and, in reply to a question on this point, he very tersely closed the subject by saying "he would not sit in the Commons to be at the beck of any party or whip". And certainly, had he sat there, it would have been on his own terms.

Sir Robert Christison has left three sons. The eldest, now Sir Alexander Christison, a deputy-surgeon-general in the Bengal Army, was about two years ago appointed Surgeon-General (local rank) of the North-West Provinces and Oudh. The second, Dr. David Christison, practises medicine in Edinburgh; and the third, Mr. John Christison, a writer to the signet, is Secretary to the Edinburgh University Court.

His funeral in Edinburgh was one of the most remarkable that has ever been seen there. The vast numbers who witnessed it, and the public bodies that took part in it, were a reflex of the character of the deceased. The University, represented by nearly all its professors, their assistants, and the General Council; the Town Council; the Royal Colleges of Physicians and Surgeons; the Royal Society; the Infirmary Managers; the Society of Arts; the Pharmaceutical Society; the University Volunteers (of which the deceased had long been the Captain), and a great body of students; together with Lord Rosebery, Rector of the University of Edinburgh; Principal Caird, representing the University of Glasgow; Drs. Cobbold and Dyce Duckworth of London; Mr. Bickersteth of Liverpool; and the private friends of the family,—formed a *cortège* which was no unfit tribute to a life which lasted eighty-five years, and which had been conspicuous by its integrity, its ability, and its success. And, while we may consider those who took part in the funeral privileged in doing so, we finish this notice by saying that the sun never sets on those who will mourn in all parts of the world the loss of their old teacher, Professor Christison.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

THE LINACRE PROFESSORSHIP OF PHYSIOLOGY.—A decree was this week passed in convocation, granting a sum not exceeding £250 for the purpose of providing the Linacre Professor of Physiology with additional microscopes, diagrams, and drawings for the use of students in the physiological laboratory, as well as with additional cupboards for containing diagrams and drawings.

DR. CHARLES MOTT, late medical officer and public vaccinator of the Walton district, Chertsey Union, has obtained a superannuation allowance of £50 per annum.

PRESENTATION TO DR. AICKIN, OF BELFAST.—An address, accompanied by a handsome silver salver and purse of sovereigns, were recently presented to this gentleman on the occasion of his recovery from a severe illness, and as a token of the esteem in which he is held, and to record his high professional skill. The salver bore the following inscription:—"Presented, together with a purse of sovereigns, to William Aickin, Esq., M.D., by his friends and patients. Belfast, 1882."

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 2nd, 1882.

Black, Robert, 15, Lewisham High Road, New Cross.
Haig-Brown, Clarence William, Charter House, Godalming.
Jea, Francis James, Downside, Bath.
Quadros, Michael Anthony de, Elliot's Row, Southwark, S.E.
Sutton, John Bland, 37, Canonbury Square, N.

The following gentlemen also on the same day passed their Primary Professional Examination.

Watson, William, Guy's Hospital.
Lovegrove, Thomas Ernest, St. Bartholomew's Hospital.

At the Preliminary Examination in Arts, held at the Hall on the 26th and 27th January, 1882, sixty-eight candidates presented themselves, of whom thirty-six were rejected, and thirty-two passed and received certificates of proficiency in general education. In the first class:

Charles Mortlock.

In the second class, in alphabetical order:

F. C. Augear, G. P. Brownlow, J. F. Chauveau, A. W. Cooke, A. C. Dove, F. Dymoke, M. M. Edwards, A. R. F. Evershed, W. D. Gimson, T. A. Grieves, B. A. Hamp, A. G. Hendley, H. R. Henley, J. G. Johnson, Richard Jones, Henry Lotz, A. O. J. Macann, A. J. Macnab, C. Manby, F. E. Marshall, H. Cecil Morris, F. B. Morse, W. H. Moyle, R. M. Peill, J. K. Prescott, C. T. Quiller, E. Somerset, F. Stamper, W. H. Timms, J. P. Watkins, W. B. Wedgwood.

The following candidates likewise passed in Elementary Mechanics.
G. P. Brownlow, J. F. Chauveau, S. A. Grieves, C. Mortlock, and F. Stumper.

MEDICAL VACANCIES.

THE following vacancies are announced:—

BRISTOL GENERAL HOSPITAL—Physician's Assistant. Salary, £50 per annum. Applications by February 18th.

BRITISH LYING-IN HOSPITAL, Endell Street, W.C.—Honorary Physician. Applications by February 13th.

CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor—House-Surgeon. Salary, £100 per annum. Applications by 11th February.

CHILDREN'S HOSPITAL, 49, Great Ormond Street, W.C.—Clinical Assistant. Applications to Dr. Lee.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental Surgeon. Applications by February 13th.

DROGHEDA UNION—Medical Officer for Monasterboice Dispensary District. Salary, £110 per annum, with £30 yearly as Medical Officer of Health, registration and vaccination fees. Election on the 21st instant.

GLENMADDY UNION—Medical Officer for Williamstown Dispensary District. Salary, £120 per annum, with £25 yearly as Medical Officer of Health, registration and vaccination fees. Election on the 17th instant.

GREENOCK INFIRMARY—Assistant House-Surgeon. Salary, £30 per annum. Applications to the Secretary, 2, Bank Street, Greenock, by the 14th instant.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistant. Applications by 11th instant.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square, W.C.—Two extra Visiting Physicians. Applications by the 21st instant.

MONTROSE ROYAL LUNATIC ASYLUM—Assistant Medical Officer. Salary, £120 per annum. Applications to Dr. Howden.

NEWCASTLE-UPON-TYNE INFIRMARY—Senior House-Surgeon. Salary, £100 per annum. Applications by February 22nd.

POPLAR HOSPITAL FOR ACCIDENTS, Blackwall, E.—Honorary Surgeon. Applications by January 21st.

RADCLIFFE INFIRMARY, Oxford.—Junior Resident Medical Officer. Salary, £60 per annum. Applications by February 22nd.

ROTHERHAM HOSPITAL—Resident House-Surgeon. Salary, £100 per annum. Applications by February 28th.

ST. BARTHOLOMEW'S HOSPITAL—Assistant Surgeon. Applications by 14th February.

ST. BARTHOLOMEW'S HOSPITAL—Surgeon. Applications by 14th February.

ST. BARTHOLOMEW'S HOSPITAL, Chatham.—Assistant House-Surgeon. Salary, £80 per annum. Applications by February 13th.

ST. MARK'S OPHTHALMIC HOSPITAL, Dublin—House-Surgeon. Salary, £52 ros. per annum. Applications to the Registrar by February 18th.

THURLES UNION—Medical Officer for Templemore Dispensary District. Salary, £120 per annum, with £10 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 15th instant.

MEDICAL APPOINTMENTS.

BUTLER-SMYTHE, A. C., M.R.C.S.Eng., appointed Honorary Assistant Medical Officer and Chloroformist to the Hospital for Women and Children, Vincent Square, S.W.

DAVIES, Sydney, M.R.C.S., appointed House-Surgeon to the Evangelical Protestant Deaconesses Institution and Training Hospital, *vice* Arthur Newsholme, M.D., resigned.

DWYER, J. J., L.K.Q.C.P., appointed Medical Superintendent of the Mullingar Lunatic Asylum.

GODSON, C., M.D., appointed Consulting Physician to the City of London Lying in Hospital.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PHYSICIAN HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE ANTIQUITY OF EARTH-TO-EARTH BURIAL.

SIR,—Possibly many persons might not be aware that the system of earth-to-earth burial introduced by Mr. Seymour Haden, and eloquently advocated by him in a series of letters to the *Times*, is by no means new-fangled, but can be traced to a remote antiquity. It appears, from the highest authorities, that the bodies of the early Christians which were laid in the catacombs of Rome had been committed to their final resting-place without coffins. "With the same feeling of reverence that surrounded the whole rite," observes one of the authors of *Christian Antiquities*, "the bodies of the faithful were not buried naked, but wrapped in linen cloths, 'as the manner of the Jews is to bury'." Sometimes, the body was enveloped in a sheet, sometimes swathed in many lengths of bands, in the same fashion as Lazarus is represented in the early Christian pictures and bas-reliefs. Bosio assures us that, in excavating the foundations for St. Peter's, he found instances of both modes. He mentions that bodies were exhumed bound with linen bands, and that he himself had seen a very many wrapt in linen sheets of exceeding fineness, which fell to dust at the touch." Although the coffin was occasionally used by the Romans, it was usually of wood, and placed at the top. Even in England, it was customary to wrap the dead in a woollen covering, and carry them to the grave. In Palestine, according to Dr. Van Dyck, coffins are only used in the cities—a custom but of comparatively recent date, the ordinary mode of burial being to lay the corpse in its best dress, and lay it on a bier with a cloak thrown over the body, leaving the face exposed. The inhabitants of Beirut carry their dead to the grave on a bier, and only occasionally put the body into a lightly constructed coffin at the grave. Dr. Erasmus Darwin, in his *Phytologia*, and Francis Osborn, in his *Advice to a Son*, commend the natural committal of the dead to the earth. "To artificial obstacle between either, so that Nature's process may be duly accomplished without danger to the living, or defrauding the soil of its essential right," Osborn, the brother of the first Duke of Leeds, and who wrote about the middle of the seventeenth century, counsels his son thus: "Be not solicitous after pomp and funeral, nor use any expensive *Funeral Ceremony*; by which Ministers, like *Crowes*, *deceive the Living*, under pretence of honouring a dead Person. Neither can I apprehend a Tomb-stone to add so great a weight of grief to the dead, as it doth of Charge and trouble to the Living. None being so unwelcome to the wasters, in my opinion, as those that build Houses for the Dead: He that lies under the Herse of Heaven is convertible into sweet herbs and flowers, and may rest in such bosoms as would shreek at the ugly bugbs, may possibly be crawling in the Magnificent Tombe of Henry the Seventh."—"I am, etc., SANITAS.

SIR,—The retiring members of the Council of the College of Surgeons of England are Mr. Marshall of University College Hospital, President of the College; Mr. Henry Power of St. Bartholomew's Hospital, Chairman of the Board of Examiners; and Mr. Alfred Baker of St. George's Hospital, who, it is rumoured, will not offer himself for re-election. The other candidates will do so. The only candidates at present mentioned are Mr. John Cooper of St. Thomas's Hospital, a member of the Court of Examiners; and Mr. Robert Harrison, who goes to the Liverpool Infirmary. The following are the proposed surgeons on the Council: Dr. Humphry of Cambridge, Mr. Baker of Birmingham, Mr. Lund of Manchester, and Mr. Cadge of Norwich.

MEDICAL ATTENDANTS ON WARDS IN CHANCERY.

SIR,—Can you kindly answer the following questions in your Notices to Correspondents in the next or an early number of the JOURNAL? A negative or affirmative reply to the numbers will suffice. 1. Does the Court? or, 2. The guardians having charge of wards in Chancery choose their medical attendant? 3. Is it inadvisable for the guardian's own medical attendant should be employed because the wards are related to his wife? I enclose my card, and remain, sir, yours faithfully.

M. E.

The medical attendants of wards of Court undoubtedly are the right persons to select for the purpose, and it is immaterial that a guardian's own medical attendant should be engaged to attend upon them; and the Court would not interfere with this course, as it would not be likely to be of any benefit to the wards.

Dr. M. Dr. Ellis on *Diseases of Women*; Dr. Tanner and Dr. Meadows' *Practical Treatise on Diseases of Infancy and Childhood*; Mr. R. Brudenell Carter on *the Diseases of Infancy*; Mr. W. W. W. book on the same subject; Dr. M. Dr. Ellis on *Diseases of Women*; or Dr. Hermann's *Elements of Physiology*, translated by Gamgee.

PHTHISIS.

SIR,—Will you, or some of your numerous readers, kindly inform me where I can find statistics with regard to phthisis? its distribution throughout Great Britain, and the special features, geographical, climatic, and geological, affecting it in the different parts, similar to the returns of the Registrar-General with respect to zymotic diseases.—I remain, sir, your obedient servant,
Hanley, near Huddersfield, February 4th, 1882. T. SMAILES, M.R.C.S.

EXPERIMENTS ON ANIMALS.

SIR,—I am glad to see that Mr. Jesse, in his letter in the JOURNAL of January 14th, has substituted the above heading for the misleading term "Vivisection". I have always felt that this term was a misnomer—a *suggestio falsi*, a *suppression veri*—and one well calculated to inflame the mind of a humane, yet technically ignorant, public, who would naturally interpret it into a dissecting alive or cutting up a living animal.

Now, we know very well that the majority of the so-called vivisections are more of the nature of, and many of them not so severe as, ordinary surgical operations which are being daily performed on ourselves; true, we give anaesthetics; and so we do to the animals experimented on, whenever it can be done without vitiating the experiment. Having regard, then, to the heading of his letter, Mr. Jesse is to be congratulated, though I cannot award the same praise to his candour; he has, in fact, not met my question, but evaded it, and dealt in generalities, which may apply to the sportsman, but certainly not to the physiologist. Not to dwell, however, on the religious aspect of the question, which was forced on me by Mr. Jesse's appeal to a higher than "an earthly tribunal", I must refer him to his sporting friends for an answer to his question, whether "any justification can be found for human beings who perpetrate such tyranny as the infliction of agonising torture and death on the unoffending and the dumb". The question, as thus put is offensive to the physiologist, whose end and object is not, as Mr. Jesse suggests, the infliction of pain for mere amusement, but for its alleviation and diminution—the prolongation of life, and the general increase of human happiness; pain is but an incidental accompaniment of the means necessary for accomplishing the above laudable objects. Could the knowledge thus acquired be obtained otherwise than by experiment, vivisection would not, from a humanitarian point of view, be justifiable; but Nature will not readily give up her secrets. "It is not sufficient," said Bacon, "to observe Nature; we must interrogate, torture her." If it be admitted that a knowledge of physiology is beneficial to mankind, then we must adopt the same methods for its cultivation as are pursued in the physical sciences. The science of physiology has to do with the laws which govern organised and living bodies, as that of physics and chemistry has to do with the inorganic; we can no more investigate the one than the other without experiment; so that the necessity is thus laid upon us, in cultivating physiology, to do that which otherwise would be repulsive to our feelings, and no doubt cruel, in the sense in which we understand that term. But surely this cruelty has redeeming features, which cannot be alleged in defence of the multifarious and innumerable horrors which are daily, and almost hourly, committed in our midst, and familiarity only with which has deadened our faculties to the perception of their enormity.

Now, these are facts which cannot be denied; and the indictment I bring against the antivivisectionists is that, while they make no effort to mitigate any of these atrocities—to use their own strong language—or to put down sports:

"Detested sport,

That owes its pleasures to another's pain!"

they pour out all the vials of their wrath on a few truth seeking and self-sacrificing men, who, in the pursuit of scientific truth, and with the ultimate object of mitigating suffering and prolonging life, inflict some pain on a few of the lower animals. I now call on them, in the name of justice and consistency, either to prosecute the sportsman, or cease to persecute us. If they shrink from doing so, they must henceforth stand convicted of

"Compounding for sins they are inclined to,

By damning those they have no mind to!"

of straining at the smallest of gnats, and swallowing the greatest of camels.—Yours truly, C. HOLTHOUSE.

F.R.C.S. (Eastbourne).—The late Mr. P. F. H. Baddeley, of the army, was not, as stated in the *Times* of the 7th instant, a Fellow of the College; he was admitted a member of it in 1828.

PROFESSOR FLEMING ON THE ORIGIN OF VACCINIA.

SIR,—The important and abstruse question of the origin of vaccinia, after having been considered as solved to the satisfaction of all British medical men, prior to the experiments of M. Chauveau and his colleagues in Lyons, seems likely for a period to remain again in a most unsettled state. Professor Fleming, for instance, in the JOURNAL, seems to think that the Lyons experiments had completely disproved those of Ceely, Badcock, and Green; whilst his predecessor, Professor Simmons, was just of the opposite opinion.

For my own part, I have paid a good deal of attention to the evidence on this most curious and important matter; and, from formerly having been of Mr. Fleming's opinion, I have become convinced by personal conversations with Mr. Ceely, Mr. Badcock, and Mr. Green, of Birmingham, that vaccinia is merely "mitigated small-pox". Mr. Badcock told me, a few months ago (November, 1881), that he had succeeded in raising a vesicle on cows thirty times out of four hundred experiments; whilst, it must be remembered, Chauveau never raised a vesicle in any of his. I am, therefore, still of the old faith in this matter; but think the time has come for making careful fresh experiments, in which, I trust, Professor Fleming will assist us in arriving at some definite conclusions. Theory (Pasteur's) is on the side of Badcock, since it is only on this theory that we can account for vaccinia preventing small-pox.—I am, sir, your obedient servant,

C. R. DRYSDALE, M.D., Senior Physician Metropolitan Free Hospital
17, Woburn Place, London, W.C.

A GRAVE SOCIAL PROBLEM.

SIR,—If the full extent of a certain evil were known, it would, I am afraid, be greater than we expect it is. Patients ask me about sexual intercourse, some expecting, as Sir James Paget writes, fornication to be prescribed. I find it a difficult matter to give each patient a lecture and full information on the injuries it causes to mind and body, etc., especially when other patients are waiting for an interview; nevertheless, I always feel loth to let a man go unless he understand me; and the value of a misled mind to thoroughly understand the subject will be apparent to all. If, in addition to the lecture, I were able to present my patient with a pamphlet giving a good explanation, it would greatly enhance the chances of recovery.

I suggest that a pamphlet be written, composed of two or three lectures; one on Irritability, similar to that written in *Cassell's Magazine*, January 1882, by a Family Doctor; a second bearing on this problem; and a third, if advisable, on some suitable subject; the three lectures to point in one direction, viz., to the value of a chaste and steady life.

Government should assist us by offering a prize or prizes for the best pamphlet or pamphlets of the above description, or of such a description as determined by a competent body of men. Let it be remembered that the nation is composed of individuals, and that its existence depends on these individuals. Government protects them from bodily injury, etc.; and why should it not assist them in this undertaking? It will reap the benefit.—I am, etc., PERSTO.

REPORTS

TO THE
SCIENTIFIC GRANTS COMMITTEE OF THE
BRITISH MEDICAL ASSOCIATION.

THIRD CONTRIBUTION TO THE LIFE-HISTORY OF CONTAGIUM.

By PETER MURRAY BRAIDWOOD, M.D., F.R.M.S.,

AND

FRANCIS VACHER, F.R.C.S. ED.

(Continued from page 184 of last number.)

WE come now to review the most recent opinions advocated in this country, as expressed in the debate on Pyæmia at the Clinical Society, in the debate on Puerperal Fever in the Obstetrical Society, in Dr. Burdon Sanderson's last published reports to the Privy Council on Infective Inflammations, and elsewhere.

Mr. Prescott Hewett, in his presidential address to the Clinical Society, on January 23rd, 1874, opened the debate on pyæmia by narrating twenty-three instances in private practice. These cases were striking examples of suppurative fever following such trivial surgical conditions as the insertion of a seton, the piercing of the toe with a splinter of wood, the removal of a small wart from the back of the ankle, and gonorrhœa; but, in his narration, Mr. Hewett included also several instances of pyæmia succeeding typhoid fever, and the case of pyæmia in a young lady who showed "severe symptoms of low peritonitis" after her confinement. All these patients either exhibited erysipelas, or had rigors to usher in the pyæmic condition; then followed profuse sweatings; in many instances, secondary abscesses were scattered over the body; some showed pneumonic symptoms; and in all there was wasting and a general typhoid state. Sixteen of the twenty-three patients lived in the best parts of London, "scattered about in good houses of good sizes, with well ventilated bedrooms, well cared for, and, in fact, to all appearance, under the most favourable conditions." The remaining cases were scattered through widely separated parts of the country. In age, the patients varied from six years to eighty years, the majority ranging from fifteen to twenty-five.

In the course of the debate, Dr. Bastian said that he had observed, on microscopically examining the discharge from surgical patients, that "when the patient was healthy, and the temperature low, no bacteria or other organisms were to be found; but, where the temperature of the patient was as high as 101°, they existed in abundance." "There was a febrile condition, and there were modifications of the febrile process; the wound, as a consequence, got into an unhealthy state, and, at last, symptoms of pyæmia developed themselves."

Mr. Henry Lee furnished a good example of the importance of the use of carbolic acid and other antiseptics by the attendants on surgical cases, and stated that "anything that would prevent the communication of diseased secretions from one patient to another had a material effect in preventing these septic influences". He expressed also his well known views on phlebitis as the exciting cause of pyæmia or septicæmia.

Mr. Erichsen drew attention to the distinction which should be drawn between secondary (pyæmic) abscesses arising from venous thrombosis exciting embolism, and "simple abscesses of a lymphatic character, or arising from a direct continuation of irritation along the absorbents or the tissues of a limb". He regarded erysipelas as a totally distinct disease from pyæmia. "Just as from a stinking drain one person would get scarlatina and another typhoid fever, so from the same conditions one might have erysipelas and another pyæmia." "He did not believe that air was anything more than the mere vehicle of contamination, whether it were brought into the wound, or into the lungs or skin of the patient." He expressed the opinion that pyæmia was more common after injuries or operations by which the medullary canal of bones (especially of the lower extremity) was opened.

Mr. Hulke considered that pus was the essential cause of pyæmia, and that embolism alone, without the admixture of purulent fluid, would not induce secondary pyæmic visceral abscesses. He thought depression of the system from moral or physical causes (as bad air, through overcrowding) a very important predisposing condition.

Mr. Savory remarked that the presence of pyæmia after unhealthy wounds, and not after healthy wounds, was explained by "the dialysing property of animal membranes"; and that in the former this property was impaired or altered, whereas it was active in healthy wounds. He regarded pyæmia, septicæmia, and erysipelas as different forms of blood-poisoning.

Mr. Callender expressed the opinion that we should ignore the term pyæmia. He further objected to include under this term "all those conditions in which, in the course of various diseases" (as typhoid or scarlet fever), "the blood may become so affected, that suddenly we have the formation of abscesses in various tissues, or outpourings of pus into synovial or serous cavities". He also regarded the term pyæmia to be misleading, "if it is for a moment to be supposed that it is to be associated with the presence of pus in the blood". He divided all cases of pyæmia into three groups: (a) those (primary septicæmia) in which the systemic poisoning is "due to the action of those acrid and irritating fluids which are poured out into a wound during the first twenty-four or thirty-six hours which follow its infliction", and which, if free vent be not given them, "rapidly produce most serious constitutional symptoms"; (b) "cases (secondary septicæmia) in which the poisoning of the system depends upon the decomposition of residua, whether these residua happen to be sloughs, or matter which is passing into a putrid state"; (c) "instances of thrombosis", in which secondary deposits are formed without the inflammatory process, and are due to decomposing clots in veins. He distinguished thrombosis from embolism by associating with the former disintegrating processes.

Mr. Brudenell Carter preferred the more general term septicæmia, and included all such cases in two classes; "those in which the patient was poisoned by something formed within his own system" (illustrated by gonorrhœa), "and those in which he was poisoned by something formed elsewhere, and conveyed to him by some form of inoculation or contagion", as is so frequently seen in hospital practice.

Mr. Cadge stated that he had come to the conclusion, from his experience, that pyæmia, if it does not find its birthplace, does find its natural home and resting-place in hospitals; and, although a hospital may not be the mother of pyæmia, it is its nurse.

Dr. A. P. Stewart regarded "bad air", as from overcrowding, to be an essential factor in the production of pyæmia, and illustrated his remarks by referring to an epidemic of pyæmia following typhus fever which occurred many years ago in the Glasgow Fever Hospital.

Mr. Spencer Wells stated that, in his extensive surgical experience, he had not met with a single instance of pyæmia, either in his hospital or in his private practice. He had frequently seen instances of septicæmia from the admission of air into cysts causing putrefaction; and some of these recovered, while others died.

Dr. Gordon mentioned that M. Verneuil had described (in the discussion on this subject before the Academy of Medicine) the active principle of septicæmia or pyæmia as an alkaloid capable of being converted into a sulphate, "and the solution of that sulphate, when inoculated, as being capable of producing the disease". Dr. Gordon had met with pyæmia during time of war. It occurred most frequently after severe injuries, "such as shell-wounds affecting the large bones and joints when implicating the heads of the bones". It commenced from the fourteenth to the sixteenth day after the receipt of the injury. He considered the peculiar heavy odour of the breath and perspiration, extreme despondency, and acute arthritis ending in pus-formation, to characterise the disease.

Dr. Burdon Sanderson enunciated as certainties known of pyæmia (hospitalism), that it is not always dependent upon external causes; that it is a process which has a beginning and a termination of a definite kind. The focus of origin he considered to be a process of inflammation; and the peculiar nature of the inflammatory process loses its potency in time, when it became septic. The mischief is propagated from the original focus to the subsequent foci by the lymphatic system or through the veins, and is unconnected necessarily with embolism.

Sir J. Fayrer referred to osteomyelitis as a frequent initiative of pyæmia, and to a "peculiar hyperinototic condition of the blood, which makes it coagulate and form fibrinous clots when it ought not to do so".

Dr. Moxon laid stress on the general constitutional condition characterising pyæmia.

In his presidential address, delivered on April 7th, 1875, before the Obstetrical Society of London, "On the Relation of Puerperal Fever to the Infective Diseases and Pyæmia", with which Mr. Spencer Wells opened the debate on this subject, he stated that his object was rather to elicit than to impart information. Defining puerperal fever, in the words of the Registrar-General (*i.e.*, as defined by Dr. W. Farr), as "a continued fever, communicable

by contagion, occurring in connection with childbirth, and often associated with extensive local lesions, especially of the uterine system," etc., Mr. Spencer Wells submitted to the Society six questions, which were intended to guide the discussion. He next argued that infectious fevers (as scarlet fever and measles) and erysipelas do occur in connection with childbirth, and are intensified by the puerperal condition; and then proceeded to discuss the relations which the local lesions associated with puerperal fever bear to the fever. "Bruises or tears of the genital canal or perinæum; inflammation, and the production of pyrogenic liquids or solids, which may contain both bacteria and some poisonous material or particles which have the power of impregnation; diphtheritic exudation on the mucous membranes of the uterus and vagina, especially on the place of the separated placenta, and plugging of the lymphatic vessels with granular masses or colonies of bacteria or spheroids; the rapid development and growth of plant-life, and the disturbance of function and alteration of structure which must follow: does all this arise under perfect sanitary conditions, spontaneously, or from mere chemical decomposition, or only when some poisonous agent is introduced from without—the seed of some plant sown in a fruitful soil? Is puerperal fever ever a simple traumatic fever, modified by the puerperal condition; or does it always and necessarily depend on the action of a morbid poison?" With such inquiries, and without discussing fully the bearings of the subject, Mr. Spencer Wells opened the debate.

Professor Leishman spoke first, stating his belief in the origin of puerperal fever from pyæmic or septicæmic infection, and said that he "had a difficulty in discovering any difference between the cases which we may suppose to have a specific origin and those which have proceeded from a specific poison". He remarked, further, that if decomposing animal matters were "so certain and so frequent a method of communicating puerperal fever, as some would suppose, we should have far more puerperal fever (than exists) in the practice of students who dissect". "But it appears to me," said Dr. Leishman, "that there is an intensity in the infection, that there is a peculiarity in the conditions, or there may be (as has often been said) in the woman, in the puerperal state, a peculiar condition which renders her specially liable to the infection, about which we know very little, that may account for all this."

Dr. Newman (of Stamford), speaking as a general practitioner, stated it as his strong belief "that there is no such thing as a definite puerperal fever"; and that, in a large number of cases of puerperal fever, there has been a distant, it may be yet a definite, link in the occurrence of possible transmission to the patient of some definite infecting poison." In other instances, he considered that it was unquestionably a local inflammatory mischief that killed, "by its production of a definite pyæmic condition, as certainly as it would kill in the instance of a surgical operation followed by pyæmia". He further considered, that often the general health of a puerperal woman was below par; and he thought that her constitutional condition, as well as her mental state when puerperal, rendered her especially liable to the exciting causes of blood-poisoning.

Dr. Braxton Hicks observed that the elucidation of this subject had been retarded by the older observations on puerperal fever having been made in hospitals, and by our information on this subject being obtained in the past from a person, that, "according as one appearance was more prominent, so it was considered the essence of the complaint". He next analysed thoroughly eighty-nine instances of puerperal fever, and found that in only eight of these was an unexplained origin to be reckoned. He then asked: "Where is the proof of the existence of a pyæmic entity, such as is ordinarily understood by puerperal fever?" He replied that, in certain cases, some other medium besides a morbid poison must be added, "such as decomposition of tissues, or living bacteria, or some material when, mixing with the secretions of the uterine cavity, are absorbed into the system"; that, in other cases, there is a morbid action and depression of the nervous system; that the morbidness of the normal symptoms is intensified in the puerperal woman; and that the pyæmic condition of puerperal cases cannot be as puerperal fever is termed. Lastly, he considered that the nature of the numerous fevers, whether as puerperal fever are considered in puerperal women.

Dr. Leishman described the condition of women after confinement, as a state of passive susceptibility, and said that in a puerperal condition, "the system is in a state which, repeated in a solid form, we call fever." He then said that, in a puerperal condition, the system is in a state of passive susceptibility, and that the system is in a state of passive susceptibility, and that the system is in a state of passive susceptibility. Then there is a discussion of the nature of the fever, and whether it is a puerperal fever or a pyæmic fever. Dr. Leishman then said that the system is in a state of passive susceptibility, and that the system is in a state of passive susceptibility.

to the child a mass of blood from her own body, which has now stopped—so that, practically, she is in the condition of a person who has lost a limb, a considerable portion of the body. Then she is in a nervous condition; she has been supplying from her own potential energy that element which has been shown in the movements of the fetus; and now that has stopped, and she is suffering from that nervous reaction which comes on when that motion is suddenly arrested; she is, therefore, in the exact condition for a series of chances, which must necessarily be febrile in character." (BRITISH MEDICAL JOURNAL, April 17th, 1875.) The hereditary qualities of women, he thought, required also to be borne in mind in discussing their proneness to puerperal fever. He did not think there was a special poison creating puerperal fever, nor that any or all the forms of puerperal fever were due to any of the so-called infectious fevers, as scarlet fever. He next specified four groups or forms of puerperal fever—viz.: simple surgical fever; fever of a remittent character, "with slight symptoms or extreme symptoms of jaundice"; septicæmic poisoning, where death takes place from deficient oxidation; and, lastly, where "a poison appears to be carried into the body from without". This poison, moreover, may be "poisonous in the individual sense, but not poisonous as coming from any person who has been poisoned". He said, further, there is "no special form of puerperal fever, no one particular type of the disease". He also expressed his firm adhesion to the physical side of the question, that the septicæmic poisons "have the power of eliminating oxygen from the blood, and preventing combination of oxygen with the blood".

Dr. Barnes divided cases of puerperal fever into heterogenetic, "the result of something which has arisen outside of the patient's body and been put into her", and antagonistic, in which all the conditions of the fever exist or arise in the patient's system. He laid stress on the puerperal state affording special ground for susceptibility to the influence of infectious poisons. The puerperal woman "is ready to receive poisons, and ready for those poisons to ferment and go on to a disastrous issue". In heterogenetic cases, the fever commences earlier (even in twenty-four hours after confinement) than in antagonistic cases. In antagonistic cases, the fever can often be cut short by washing out the uterus, and thus preventing the repetition of the poisoning process.

The opinion expressed by the general practitioners who took part in this debate was, that puerperal fever did not have its origin in the poisons of infectious diseases, and that scarlet fever frequently attacked puerperal women without adding to the severity of the case.

Dr. Graily Hewitt remarked that puerperal fever "is essentially a form of blood-poison", a form of pyæmia; and he entirely disbelieved in "the existence of a form of fever which is sufficiently definite and precise to receive a distinctive name". Like Dr. Barnes, he divided cases of puerperal fever into two groups—those which occur from the introduction of a morbid animal poison into the system from without, and those in which there is no evidence of the introduction of such a poison. Dr. Hewitt considered that the hands, especially beneath the nails, were the most common means of inoculation, and that any animal poison may excite puerperal fever. He said, "the uterus is so constructed that it is exceedingly easy for pyæmia to occur in it, and in its tissues"; moreover, "concurrently with the commencement of the attack of puerperal pyæmia, the uterus is found to be enlarged—in other words, in a state in which its involution is absolutely retarded". Thus Dr. Hewitt explained the manner whereby animal poisons obtained ingress into the system of the puerperal woman.

Mr. Callender expressed his belief that, by attention to extreme cleanliness, by removing carefully acid, foul discharges whenever formed, and by abstaining from septicæmic affections may be banished from obstetrical as well as from surgical practice.

Dr. A. Barre discussed and explained his definition of puerperal fever, as it stands in the *Annuaire*, and stated that, in studying these affected cases, two processes going on in the lying-in woman required to be borne in mind—viz., the secretion of milk, and the resolution process in the uterus. He divided puerperal fevers into three classes: those simple fevers arising from some local irritation (irritative fevers, the so-called milk fever); those simple febrile consequences of a traumatic origin, which result from slight injuries to the soft parts, laceration and the like; and those pyæmic states, which are of a fugitive and transient nature, and very often fatal. The first two alone he considered to be connected with the puerperal state. He preferred the term *post partum* fevers.

Dr. Wynn Williams defined puerperal fever as a septic contamination of the blood, and stated that putrid animal matter enters the system both in a state of solution and as vapour. In the former there is a breach of surface, in the latter none.

Dr. Playfair expressed his belief that there is not any specific condition justifying the name of puerperal fever, nor any special miasm

arising from the puerperal patient, nor has there been any epidemic of puerperal fever in the strict sense of the word; and that puerperal fever is practically the same disease as surgical septicæmia or pyæmia; that "it arises from the contact of septic matter with lesions of continuity in the generative tract"; that "there are channels of diffusion through the lymphatics, or possibly the veins"; and that there are "general and local results of great consequence, rendered in the puerperal state particularly intense and virulent".

Dr. Tilt maintained strongly the autogenetic origin of puerperal fever. A woman "most frequently poisons herself". He urged that medical men should be on the outlook for foetid lochia, and ascertain the fact always *for themselves*.

We must next refer shortly to the addresses by Dr. Fordyce Baker and Dr. Charles West, delivered before the Obstetrical Society at this portion of the debate (July 7th, 1875).

Dr. F. Baker stated puerperal fever to be a "disease which presents a group of general symptoms, independent of local inflammations, resulting from the absorption of some portion into the system". He believed it to be a distinct disease, and thought the definition given in the *Nomenclature of Diseases* to be "absolutely perfect". He also maintained the epidemic character of puerperal fever as it sometimes occurs, and quoted statistics in proof thereof.

Dr. Charles West distinguished puerperal fever from the "specific fevers" by remarking that it has "not the same regularity of course, the same regularity of incubation, the same regularity of outbirth". It has not the same diagnostic marks. These fevers, moreover, produce disease like to themselves, and have a tendency not to recur where once they have happened. There is also a "marked connection between the liability to an outbreak of puerperal fever and the difficulties attendant on the process of labour". He said: "We are to look for the cause of puerperal fever rather to the condition present after delivery than to any special poison."

Dr. Snow Beck was "unable to perceive that there is any special or specific disease connected with childbirth", or that it was "communicable by contagion". He thought the fault is with "the individual" (every puerperal woman is not in a state of health at this time), and "not with the natural and physiological process of procreation". The lying-in woman, he remarked, is liable to two classes of diseases; "one class arising from the general system, and being the result of changes and accidents to which all women are liable at any period of their existence; the other class arising from the uterine system, and being the consequence of accidents incident to pregnancy and childbirth, yet not comprising any disease specially connected with either of these states". He did not think that specific diseases are ever transformed into one and the same disease, puerperal fever.

In his first paper (appendix) in the Reports of the Medical Officer of the Privy Council, No. vi, 1875, Dr. Burdon Sanderson says: "The recognised characteristics of fever are those which relate either to the disintegration of the living substance of the body, or to the increase and diminished constancy of the bodily temperature." According to the researches of Drs. Senator and Naunyn, while "the discharge of heat, of carbonic acid, and of aqueous vapour, may even be diminished during the initial stage of fever, that of urea is augmented". In the later stages, this relation is in the main reversed. Moreover, Senator states that the discharge of water "is very considerably increased in febrile animals". As regards clinical observations, "the general conclusion to be derived from the whole series is that, in the early stage of fever, a patient excretes about three times as much urea as he would do on the same diet if he were in health; the difference between the febrile and the healthy body consisting chiefly in this, that, whereas the latter discharges a quantity of nitrogen equal to that taken in, the former wastes the store of nitrogen contained in its own tissues". "In fever, more carbonic acid is actually formed in the body than in health; a febrile man or animal discharges more nitrogen than a healthy person or animal on the same nitrogen income; and, as regards the man, the febrile excess amounts to something like three-quarters of the normal expenditure. In man, there is during fever an excess of discharge of carbonic acid, and this cannot be accounted for as the mere result of excessive respiration." According to Professor Leyden's observations, the febrile augmentation of the carbonic acid discharge amounts to nearly 50 per cent. "We are", says Sanderson, "compelled to accept it as a fact that, in fever, more carbonic acid is actually formed in the body than in health." Accordingly, in the febrile state, taking into account the augmentation of urea excretion and its consequence, the discharge of nitrogen, we find this to be due to the using up of stored albumen; and "there is an additional and altogether abnormal disintegration, which we believe to take place at the expense of blood-corpuscles, or muscle, or other tissue".

The next question discussed by Dr. Sanderson is the "Production

and Discharge of Heat in Fever". "The constancy of the temperature of the body", he says, "depends upon the existence of heat-equilibrium—i.e., of that condition of the organism in which the processes by which heat is produced, and those by which it is liberated, balance each other." We would fain give a complete *résumé* of that portion of Dr. Sanderson's paper which discusses this important problem; but we feel that this would be irrelevant to the subject treated of by this essay. We shall, therefore, quote only his inferences as to the seat of origin of febrile pyrexia. "A satisfactory explanation of the nature of fever, and of its relation to the febrile process, is not", he remarks, "at present possible, because we are not as yet possessed of the necessary physiological knowledge." To explain these points, "two possibilities are open to us. One is, that fever originates in disorder of the nervous centres; that, by means of the influence of the nervous system on the systemic functions, the liberation of heat at the surface of the body is controlled or restrained, so that, by 'retention', the temperature rises; and, finally, that the increased temperature so produced acts on the living substance of the body, so as to disorder its nutrition. The other alternative is, that fever originates in the living tissues; that it is, from first to last, a disorder of protoplasm; and that all the systemic disturbances are secondary. In both hypotheses, it is tacitly assumed that fever is the product of a material fever-producing cause contained in the blood or tissue-juice, the morbidification of which in the organism is antecedent to all functional disturbances whatever." After regarding the facts and considerations we possess regarding each of these hypotheses, Dr. Sanderson says: "We are at liberty to adopt the tissue-origin of fever as the basis on which we hope *eventually* to construct an explanation of the process."

In concluding his Report of 1872 on Infective Inflammations, Dr. Sanderson states the following results as propositions. "It has been shown", he says: "1. That that combination of malignant fever with intense and destructive inflammations, to which pathologists have rightly applied the term septicæmia, because it is known by experiment as well as by clinical observation to result from the existence in the blood of putrescent albuminous matter, may also be produced by the introduction into the circulation, or into the serous cavities, of small quantities of liquids derived directly from living tissues in certain states of inflammation; and that such states have the same distinctive characters as those which distinguish inflammation of septicæmic origin. 2. That pyæmia (the term being understood to denote a general febrile disorder of less virulence than that of septicæmia accompanied by numerous disseminated inflammations, characterised chiefly by their proneness to suppuration) is so closely related to septicæmia, as regards its origin and essential nature, that in these respects no line of distinction can be drawn between them; and that pyæmia, like septicæmia, may originate from a purely traumatic inflammation, independently of any infection with contagium derived from a previously existing pyæmic inflammation. 3. That both of these conditions are characterised by the existence of microzymes in the infected liquids; and that the relation of intensity between different cases of septicæmia and pyæmic infection is indicated by the number and character of these organisms; so that in the most intense processes—i.e., those which exhibit the characters of septicæmia—the exudation-liquids and the blood are crowded with actively moving bacteria; while, in the more chronic processes, the spherical and dumb-bell forms prevail, and the number of organisms found in the liquids are relatively inconsiderable."

At the close of his Report of 1875, Dr. Sanderson furnishes the following conclusions. "We have seen it to be the result of observation, that the intensity of any transmitted inflammation is dependent on the intensity of the inflammatory process by which it was produced; or, in other words, that the transmitted inflammations are most intense which are begotten of the most intense antecedents. We have also seen that, if a process of inflammation is transmitted through a series of animals from one to another, in such a way that each is infected by the introduction into its body of exudation-liquid derived from its predecessor, the transmitted process becomes, on the whole, more intense towards the end of the series"; and that this "augmentation does not take place by successive steps, but *per saltum*". This last curious fact Dr. Sanderson explains by saying that it is due to "the conditions belonging to the infected individual being no less efficacious than those which belong to the material transmitted". "The most active products are yielded by animals which have *longest* resisted the *most intense* process." Moreover, "it would be a mistake to regard the phlogogenic and the pyrogenic actions as identical in their nature".

Dr. Sanderson states, further, that there is no difficulty in recognising a highly infective product by its physical and microscopical characters. "The highly infective serous exudation-products of guinea-pigs have always a high specific gravity; fail to coagulate"; possess a very peculiar viscosity; show spheroids and dumb-bells,

"either isolated in the liquid, collected in colonies or cloud-like masses, or embedded in the cell-substance of pus-corpuscles. "The presence," he says, "of characteristic organic forms in infective liquids affords in itself no conclusive evidence that these bodies are themselves the cause of the infectiveness."

(To be continued.)

REMARKS ON THE TREATMENT OF GUNSHOT-WOUNDS OF THE ABDOMEN IN RELATION TO MODERN PERITONEAL SURGERY.

By J. MARION SIMS, M.D., LL.D., etc.

[page 186 of last number.]

THE presence of bloody serum in the peritoneal cavity, when there has been wound of bowel, with escape of flatus and intestinal contents, is not surprising; and it is always found when we know how to look for it. Heretofore, the necropsists have expected to find peritonitis in every case of death following wounds of the abdomen, and they were not prepared for anything else. Educate the medical mind in the truth, and it will always grasp and appreciate it. I have more than once seen necropsies made by men of reputation as pathologists, who, as they saw the intestines agglutinated by plastic lymph, would say: "Here is peritonitis; here is the cause of death." They would then proceed to run a sponge down into the pelvic cavity, and bring it up full of bloody serum, and squeeze it out into a basin, without attaching any importance whatever to it. A peritonitis that stops at agglutinating contiguous serous surfaces is not dangerous; never fatal. It cannot end in death unless it proceed to purulent infiltration; and then it is dangerous, because it is the source of blood-poisoning, for which there is no remedy, and never can be, till we open the abdomen, and remove the purulent deposits, the source of the blood-poisoning. We have opened it after death, and found the bloody serum, which was the source of blood-poisoning.

There is no doubt that the American Civil War contained but few fatal cases of peritonitis, that did not result from gunshot wounds. Twenty years ago, when I began, none of us knew any better. We knew that the peritoneum was a cavity, and knew less of its contents and nature. I remember that Dr. Hunter McGuire, of Virginia, in 1861, when he was a student of medicine, found bloody serum in the peritoneal cavity of a man who had been shot in the abdomen. If he, the student, had known that the peritoneum was a cavity, and that it contained bloody serum, he would have interpreted it? I do not know. But I know that the American Civil War had had the peritoneum would have poured out the bloody serum, and the wound would have been fatal.

There is no doubt that the American Civil War contained but few fatal cases of peritonitis, that did not result from gunshot wounds. Twenty years ago, when I began, none of us knew any better. We knew that the peritoneum was a cavity, and knew less of its contents and nature. I remember that Dr. Hunter McGuire, of Virginia, in 1861, when he was a student of medicine, found bloody serum in the peritoneal cavity of a man who had been shot in the abdomen. If he, the student, had known that the peritoneum was a cavity, and that it contained bloody serum, he would have interpreted it? I do not know. But I know that the American Civil War had had the peritoneum would have poured out the bloody serum, and the wound would have been fatal.

There is no doubt that the American Civil War contained but few fatal cases of peritonitis, that did not result from gunshot wounds. Twenty years ago, when I began, none of us knew any better. We knew that the peritoneum was a cavity, and knew less of its contents and nature. I remember that Dr. Hunter McGuire, of Virginia, in 1861, when he was a student of medicine, found bloody serum in the peritoneal cavity of a man who had been shot in the abdomen. If he, the student, had known that the peritoneum was a cavity, and that it contained bloody serum, he would have interpreted it? I do not know. But I know that the American Civil War had had the peritoneum would have poured out the bloody serum, and the wound would have been fatal.

There is no doubt that the American Civil War contained but few fatal cases of peritonitis, that did not result from gunshot wounds. Twenty years ago, when I began, none of us knew any better. We knew that the peritoneum was a cavity, and knew less of its contents and nature. I remember that Dr. Hunter McGuire, of Virginia, in 1861, when he was a student of medicine, found bloody serum in the peritoneal cavity of a man who had been shot in the abdomen. If he, the student, had known that the peritoneum was a cavity, and that it contained bloody serum, he would have interpreted it? I do not know. But I know that the American Civil War had had the peritoneum would have poured out the bloody serum, and the wound would have been fatal.

because we will learn that effusions in the peritoneal cavity may be as safely evacuated as those of the pleural cavity; that the danger will consist, not in opening the peritoneal cavity, but in keeping it closed, with its retained fluids to poison the blood and take the life of the poor sufferer. The time will also come when gunshot and other wounds of the abdomen, and perforations of the intestine, will be treated by opening the peritoneal cavity, and washing out or draining off the septic fluids that would otherwise poison the blood; for death, in all these cases, is produced by the same cause, and in precisely the same way, and they will require the same plan of treatment."

Thus it will be seen that I advocated the same line of treatment ten years ago in shot-wounds of the abdomen that I plead for to-day. But the profession was not then prepared for such radical views, and they fell stillborn. Ovariectomy was not then as successful as it is now; Harvey's operation had not seen the light of day; the great domain of peritoneal surgery had not been opened up; and I know of but one man who was ready to accept my doctrines. Hunter McGuire, Professor of Surgery in the Richmond Medical College, Virginia, and surgeon to Stonewall Jackson's command, looking back upon his immense experience during our great civil war, recalled cases and *post mortem* examinations that could be explained only as it is done now. As President of the Surgical Section at the last meeting of the American Medical Association (June 1881), Dr. McGuire read a paper on Gunshot Wounds of the Abdomen, advocating the same views as I do. In this paper, he gave the histories of four cases that are unique in military surgery, not because such cases never happened before, but because no one, as far as I know, had observed the facts and published them before. Two of them occurred during the war, and two in private practice since then. In all these cases, the ball passed transversely and superficially through the walls of the abdomen, wounding or bruising only the peritoneal lining of the abdomen, not perforating it, or wounding the intestine, or even the omentum. All of these cases died of peritonitis.

CASE I. "Fully a quart of reddish serum escaped from the pelvis and abdominal cavities during the necropsy."

CASE II. Died three days after wound. "Three pints of red serum in the peritoneal cavity."

CASE III and IV were seen in Confederate soldiers. Both had large amounts of red serum in the peritoneal cavity.

In these, death resulted precisely as it would have done if the peritoneal cavity had been penetrated, and the omentum or intestine wounded. These help to prove that all wounds of the peritoneum have a common termination in death by peritonitis, and not by perforation. Where the outer surface of the peritoneum was merely bruised by the force of the missile, we might have expected to see very different special symptoms; or if inflammation set in, as expected, we would have expected its propagation to the inner surface of the peritoneum, producing legitimate peritonitis; but, in Dr. Hunter McGuire's case, such thing was found. When the injured peritoneum takes action necessary to throw off bloody serum along the track of the ball, this same action on the inner surface of the peritoneum resulted in the exudation of bloody serum into the peritoneal cavity. Hence, there is a process for death. The idea prevails that bloody serum in the peritoneal cavity is aseptic and harmless, when there is no vent by which air can reach it. In the above cases, the intestine was not opened, and its contents could not mingle with the bloody serum; nor was the peritoneum penetrated, and hence no entry of air into the track of the ball. Why, then, should the bloody serum in these four cases have produced death in two and three days, when the peritoneal cavity had been penetrated, with its contents mingled with the bloody serum, and the peritoneum penetrated, and hence no entry of air into the track of the ball. Why, then, should the bloody serum in these four cases have produced death in two and three days, when the peritoneal cavity had been penetrated, with its contents mingled with the bloody serum, and the peritoneum penetrated, and hence no entry of air into the track of the ball. Why, then, should the bloody serum in these four cases have produced death in two and three days, when the peritoneal cavity had been penetrated, with its contents mingled with the bloody serum, and the peritoneum penetrated, and hence no entry of air into the track of the ball.

There is no doubt that the American Civil War contained but few fatal cases of peritonitis, that did not result from gunshot wounds. Twenty years ago, when I began, none of us knew any better. We knew that the peritoneum was a cavity, and knew less of its contents and nature. I remember that Dr. Hunter McGuire, of Virginia, in 1861, when he was a student of medicine, found bloody serum in the peritoneal cavity of a man who had been shot in the abdomen. If he, the student, had known that the peritoneum was a cavity, and that it contained bloody serum, he would have interpreted it? I do not know. But I know that the American Civil War had had the peritoneum would have poured out the bloody serum, and the wound would have been fatal.

There is no doubt that the American Civil War contained but few fatal cases of peritonitis, that did not result from gunshot wounds. Twenty years ago, when I began, none of us knew any better. We knew that the peritoneum was a cavity, and knew less of its contents and nature. I remember that Dr. Hunter McGuire, of Virginia, in 1861, when he was a student of medicine, found bloody serum in the peritoneal cavity of a man who had been shot in the abdomen. If he, the student, had known that the peritoneum was a cavity, and that it contained bloody serum, he would have interpreted it? I do not know. But I know that the American Civil War had had the peritoneum would have poured out the bloody serum, and the wound would have been fatal.

jury on a criminal case, and, with pistol in hand, he was demonstrating how a man might accidentally shoot himself in the abdomen; and, when he pointed the weapon (which was unfortunately loaded) toward his own abdomen, it went off, and the ball perforated the peritoneal cavity. He fell to the floor, and died in twelve hours, without reaction, for he died of internal hemorrhage. If the abdomen had been promptly opened, the bleeding vessels could have been secured, and a valuable life saved.

Do men ever recover spontaneously from gunshot-wounds of the abdomen perforating the peritoneal cavity? Rarely indeed, if the bowel be wounded above the brim of the pelvis.

At Sedan, we had seven cases of shot-wounds of the abdomen, and they all died, most of them within twenty-four hours. I made *post mortem* examinations in several of these, and in all found large quantities of reddish serum in the pelvic peritoneal cavity; and, in all, death was evidently the result of septicæmia caused by this reddish serum. There were several cases of recovery, where balls passed through the pelvis, wounding the bladder or bowel, or both; but no recovery where the wound was above the brim of the pelvis.

We had three cases of pelvic shot-wounds that recovered in the Anglo-American Ambulance at Sedan. In one case, "the ball entered on the left side of the coccyx, traversed the rectum and bladder, and emerged just above the symphysis pubis. For a considerable time, all the feces passed by the posterior opening, while the urine flowed entirely by the anterior wound. He recovered without one single unfavourable symptom. Both wounds had closed by the 18th September (seventeen days after the battle), and remained so till his discharge from hospital on September 28th, when he appeared as well as if nothing had happened to him" (*Notes and Recollections of an Ambulance Surgeon, etc.*, by William Mac Cormac, pp. 73, 74. 1871). Sir W. Mac Cormac saw three other cases of pelvic gunshot-wound involving the bladder recover without accident, two in a Belgian ambulance, and the third under Dr. Junker's care at the Chateau de Bazielles. Sir W. Mac Cormac further says, "There were some other cases of similar injury which I did not see, but which, I was informed, were doing well".

Four days after the battle of Sedan, I went to Mézières for supplies for the wounded soldiers. Travelling under the banner of the red cross, we were hailed at almost every hamlet, and asked to visit sick and wounded. Amongst the great number demanding our care, my son, Dr. Harry Marion Sims, called my attention to a young German who was shot through the pelvis. The ball entered about two inches above Poupart's ligament, and midway between the linea alba and the crest of the ilium on the left side, and passed directly back through the pelvis, wounding the sigmoid flexure. Fæces passed freely by both openings, but, of course, more freely by the posterior, as he lay mostly on his back. His pulse was but 78, and there was no pain or tension in any part of the abdomen; and he had every appearance of a rapid recovery. He was among French wounded, could speak only his own language, and his greatest suffering was from nostalgia. When my son spoke to him in German, and gave him every assurance of a speedy cure, and of early removal to a German ambulance, it raised his drooping spirits, and I have no doubt that he eventually recovered. He was shot through and through the pelvic peritoneal cavity, perforating the bowel, and yet there was not the least constitutional disturbance, nor the first symptom of peritonitis. This was four days after the wounding.

Thus, at our Sedan ambulance, we had three cases shot directly through the pelvis; one at the ambulance at Bazielles, one on the road to Mézières, and two at the Belgian ambulance; seven in all. Thus, seven shot through the pelvis all recovered, and seven shot through the abdomen all died in about twenty-four hours.

Professor Montrose A. Pallen, who had a large experience in the Confederate Army, saw a case recover, where the ball passed through the bladder and out through the left ilium; and Professor von Nussbaum says, "I have seen cases get well in which the bladder and rectum were shot through and through, the ball making not only an inlet, but an outlet as well".*

Major Gardner, surgeon, United States Army, has given me the histories of four cases of recovery from shot-wounds of the pelvis, two during the war, and two since.

1. General X. Ball shattered radius of right arm, entered abdomen, right side, three inches above Poupart's ligament, perforated colon, and passed out at right sacro-iliac junction; radius right arm resected; fæces passed by both entrance and exit openings. Returned

to duty in three months, wearing pad on posterior fistulous track, through which fecal matter passed in small quantities. This healed soon after, and the General lived many years in perfect health.

2. Ball passed transversely through both ilia, wounding bladder; wore a catheter. Three weeks after, there was urinous odour at the exit in left hip. Patient soon got well.

Two others, with similar pelvic wounds of bowel, recovered speedily. In all these cases, shock was less than when balls perforate the abdominal cavity. In one case, there was perfect reaction in four hours.

Dr. Thomas J. Murdoch of Baltimore gives me the history of a man wounded at Gettysburg. The ball passed antero-posteriorly through the bladder and bowel. He frequently passed feces through the urethra as well as by posterior opening. In seven weeks, he left hospital well, and returned to duty.

Now let us sum up these pelvic gunshot-wounds, which have occurred under the observation of my personal friends: at Sedan, seven; Dr. Pallen, one; Dr. Gardner, four; Dr. Murdoch, one; total, thirteen.

From my Sedan experience, it would seem to be an exception for a man to recover if shot through the abdomen; and it appears to be exceptional for a man to die when shot through the pelvis. Why do men recover from gunshot-wounds perforating the bladder, bowel, and peritoneum in the pelvic cavity, and not from gunshot-wounds perforating the intestine and peritoneum in the abdominal cavity? The explanation is very simple. In the first case, there is natural drainage of septic matter directly from the pelvic cavity along the track of the ball, and the patient lives. In the other case, drainage is impossible, because the septic matter falls into the pelvic cavity, is there retained, and then absorbed, and the patient dies of blood-poisoning.

[To be continued.]

THE DIAGNOSIS OF EPITHELIOMA OF THE TONGUE.

By HENRY T. BUTLIN, F.R.C.S. Eng.,

Assistant-Surgeon, and Demonstrator of Surgery and of Diseases of the Throat, St. Bartholomew's Hospital.

MOST surgeons will admit that, if operations for the removal of epithelioma of the tongue are to be undertaken with any prospect of permanent success, they should be performed at the earliest possible period of the disease, while yet but a small segment of the tongue is affected and the lymphatic glands are sound. Most surgeons will agree, therefore, that a certain and early diagnosis of epithelioma of the tongue is exceedingly to be desired. No means, however, are described by which a certain and early diagnosis can be effected. The characters which chiefly are relied on are, the sinuous outline of the epithelial ulcer; its raised, everted, nodular borders; its glazed, or foul and ragged surface; and the surrounding induration. But every surgeon knows how often one or the other of these characters is absent, and how often many of them are simulated in a tuberculous or syphilitic ulcer, and how difficult the diagnosis of certain cases is, not merely in their early stages, but when they have existed many months. Mr. T. Smith's case, reported from the St. Bartholomew's Hospital consultations in the last volume of the JOURNAL (1881, vol. ii, page 1015), affords an admirable illustration of the difficulty of distinguishing between epithelioma and tertiary syphilis of the tongue. It shows, too, the disastrous result which follows the practice of deferring an operation until the effect of anti-syphilitic remedies has been observed.

This watching of malignant ulcers, and studying the effect of remedies upon them, is so common, that a surgeon, so far from being blamed for following it until the disease is too far developed for operation, would more probably be blamed for adopting the opposite principle, and freely cutting out a disease of doubtful nature. It is at present impossible to make a certain diagnosis of all forms of malignant ulcers in all parts of the body; but in the tongue I believe it is possible, and not extremely difficult.

The structures of which epithelioma is composed are very characteristic, and lie so close to the surface that they can easily be procured for examination by scraping the surface of the ulcer with a blunt knife or Volkman's spoon, or any similar instrument. In addition to pus- and blood-corpuscles, *débris*, and microzymes, numerous epithelial cells are always present, but differing widely from the normal epithelium of the tongue. Many of them are smaller than the normal cells; others are much larger; the nuclei of both kinds are several times larger than the normal nuclei. All the cells are granular; some of them are clouded and opaque with granular matter. Some contain large round or oval spaces, clear and well defined. Many of them have more than a single

* On Drainage of the Peritoneal Cavity and Intraperitoneal Injections. A contribution to the Treatment of Wounds of the Peritoneum, and Ovariectomy, by Professor von Nussbaum, staff-surgeon, etc.. 1873.

nucleus, and some contain smaller cells with nuclei and nucleoli. The shape of these abnormal cells varies as much as does their size; some are round, some oval, some quadrangular or polygonal, some tapering at one end, and some at both ends. With these distorted and fantastic cells, normal epithelium may be mingled; but the normal cells are few in number, while the diseased cells are many. The following sketch represents the scraping from the surface of an epithelial ulcer of the tongue in a man aged 53, in whom the glands beneath the jaw were extensively diseased. Here, pus-cells, blood-cells, healthy, and diseased epithelial cells, are present.

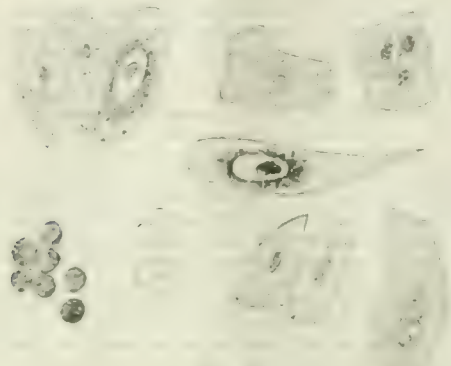


Fig. 1.

Sometimes, and not unfrequently, even more characteristic structures than any of those described are found; *i.e.*, cell-nests, or portions of cell-nests. Two of these are represented in the accompanying sketch, taken from the scraping of an epithelial ulcer of the tongue in a man forty-three years old.

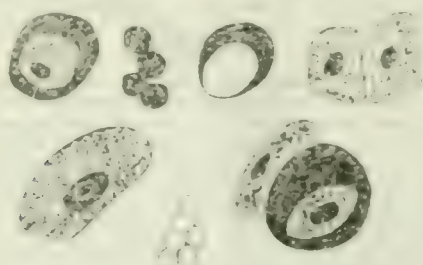


Fig. 2.

I have applied the method of examination in the case of an epithelioma of the tongue in a young man, where the diagnosis was difficult, nearly as young as the patient's age (29). The microscopic characters of a scraping suggested all kinds of the nature of the disease. I have since used it in several difficult cases, with the greatest satisfaction. In order to prove that the test is reliable, I have made sections after removal of the epithelial mass which have been scraped and examined before removal, and have then been sure that the diagnosis was correct. I have also examined scrapings taken from other kinds of ulcers of the tongue, and have never found structures resembling those of epithelioma. Pus-cells, blood-cells, and granulation-cells are present in large numbers. Squamous, columnar, and normal epithelium are also present, but diseased and altered epithelial cells are not found. The scraping from which the sketch was made was taken from a very extensive epithelial ulcer of the anterior portion of the tongue of a young man. The ulcer healed with scarring, and has since remained healed for a year. (The large granular body is a pus-cell.)

I have also examined scrapings from the structure I have described as a "cell-nest," and have found that they are not found in any other kind of ulcer, where I have examined them. I have also examined scrapings from the structure I have described as a "cell-nest," and have found that they are not found in any other kind of ulcer, where I have examined them. I have also examined scrapings from the structure I have described as a "cell-nest," and have found that they are not found in any other kind of ulcer, where I have examined them.

I have also examined scrapings from the structure I have described as a "cell-nest," and have found that they are not found in any other kind of ulcer, where I have examined them.

than hitherto; to show how far it is reliable, and in what cases it should be used.



Fig. 3.

The method is very simple, and very easily applied. The surface of the ulcer to be examined is cleaned by lightly brushing it, or gently scraping it with a blunt instrument; a slightly deeper scraping is then taken, mixed with a drop of water on a glass slide, and examined with a quarter-inch power, or No. 7 Hartnack. The pain produced by this operation is so trivial that it seldom calls forth a complaint; and the scraping may be repeated several times, if necessary, without seriously inconveniencing the patient. It may be employed, not only for epithelioma of the tongue, but for squamous epithelioma (squamous-celled carcinoma), whenever it occurs in accessible situations. I have used it for epithelioma of the upper jaw, the face, the penis, and the uterus. I am afraid it cannot be employed, however, for malignant ulcers other than squamous epitheliomas with any degree of certainty; for the structures of which most of them are composed are not sufficiently characteristic to be easily recognised.

One caution may be given. It must not be too hastily assumed that an ulcer is not epitheliomatous because these structures are not at once discovered. If its general characters be suspicious, it should be repeatedly examined before a definite conclusion is arrived at.

I hope it will not be believed, because I recommend so strongly this method of diagnosis, that I am insensible to the general characters of epithelial ulcers, or that I desire others to take no notice of them. On the contrary, I think they should be as carefully studied in the future as in the past; and, when any of them can be shown to be reliable in diagnosis, the microscope should be dispensed with.

AN ANOMALOUS CASE OF INFANTILE HEMIPLEGIA.

By W. B. HADDEN, M.D., M.R.C.P.

Communicated to the Medical Association at the Meeting of the British Medical Association, held at the Royal Victoria Hotel, London, 1881.

THE patient whose history is narrated below was exhibited in the museum at the recent International Medical Congress. The case is one of great interest, both from a pathological and a clinical point of view. The patient is a boy aged 13, whose limbs are free from all paralytic tendencies. The boy is subject to attacks of unconsciousness, and has been known to have no other symptoms, since he was one year old. When a child three years old, he had a fall, since which he has been subject to the attacks of unconsciousness, and has been known to have no other symptoms.

The case is remarkable, inasmuch as it is a case of infantile hemiplegia, and is the only case of the kind which has been recorded. The boy was born at the Royal Victoria Hotel, London, on the 1st of January, 1869, and was the only child of his mother. He was born at full term, and was healthy at birth. He was brought up by his mother, and was educated at the Royal Victoria Hotel, London. He was a very healthy child, and was very fond of his mother. He was a very healthy child, and was very fond of his mother.

The boy was brought up by his mother, and was educated at the Royal Victoria Hotel, London. He was a very healthy child, and was very fond of his mother.

scious for several hours. When first seen, he was strongly convulsed, and there were clonic spasms of the hands, especially the right, which was rapidly opened and shut. The upper extremities were far more affected than the lower, which, with the exception of a few slight twitches, were motionless. The muscles of the face and eyeballs were strongly convulsed; the pupils constantly varied in size. The patient was quite unconscious. The patellar reflex was said to be entirely absent, although there was marked ankle-clonus. On subsequent examination, the patient was found to be a fairly intelligent boy. Although his friends consider him somewhat deficient mentally, he reads, counts, and remembers well. His expression is rather vacant, but there is certainly no notable intellectual deficiency. The pupils are equal, and act well to light; the tongue, which is a little tremulous, is protruded straight; there is no sign of facial paralysis. The right upper extremity is much smaller than its fellow, the ulna being an inch shorter than the bone on the other side. The muscles are evidently atrophied to a considerable extent. The fingers of the right hand are kept apart and extended, especially the index and middle fingers. The tendon-reflexes are much more marked than on the left side. There is very pronounced loss of power both of the arm and hand. The left upper extremity is in every respect natural. The legs are rigid, especially the right; and there is well marked talipes equinus on both sides. The patellar reflex is exaggerated, but there is no appreciable difference between the two limbs in this respect. Ankle-clonus was usually obtainable on both sides to an equal extent; but occasionally it was impossible to provoke it, in consequence of the great rigidity of the calf-muscles. The lower extremities are not atrophied, and evidently possess considerable muscular force. The plantar, epigastric, abdominal, and cremasteric reflexes are all present; but it is difficult to say whether they are exaggerated or not. Sensation is everywhere intact. There is no atrophy of the thoracic wall or pelvis on either side. The thoracic and abdominal organs are perfectly healthy. But the most striking feature in this patient is his gait. When asked to walk, he stands upright, and supports himself for a moment by leaning against some object. It is evident, indeed, that, although not lacking the muscular force, he is unable to maintain his equilibrium, when upright, without extraneous aid. This is no doubt due to the great contraction of the gastrocnemii and their tendons. Erect, he rests on the ends of the metatarsal bones, the heels being drawn up from the ground; the thighs are adducted, the knees almost in contact; the legs incline outwards, and the feet are much inverted. When walking, he brings each lower limb forwards by describing an arc with the convexity outwards. At the same time, the head and shoulders are thrown back, the dorsal curve is greatly exaggerated, and the right arm, which is flexed on the forearm, with the corresponding hand dropped on the wrist, is brought up nearly to a level with the chin. As he walks, he keeps the right upper extremity in this position; but the opposite limb is moved backwards and forwards, and, together with the trunk, which sways powerfully from side to side, serves to maintain the equilibrium during progression. The patient's attitude, when standing, is depicted fairly well in the accompanying figure.

In considering this case, the fact that the epileptic attacks begin in the right upper extremity, and affect it more powerfully than the other limbs, strongly suggests that the lesion in this patient is primarily cerebral. But, although this is probably so, the secondary spinal effects are now much more pronounced, and, unfortunately, much more disastrous, than is usually the case in hemiplegia.

What, then, is the probable nature of the cerebral lesion? and where is it situated? With a fair amount of confidence it may be said that the lesion is for the most part destructive, and that it involves the motor zone of the brain. The circumstance that epileptic attacks still persist suggests that, although the lesion may be to a large extent destructive, certain of the ganglionic cells of the cortex are in a condition of unstable equilibrium, and, by their discharge, give rise to the occasional epileptic attacks.

Furthermore, not only the cortex, but also the subjacent white matter has been involved—if indeed we are to believe the dictates of modern experiment and pathological anatomy. Assuming then that the lesion has involved the motor convolutions (ascending frontal and parietal and paracentral lobule) on the left side, the consequence would be descending degeneration of the pyramidal tract in the hemisphere, crus cerebri, pons and medulla oblongata on that side. In the cord, the direct pyramidal tract (fasciculi of Tücker) on the same side, and the crossed pyramidal tract in the lateral column of the opposite side, would be degenerated. Clinically, such a change would reveal itself by rigidity, contracture, and exaggeration of the reflexes of the corresponding limbs. It happens—rarely, it is true—that the sound limb in a hemiplegic patient occasionally becomes affected with contracture, like its fellow. The explanation of this curious fact is somewhat difficult. Charcot has

put forward the hypothesis that some of the fibres of the pyramidal tract of one side pass through the anterior commissure of the spinal cord to gain the opposite side. In other words, the motor tract decussates, not only at the lower part of the medulla oblongata, but also in the spinal cord itself, to an extent varying probably according to the individual.



By means of preparations in chloride of gold, Schiefferdecker has shown that this is really so. But further proofs are not wanting. If one half of the spinal cord in a guinea-pig be divided, there is well marked paralysis of the corresponding side and *slight paresis of the other side*. Again, it is extremely probable that the motor strands are in intimate relation in the cord, when we consider that the lower limbs are constantly associated together in movement. Not unfrequently, when a hemiplegic patient exerts his sound arm by lifting a weight, for example, the paralysed hand, if contractured, at the same time closes spasmodically.

Now, in spite of the belief of our patient's friends that his trouble is dependent on a fall when three years old, we are inclined strongly to the opinion that the primary lesion, as we have before said, is cerebral. It must be remembered that the fits began when he was in his first year, and that he did not walk until his third year—about the time when the accident happened. It may be that the pyramidal tracts, which are in full progress of development from birth up to the first year or later, are more apt to take on degenerative or inflammatory changes at this period of life than subsequently. The wasting of the right upper extremity is doubtless dependent on atrophy of the large multipolar cells of the right anterior cornua at some point of the cervico-brachial enlargement.

Pitres has described an analogous case of muscular atrophy affecting the left arm in a hemiplegic patient. (*Arch de Physiologie Normale et Pathologique*, 1876, p. 664.) After death, it was found that most of the large cells of the left anterior cornua had disappeared, at the level of the cervico-brachial enlargement, between the seventh and ninth nerve-roots. At present it is impossible to say under what conditions the motor cells become affected with atrophy in cases of lateral sclerosis. Usually, the anterior cornua display great resisting power to the extension of the morbid process from the degenerated pyramidal tracts.

Hemiplegia, when occurring in infancy, frequently entails arrest of development of the paralysed limbs; whereas the same affection when developed in adult life has not the same effect, because the parts are already fully developed. Not unfrequently it is found that the trunk on the paralysed side, in cases of infantile hemiplegia, is imperfectly formed. No such abnormality was observable in our patient.

The case just considered is especially important from a diagnostic point of view. Erb, Seeligmüller, and Stromeyer have called attention

REPORTS

OF
MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

MANCHESTER ROYAL INFIRMARY.

INTERSTITIAL ABSORPTION OF THE NECK OF THE FEMUR FOLLOWING
A FALL ON THE TROCHANTER MAJOR.

(Under the care of Mr. JONES.)

WILLIAM D., aged 15, was readmitted from Cheadle Convalescent Hospital, October 22nd, 1881. His family history was good: there was no tendency to rheumatism in any member of the family. The patient had always enjoyed good health.

History and Condition on admission.—A little before the previous Christmas, while skating, he fell on the outer side of the right thigh. The fall was not a severe one, for he was able to continue skating for some considerable time, and afterwards to walk home, a distance of more than a mile. A week or two afterwards the injured hip became the seat of pain, which was most marked when sitting, not noticed much during walking or lying down. Without any augmentation of the pain, and with a complete absence of other symptoms, the hip gradually and almost imperceptibly grew more and more stiff, so that at the time of admission there was scarcely if any movement in the joint; the patient was unable to reach the right foot without bending the knee, and placing the right limb behind the left. When he lay in the horizontal position, the right thigh and leg were rotated outwards. The hip-joint did not permit any movement; any attempt at flexing the thigh moved the pelvis. The knee-joint on the contrary was quite movable. Accurate measurements were taken, and a comparison of the two sides gave the following results:—From anterior superior spinous process of ilium to internal malleolus, right side, $32\frac{1}{2}$ inches, left side, $33\frac{1}{4}$ inches; circumference of right thigh $17\frac{1}{2}$, of left thigh $18\frac{1}{2}$ inches. The right buttock was smaller than the left, and its fold was almost obliterated.

October 25th. The patient was placed under the influence of chloroform, and the right thigh forcibly flexed on the abdomen, and rotated outwards and inwards. Fibrous adhesions audibly gave way, and the movements of the limb were subsequently extremely free—much more so than in a healthy joint. Liston's long splint was then applied, and the limb kept in the extended position.

November 2nd. Comparative measurements of the lengths of the two limbs were again taken. The right was one inch and three-quarters shorter than the left. There was considerable thickening about the trochanter which was two inches above Nelaton's line. The base of Bryant's triangle was half an inch less on the right than on the left side. The limb was capable of flexion through a few degrees; rotation was impossible, and any attempt was painful. Eversion of the limb had now given place to slight inversion and adduction.

November 10th. For the last few days passive motion had been employed, but with negative results. The patient was allowed to get up and move about.

November 16th. Movement of rotation caused a pain which was felt on the inner side of the knee; the hip was painless. The pain in the knee was relieved by pressure.

November 17th. The right limb was found to be two inches shorter than the left. The circumference of the thigh was less by three-fourths of an inch, than at the time of admission.

November 18th. The patient's mother was seen, and the lad's personal and family history inquired into; nothing was elicited which could in any degree assist in the elucidation of the symptoms. The different members of the family were quite free from any rheumatic tendency.

November 21st. Aching pain had been constantly present in the right knee for two or three days, and was compared to the sensation experienced when he had stood too long on the leg.

November 24th. The pain continued, but was worse at night.

November 28th. Chloroform was again administered, and the limb forcibly and freely moved; a more careful and detailed examination of the part was also made. When the leg was flexed and rotated inwards, a hard irregular mass could be felt behind and somewhat above the trochanter. From the position which it occupied and its behaviour under the various movements of the limb, it was concluded that this mass was the head of the femur. It had lost the rounded outline, and appeared to be of an ovoid shape, with the long diameter at right angles to the remains of the neck. The thigh-bone could be rotated inwards to such an extent that, when flexed, it crossed the sound thigh about the centre.

When extended, it allowed the inner margin of the foot to lie on the bed.

November 30th. Pain in the knee was still present; slight flexion of the thigh could be practised. Rigidity of the hip-joint had returned, as shown by the pelvis moving with the leg when the thigh was flexed beyond a certain degree. The patient could voluntarily invert and evert the foot slightly; he was quite unable to bring the right thigh over the left without lifting it with his hands.

December 22nd. He was discharged. He had no pain when walking; the shortening caused much inconvenience, and he was advised to wear a high-heeled boot. When the patient was in a position of rest, *i.e.* lying on his back with the spine level on the bed, the femur was fixed at an angle of 30° with the horizontal plane. It could be moved through a space of about 10° ; beyond that, the spine became curved. There was shortening to two inches, no pain or tenderness about the joint, considerable deformity, with slight wasting of the muscles of the limb. There was a depression in the groin in front, where the head of the bone should be. He could stand straight; the heel was raised. Slight rotation inwards was possible; abduction and adduction were impossible.

REMARKS.—This case presents a fairly typical example of a condition which fortunately does not often follow contusion of the hip. The original injury was of a very trivial nature, and did not call for any treatment. We cannot, however, resist its causal relationship with the changes which subsequently occurred. The aching pain, commencing soon after the fall, sufficiently indicated the presence of a change which gradually and slowly proceeded: for even while the patient was under observation, shortening of the femur to the extent of an inch took place. That the shortening is due to a change in the neck of the femur is shown by the altered position and direction of the head.

The different measurements demonstrate the close proximity of the head to the trochanter, as well as an alteration in the axis of the neck. The almost exclusive appearance of interstitial absorption in the upper end of the femur still requires explanation. It appears that blows or falls on the hip can disturb the circulation in the neck of the thigh-bone to such a degree as to determine organic changes, which result in shortening of the neck and much deformity of the limb. The alteration has been mostly observed after fracture of the cervix femoris; its occurrence after contusion of the hip is mentioned, and cases of this nature are occasionally recorded. No age seems to be exempt, for among Hell's cases it was observed as early as thirteen years. In old people, a liability to reabsorption after slight causes is an undisputed fact, a knowledge of which is of considerable importance. It would be well to warn a patient (especially an aged one) who has sustained an injury to the hip, that structural alteration of the neck of the bone is within the range of possibility; otherwise the surgeon at some future time may be blamed for having overlooked a supposed fracture or dislocation. In the present case, an ability to continue at work at once excluded these accidents. If, however, the contusion had been of such a severe nature as to require rest for some time, and deformity and shortening had subsequently been detected, it is more than probable that a mistaken diagnosis would have been suspected. Interstitial absorption is not associated with any constant peculiarity of constitution. This lad presented a healthy appearance, and the attempt to detect any hereditary predisposition to disease proved fruitless. The relation between chronic rheumatic arthritis and interstitial absorption appears to be still unsettled clinically. There is an undoubted similarity between the two conditions, and the similarity may also be traced in the appearances presented by the parts which are the seat of the morbid action. In the case which is recorded above, the diseased condition had proceeded at a much faster rate than it ever does in chronic rheumatic arthritis; besides this, the deposition of bone in the soft structures in the vicinity of the affected joint, characteristic of the latter disease, was entirely absent. The diagnosis of morbus coxarius from interstitial absorption of the neck of the femur is not usually attended with much difficulty. The presence of extra-articular fibrous adhesions, which rendered motion of the hip-joint impossible without the aid of anaesthetics, introduced a difficulty in the diagnosis. The history of the case, combined with the result of the examination while under the influence of chloroform, with the absence of constitutional derangement usually attendant upon the ordinary disease of the joint, makes the diagnosis of interstitial absorption tolerably certain.

MISSION HOSPITAL, KASHMIR.

ELEPHANTIASIS OF THE PENIS AND SCROTUM,

(Under the care of Mr. E. DOWNES.)

K., a Kashmiri, aged about 35, came to the Mission Hospital, with an enormous elephantiasis of the penis and scrotum. The mass reached down below his knees, and he could walk with

was five weeks in healing.—Mr. HOLMES had hoped to hear a more detailed account of the effects of the ligatures. The use of kangaroo tendon was not new; it had been employed at St. George's Hospital in several cases by Mr. Stirling. It would add to the value of the communication, if Mr. Smith would state the conclusions at which he had arrived as to its value as a suture and as a ligature respectively. As a suture, it appeared not to differ much from carbolised catgut. He was much disposed to agree with Mr. Barwell in preferring fresh tissue.—Mr. T. SMITH said that there had been no opportunity of observing the pathological changes attending the use of the kangaroo-tendon ligature; and he hoped that it would be long before it was possible to make such observations. He had never used it in ovariectomy.

On Two Cases of Unreduced and Two Cases of Reduced Dislocation of the Hip. By HENRY MORRIS, M.A., M.B.—In Case I, an impacted fracture of the neck of the thigh-bone occurred to an old man, who had for years had an unreduced dorsal dislocation of the same hip. Under examination, the impaction was broken down and the limb brought straight, and therefore into a much better position than it was prior to the second accident. Union of the fracture followed, with the two limbs parallel. It was suggested that, in certain cases of unreduced dislocation, subcutaneous division of the neck of the bone should be performed, with a view to correct the more extreme inconveniences of the dislocation; and that, in all irreducible dislocations with fracture of the neck or shaft of the thigh-bone, the fracture should be so set as to get parallelism of the limbs by causing the fragments to unite at an angle. Case II was an unreduced dorsal dislocation, with fracture of the rim of the acetabulum, in a young and active man. The dislocation was of fourteen months' standing, and was caused by a fall from a height during a walk in a state of somnambulism. At first, the symptoms of dorsal dislocation were absent, and it was thought that the trochanter major was fractured and slightly displaced upwards and outwards; but whilst lying in bed the limb gradually shortened, and at the end of ten weeks had assumed the characteristic signs of dorsal dislocation. The feature of interest was the marvellous mobility of the unreduced limb, which was capable of every form of movement common to a ball-and-socket joint, and to an almost perfect degree. It was suggested that this freedom of movement, whilst in large part due to the activity and perseverance of the patient, was also largely the result of the dislocation being direct—the result of previous fracture of the acetabulum. The head of the femur thus rested upon the bone of the pelvis, and was strapped down and steadied by the rotatory muscles; whilst the neck was not wound round the capsular ligament as in the case of indirect dorsal dislocations, in which the head of the bone mounted over the rotator muscles so as to have them between it and the dorsum ilii. The case showed how a dislocation might insidiously follow fracture of the rim of the acetabulum by the mere continued traction of muscular action. Case III was a thyroid dislocation, reduced by manipulation after having been converted into a dorsal dislocation. The peculiarity—as it must be called, if the text-books were correct—of the case was the shortening of the limb an inch and a quarter; but probably in all obturator luxations the lengthening was only apparent, and due to the extreme tilting of the pelvis. Case IV was a dorsal luxation of the ordinary type, and was reduced by manipulation in the ordinary way. The head of the bone, during reduction, could be plainly felt traversing its way to the lower edge of the acetabulum, that is, retracing the course along which it was displaced. This case, and Case III, in which the thyroid was converted very easily into a dorsal dislocation—and indeed all cases of pubic and thyroid luxations which were changed into posterior luxations—afforded additional arguments in support of the views, previously published, of the author; namely, that in all the ordinary dislocations backwards without fracture, whether spoken of as “dorsal” and “sciatic”, or, as Bigelow styled them, “dorsal above” and “dorsal below the obturator tendon”, the femur left the acetabulum through a rupture of the thin part of the capsule and below the internal obturator tendon. Herein was the *rationale* of the success of the method of reduction by manipulation; and posterior as well as anterior dislocations occurred whilst the limb was abducted. The chief museums of England, Ireland, and France had been searched for specimens of dislocation of the hip, with this result, that there was not a single example of simple, uncomplicated, direct posterior dislocation above the obturator internus, but many of secondary dorsal and sciatic luxation; that is, luxation in which the head of the bone, having left the socket below the obturator internus muscle, had ridden upwards over it into its new position. Special reference was made to Sir W. Mac Cormac's case in St. Thomas's Hospital Museum, and a diagram of it was shown.—Mr. F. S. EVE made some remarks in reference to his views on dislocation of the hip-joint, as expressed in a paper previously read before the society, which differed from those entertained by Mr. Morris.—Mr. MORRIS briefly replied.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 11TH, 1882.

J. MATTHEWS DUNCAN, M.D., President, in the Chair.

Fibroid Tumour of Uterus.—Dr. CARTER showed a fibroid tumour removed from a patient, aged 54, who had suffered from hæmorrhage for six years. The vagina was filled by a large smooth growth, an expansion of the posterior lip of the cervix. It was removed by *écraseur* under ether, and weighed twenty-one and a half ounces. The next day a large mass again filled the vagina, being the interstitial part of the tumour extruded. Ether was again given, and a piece, weighing ten and a quarter ounces, removed from the posterior lip of the cervix. On the third day there was again found in the vagina a polypoid mass springing from posterior wall of fundus. This was again removed by *écraseur*, and weighed three ounces. The patient did well.

Mummified Fetus.—Dr. OUTHWAITE showed a mummified fetus, evidently developed up to about the second or third month. It came away after the delivery of child in the seventh month of pregnancy. The placenta was single, and the membranes showed a manifest septum.—Dr. EDIS thought that the case illustrated a common incident. It often happened that, in twin pregnancy, a burst of hæmorrhage took place, and abortion was supposed to have occurred, when only one ovum was blighted, and might either be retained or expelled.

Uterine Fibroid complicating Pregnancy.—Dr. GALABIN showed for Mr. GILLINGHAM an uterus at full term of pregnancy, having a very large soft fibroid tumour growing from its internal surface. The os was found closed, and the head above the brim; and it was thought at first that the smooth elastic mass, felt through the os, was the sac of a second fetus. This was disproved on attempting to scratch through the supposed membranes. A second practitioner called in took the case to be placenta prævia. The child was delivered with difficulty by version, and the patient died from shock and hæmorrhage shortly afterwards.

Salicylic Cream.—The PRESIDENT called attention to salicylic cream (one part of the powdered acid to four or five of glycerine or vaseline) as a valuable means of keeping sponges, tents, instruments, etc., aseptic in the vagina. It had been suggested to him by Dr. Alexander Ogston, of Aberdeen, and he had used it with success in inducing premature labour and other operations.

Treatment of Dysmenorrhœa and Sterility.—The discussion on Dr. GODSON's paper on the treatment of dysmenorrhœa and sterility by dilatations with metallic bougies, was continued.—Dr. ROGERS had, 15 years ago, commenced the use of dilators, at the recommendation of the late Sir James Simpson. In married women, pregnancy often followed; but the results were not so satisfactory in the unmarried, who often relapsed into their former condition. Eventually, he ceased to have confidence in their use, and he believed that they had been universally discontinued in London until the last few years. He had also given up the use of incisions, one of his patients having died after that operation. Eventually he turned his attention to the cure of dysmenorrhœa by the use of Dr. Wynn Williams's intra-uterine stem and shield, and in only one case had serious mischief arisen. In private practice, however, he preferred one of Meadows's or Routh's stems of vulcanite, as India-rubber soon decomposed. Since hearing the paper, he had tried a No. 7 and No. 8 dilator upon one patient, but found that the latter gave extreme torture. Dilatation by sea-tangle was afterwards well borne.—Dr. BRANTON HICKS confessed to a difficulty he had always felt in distinguishing the purely spasmodic dysmenorrhœa, to which the author wished to confine his paper. It might be possible, during the menstrual intervals, to pass a sound readily up to the fundus, and yet the menses might be obstructed, for instance, from a hæmorrhagic coagulum or tumidity of the mucous membrane. How often were these conditions mixed with spasm in persons sensitive to reflex-irritations, so that there was a compound condition. When one looked to the remedy employed by the author, it was found that it was essentially dilatation by bougies graduated in size. Hence it might fairly be concluded that the cases where these were of use were, more or less, at the menstrual period, cases of obstruction, unless it were argued that the mere passage of the metal tended to harden the mucous surface, and to render the uterus less susceptible and spasmodic. If then the cases were, in a measure, instances of obstruction, they were out of the discussion, which was limited to those of pure spasm.—Dr. SAVAGE said that the instrumentalists contended that their inventions cured in some cases, relieved in most, and never did harm; whereas there was abundant evidence that they never cured, relieved only so long as they were used, and too often did much harm, even to compromising life. An eminent provincial surgeon had lately brought to the notice of the profession fourteen morbid specimens of the uterine appendages, some of the tubes containing half a pint of matter. It was said that these unfor-

state for at least a year previous to the development of tubercles in the lungs, and that the microscope could very readily detect this state;" and he showed further that, by direct treatment, the blood could be brought back to the healthy standard, and so phthisis could be literally prevented. He went on to state that this depraved state of the blood is mainly caused by the immoderate use of two articles of food—starch and sugar; and that, by excluding these from the diet, the blood rapidly regains its normal state of health. In support of these views, Dr. Salisbury experimented on no fewer than two thousand swine; about one-half of these were fed on food which did not contain either starch or sugar. These animals remained perfectly healthy, whilst the other half were allowed starch and sugar, and very many of these showed signs of disease in three weeks, which, later on, ended in the development of tubercles in the lungs, as proved by dissection after death. Similar experiments, but not carried to the same degree, were made on some men, with similar results. Dr. Kennedy contended that Salisbury's views as to the etiology of phthisis were not sound, because, whilst the use of starch and sugar may be described as universal, the phthisis which is said to follow their use is by no means so; and, further, Salisbury himself admits that a similar state of the blood to that which, he says, precedes phthisis, exists also in other disease—such as syphilis, rheumatism, paresis, typhoid fever, small-pox, erysipelas, and ague. In other respects, his views seemed to Dr. Kennedy to be of great moment, especially in reference to a pretubercular stage of consumption; but there were important omissions in the list of remedies which, besides animal food, had the power of restoring the blood to a healthy state—such were iron and cod-liver oil.—In the discussion which followed the reading of Dr. Kennedy's paper, the Vice-President, Brigade-Surgeon Jackson, Dr. Finny, and Dr. Kennedy took part; after which the Society adjourned.

REVIEWS AND NOTICES.

DESCRIPTIVE CATALOGUE OF THE SPECIMENS ILLUSTRATING SURGICAL PATHOLOGY IN THE MUSEUM OF UNIVERSITY COLLEGE, LONDON. By MARCUS BECK, M.S., M.B., F.R.C.S., Assistant-Surgeon to University College Hospital, and S. G. SHATTOCK, M.R.C.S., Curator of the Museum. Part I. London. 1881.

WITHOUT a good catalogue, a pathological collection is useless. When the spirit in the bottles is kept clean by frequent changing, and the specimens are mounted after proper dissection, and not allowed to break from their suspending threads and lie for months at the bottom of their jars, half the duties of a curator are performed; but efficient means of reference make up quite the remaining half of the labours of those who attend to museums. The description of the specimen as it appeared when fresh, and all microscopical details, are practically included amongst matters of reference, since the curator is appointed to arrange specimens and describe them for the benefit of visitors to his museum. Such is his duty. That he has the right to advance his own interests in any legitimate manner, no one will deny; but that is another question. Should the curator neglect to keep up an efficient catalogue, students and qualified visitors will be disheartened by having to search amongst dusty pages of faded or illegible manuscript, old printed matter crammed with effete terms, or, at the best, supplements half-printed and half-written, and twice as long as the original catalogue. Of late, the most laudable efforts have been made to remedy the evils of imperfect and superannuated catalogues. At the Royal College of Surgeons, and at several museums of metropolitan hospitals, new pathological catalogues are in more or less active progress of compilation. Mr. BECK and Mr. SHATTOCK may be congratulated in having won the race—not so much by the merits of their catalogue, which are high, but rather by being the first to bring out an important part of it. Those who wish to study diseases and injuries of bone, joints, muscles, tendons, and tissue, the alimentary canal, the blood-vessels, lymphatics, and nerves, at the museum of University College, have now a valuable well-printed catalogue to aid their studies. On the title-page, we are informed that "copies may be obtained at the office of the College". The specimens catalogued in Part I are purely surgical, in accordance with the scope of the catalogue as expressed in its title; so that, under "injuries and diseases of the intestines", we find ulcers of the duodenum following burns, but not typhoid ulcers. The specimens are numbered in sequence through all the series. This we consider to be by far the best

system; for, as additions are catalogued, such numbering as "666 A, Series ix", or "1238 A, Series xxi", is far less confusing and unsightly than what would be seen, were the numbers to be commenced afresh from the unit in every series, as in several hospital museums, where we find such references as "Series 22, 16 A, a". The visitor may be much confused by opening the catalogue at No. 16, in Series 21, and then looking on too far in the book, and dropping on to 16, Series 23. By numbering in plain sequence, all this annoyance is avoided; and we are glad to see that this simpler method is adopted by Messrs. Beck and Shattock. The description of each specimen is short, concise, and correct; all that is to be seen is described, lest any point should escape the observation of the student. We should have liked to see more histories; but doubtless, in the older specimens, the compilers could find no records, or, at least, no satisfactory description of the symptoms of the illnesses of the patients whence the specimens were obtained. Such a history as that appended to No. 1072, a villous tumour of the rectum, greatly increases the value of a specimen as a factor in medical education. There is no summary, at the beginning of each series, of the latest views of pathologists on each subject; and this is advisable, for the catalogue will be useful for many years, whilst "latest views" are apt, in these days, to become old in a twelvemonth. We regret to find that there are no cross-references. Thus, under the subseries, (true) "aneurysms of the thoracic aorta", some reference should be made to specimens of dissecting aneurysm of the same vessel further on, and to examples of true aneurysm of the aorta in the general subseries, "fusiform and sacculated aneurysms", a few pages earlier. Such an arrangement, however, would have involved much labour, and would have retarded the publication of a catalogue which, for some time, has been urgently needed by visitors to the museum of University College. Messrs. Beck and Shattock, both from the first well suited for such a task, have earned the thanks of all who, for the next twenty years or so, study pathology in that fine museum.

TEXT-BOOK OF MODERN MIDWIFERY. By RODNEY GLISAN, M.D., Emeritus Professor of Obstetrics in the Willamette University. Philadelphia: Blakiston. 1881.

IN the preface to this work, the author states: "Believing that there is a demand for a work which shall more thoroughly represent American obstetric practice, the author has ventured to present the following condensed treatise to the medical students and practitioners of his own country. Many years' experience as a practitioner, and several as teacher of midwifery, lead him to hope that he may at least assist in supplying the demand for a book properly representing the peculiarities of American practice, and adapted to the wants of obstetric teachers and busy practitioners." After reading this, we were disappointed to find that the work was merely a condensed epitome of the works of Barnes, Duncan, Playfair, and Leishman. The "peculiarities", if any exist, of American practice, are conspicuous by their absence. The views of the chief representatives of American obstetrics, such as Goodell, Fordyce Barker, Thomas, Lusk, and Hodge, are by no means prominently set forth. In the chapter on the forceps, we find, in the figure illustrating the application of that instrument at the superior strait, that the forceps drawn is a French model, with the ordinary French lock. We suppose this illustration was used as a makeshift; but it is calculated to puzzle the student, who finds the ordinary English lock figured at page 475 as Elliott's forceps, and recommended as the best pattern. Of the one hundred and twenty-nine illustrations which scantily illustrate the book, the large majority are from Tyler Smith, Leishman, Playfair, and Barnes; the few American drawings being chiefly after Hodge. In a work on midwifery, good illustrations are important and essential; and in this respect the book prepared by Dr. GLISAN is singularly deficient. The work bears evidence of haste in compilation, and calls for no further remarks.

AN UNHEALTHY VILLAGE.—In the village of Tanmanaing the Burmese state that no one can live, except those who have been born and brought up there, because of the prevalence of fever, from an attack of which there is never permanent or thorough recovery. The place is much dreaded by the people generally. A former deputy commissioner states that he thinks the disease is caused through the air around the village being poisoned from the continual making of salt that goes on throughout the year; moreover, no pure water is procurable in the village, the fresh water tanks being injured by the ashes which are wafted into them by the wind from the burning salt kilns.

* The changes chiefly consist in the presence of spores, mycelial filaments of yeast, enlarged white corpuscles, and the loss of the neurine of the red discs, owing to which they aggregate themselves into confused masses.

and support: and, assuming that the compromise proposed in it is the only way in which the scruples of our Irish colleagues with regard to notification can be met, there is nothing objectionable in the course proposed. But it is notorious that, in a measure of this kind, the permissive element is fatal to its success. No one needs to be told how the permissive character of much of our public health law has crippled its working. At the annual meeting of the Dublin Branch, the majority of the speakers seem to have been amply satisfied with the compromise suggested; but it may be doubted whether it carries out the spirit of the plan which has consistently been urged by the Registration of Disease Committee of the Association, and accepted by the Association at its general meeting. That committee has indicated as the proper method, and the Association has accepted the view, that the medical man should be responsible for giving a certificate as to the nature of the case to the occupier, whose duty it should be, under penalty, to forward such certificate to the sanitary authority. The policy indicated here is clear and unmistakable, and, as we think, wise and equitable; whereas that approved by the Dublin Branch is temporising and unsatisfactory. To leave it to the choice of the medical man to notify or not to notify, "as he thinks fit," is to tempt poor and ignorant people, about the presence of disease amongst whom it is of chiefest importance for the sanitary authority to learn, to call in the aid of the lowest class of practitioners, who may allow it to be regarded as an inducement to employ them that they will not make uncomfortable reports to the sanitary authority. Everyone who has any practical experience of the penal clauses of sanitary law knows how difficult it is to get together evidence sufficient to justify a conviction in cases where wilful neglect has to be proved, and the large discretionary power proposed to be given to medical men will, we think, be found to make the clause unworkable.

For our own part, we have been disposed to regard the method suggested by Dr. G. Purcell Atkins of Cork as promising to meet the disappointing difficulties which apparently beset this question. Dr. Atkins proposes (see vol. ii, 1881, p. 737) that the medical attendant should, on recognising that a case is infectious, fill up a certificate giving the usual particulars, and hand it to the responsible person, who is then to forward it to the sanitary authority. At the foot of the certificate, the words "no immediate attention is required" might be printed, so that, when the certificate reaches the authority, the inspector need not be sent to inquire, unless the word "No" were erased. Immediately on receiving the certificate, the clerk to the sanitary authority or medical officer of health would acknowledge its receipt to the medical attendant, who, if he did not get such acknowledgment within a certain number of hours, would send a duplicate certificate to the authority. As Dr. J. W. Moore has well said of this proposal, "No doubt delay will occur when the householder neglects to forward the information; but no system can be regarded as perfect, and the instances of neglect of duty on the part of the householder will probably be comparatively few, because he knows that, should he omit to send the notice, the medical attendant will have to notify—a contingency which is to be avoided if possible, as there will be a substantial penalty to which the housekeeper will render himself liable by his neglect. Also, he can have no grievance against the medical attendant, who in the first instance does not move in the matter at all." We are bound to say that this plan promises better than that proposed in the Bill before us; and it may be hoped that the Select Committee which, it is expected, will be appointed to consider the question in all its bearings, will devote some attention to this point.

Since the above was written, a Bill to provide "for the better notification of infectious diseases", and indorsed with the names of Mr. Hastings, Sir Trevor Lawrence, Dr. Farquharson, and Mr. Brinton, has been issued from the printing office of the House of Commons. It proposes to do for England and Scotland what the Bill of the Dublin Branch proposes to do for Ireland, except that the duty of notification is cast primarily on the medical practitioner, the occupier being only bound to give notice in the event of no medical attendant having been

called in. The bill is, in fact, identical with that suggested by Mr. Hastings, Q.C., and appended to his paper on the subject published in these columns on the 5th November last. The principle proposed is not one that the Association, as advised by its two Committees that have given special attention to the subject, can accept without material modification, however anxious it may be for compulsory notification of infectious cases to become law.

ISOLATION OF PERSONS SUFFERING FROM DIPHtheria.

THE question of the propriety of treating cases of diphtheria amongst non-infectious patients in general hospitals has not, so far as we know, been recently discussed. Skilled opinion would doubtless be, on the whole, now opposed to such a course, as likely to result in the spread of the subtle poison of the disease to other inmates of the hospital. Diphtheria is an affection so insidious, that no precaution ought to be spared to prevent its spread; and isolation in a special hospital for infectious cases is the most effectual mode of prevention. Undoubtedly, the number of cases of diphtheria recorded in local reports as having been received into infectious hospitals is inconsiderable as compared with other diseases, notably scarlatina; but, in view of its known character, few health officers would hesitate to say that isolation was necessary for it. Mr. Shirley Murphy, who shows praiseworthy zeal, in his capacity of health-officer of St. Pancras, to collect information on points of general interest, has, in pursuance of instructions received from his sanitary committee, put this question to the test. He has addressed a circular letter to the medical officers of health. Mr. Murphy, as an old official of the Metropolitan Asylums Board and of the London Fever Hospital, should have something to tell us from his own experience on the danger of the spread of diphtheria in hospital. Many months ago, Dr. Thorne Thorne was commissioned by the Local Government Board to make an inquiry into the hospitals provided throughout England for infectious disease; and his report would no doubt have given valuable information on this point, had it been available. But no signs of the report are yet apparent; and, though the question is one that most persons will decide without difficulty for themselves, it would be more satisfactory to have the matured judgment of an experienced public official who has given special study to the subject, than the diverse and often crude opinions of local officers of the various sanitary districts of the metropolis, asking their opinion as to the necessity for the isolation of persons suffering from diphtheria, and the propriety of treating such cases among non-infectious patients in general hospitals. To his circular, Mr. Murphy received twenty-seven replies, on which he has made a detailed report. To the first question, as to whether diphtheria was considered a dangerous infectious disease, twenty-six health officers replied in the affirmative; by one, no answer was sent; two considered the disease less infectious than scarlet fever; others replied "eminently infectious", "decidedly", "undoubtedly", and "certainly"; while the remainder confined their answer to the simple affirmative, that the malady must rank as a dangerous infectious disease. In reply to the question whether persons suffering from diphtheria required isolation, twenty-six answers were sent. Of these, all were in the affirmative; one respondent, however, apparently forgetting the existence of the London Fever Hospital, did not know to which hospital such cases could be sent. With regard to the treatment of cases of diphtheria among other non-infectious cases in a general hospital, twenty-two answers were received, all condemning the practice. One of the respondents would not object to the disease being treated in a general hospital when not epidemic, while the only reply which approved the treatment of such cases under these circumstances required conditions of cubic space, etc. The fact, then, remains that twenty-one replies out of twenty-three received altogether condemn it; while one gentleman, the physician to a large metropolitan general hospital, tells a story of the disease spreading from one patient to others in that institution, and killing them.

Concerning the question as to whether general hospitals in other parts

AN inquest was held at University College Hospital on Wednesday last, on the body of a woman who died from the effects of an overdose of nitric acid, taken to relieve toothache. It appears that the deceased woman, who had sent to a druggist for twopennyworth of the acid, put the mouth of the phial to the affected tooth, and tilted it up so high that she swallowed nearly the whole of the contents.

A TELEGRAM from Tabreez, under date of February 14th, informs us that an epidemic disease strongly resembling plague broke out at a small village in the neighbourhood of Saujbulagh, on the 5th instant, since which date upwards of forty fatal cases have occurred. The present winter in Persia is said to be exceptionally rigorous, the thermometer registering at present 35 degrees of frost Fahrenheit.

LAST week, there were registered in London 2,951 births and 2,632 deaths; and the annual death-rate rose to 35.3. This is the highest figure recorded since February 1880, when the rate was 46.7: an increase attributed to a succession of dense fogs, accompanied with low temperature, which prevailed at this time. The deaths from diseases of the respiratory organs exceeded the average by 430 in the week ending Saturday last. Old people suffered the most, and children under five the least.

MR. CUBITT proposes to move on an early day for the appointment of a Select Committee of the house of Commons, to consider to what extent the fogs of London are injurious to life, health, and property; whether they have increased and are increasing from causes which are controllable; whether the existing Acts of Parliament relative to the consumption of smoke are applicable to the present state of the metropolis, and can still be enforced; and whether alteration and extension of this legislation would be beneficial.

WE learn, with great pleasure, that the rumour that Mr. Alfred Baker of Birmingham does not intend to offer himself for re-election on the Council of the College of Surgeons in July next, to which we recently referred, is without foundation. On the contrary, as Mr. Baker's recent resignation of active hospital duties must place more time at his disposal, he will, we believe, probably feel disposed to apply for re-election, since his attendance in London will thus become less difficult of arrangement, and much less likely to clash with his professional engagements.

SCARLET fever shows signs of assuming serious dimensions in the Wednesbury Local Board District. In his last report, the medical officer of health stated that one-half of the deaths from zymotic causes had been caused by this disease. The Nottingham guardians have recently decided that all cases of scarlet fever coming under the notice of the relieving officers are to be at once reported to the Health Committee. It may seem strange to have to describe this resolution as a step in the right direction; but the lack of accord between local authorities, as to the giving of information to each other, has long been a scandal in our social system.

WE hear that at the meeting of the General Committee of the Coventry Provident Dispensary (February 14th), it was resolved to appoint a fourth surgeon on the medical staff of the institution. A resignation was also read from one of the three present medical officers, who is about to retire from the practice of his profession; and, consequently, the Committee will, at their meeting on the 14th of March, proceed to the appointment of two surgeons to the institution. The emoluments last year amounted to about £300 for each surgeon, and the institution is still rapidly growing. Particulars may be obtained of Luke Dresser, Esq., Coventry, the Honorary Secretary, and the applications are to be sent in by the 1st of March; the duties to commence on the 11th of April.

THE ABATEMENT OF SMOKE.

THE Manchester Association for Controlling Noxious Vapours have just issued their annual report, in which, referring to the work of the

Smoke Abatement Committee, they say: "Another important matter to record in connection with our work is the opening of an exhibition in London of smoke-consuming appliances. Patronised by Royalty and managed by a committee composed, for the most part, of well-known men, and backed by ample means, this exhibition has done more than anything else to popularise the cause we have at heart. The collection of smoke-preventing grates, furnaces, etc., now on view at South Kensington, brings within reach of a large part of the public the knowledge, hitherto confined to a comparatively small number of experts, that common coal can be used for all useful purposes in mills, works, and houses, without producing any dense smoke. As smoke greatly lessens the pleasantness of life for all classes of people in England, and injures the health, physical, mental and moral, of a large proportion of the inhabitants of our towns, it is to be hoped that the public will be led, by the knowledge gained at South Kensington, to demand not only the strict enforcement of the law which prohibits the emission of dense smoke from the chimneys of factories, but also to insist on an extension of it to those of dwelling-houses. This exhibition, as might have been expected, has attracted considerable attention in Lancashire; and we are glad to learn that the Nuisance Committee of our own Corporation, which, with its zealous superintendent, Mr. Rooke, is by no means the apathetic body certain newspaper correspondents represent it to be, has made a journey to London to visit it, as also the Mayor of Oldham and other gentlemen from that town. The Committee has thought it desirable that this Association and the Sanitary Association (of which there are already several allied branches, should be combined, with a view to mutually extending their spheres of usefulness. Each will do its separate work; but the annual meeting will be common to both. It is hoped that thus a grand local association will be formed, having for its object the physical and moral improvement of this great community."

THE GREAT WESTERN RAILWAY.

THE actively contested appointment of Surgeon to the Great Western Railway has been awarded to Mr. Bond, Assistant-Surgeon to the Westminster Hospital. The appointment was one of rather more than usual interest; the very moderate salary of a few hundred pounds a year attached to it produced, we understand, upwards of six hundred candidates, including several surgeons of considerable eminence. Mr. Bond having already held the same post in the services of another line, it is probable that the company were in no small degree guided in their choice by the obvious advantages of selecting a tried man, who in this particular case is experienced in other duties where public, private, and medical interests are blended.

MORTALITY FROM LONDON FOGS.

THE Registrar-General, in his last weekly return, calls attention to the fact that the combined effect of dense fog and low temperature have once more raised the metropolitan death-rate to a point which is seldom reached except during the prevalence of severe epidemics. Since the cholera epidemics of 1849, 1854, and 1866, the London death-rate has been raised to an abnormal point on three occasions, on each of which the excessive mortality has been due to fog and low temperature. In the week ending December 20th, 1873, following the memorable fog which was so fatal to the beasts at the Islington Cattle Show, the metropolitan death-rate rose to 37.5; in the week ending February 7th, 1880, following a week of intense frost and dense fog, the rate rose to 46.7; and again last week, influenced by the dense fog of the previous week, and a few days of low temperature, the exceptional death-rate of 35.3 was recorded. An analysis of the age-distribution of the deaths last week shows that the excess of mortality due to fog and cold affects the London population at each group of ages; this noxious effect is, however, smallest among infants under one year of age, while it is most strongly marked among elderly persons. As regards diseases, the most fatal effect of the fog is shown in the deaths referred to diseases of the respiratory organs, which from 415, 543, and 647, in the three preceding weeks, further rose last week to 994; this latter number—of which 696 were attributed to bronchitis, and 185 to pneumonia—

endeavour, as far as lies in their power, to remove the existing prejudice to it, and to persuade their patients to avail themselves of it. We trust that the new health-officer's praiseworthy efforts to follow in the steps of his energetic predecessor will meet with their due reward in a reduction of the present lamentable mortality in the town from scarlet fever and other zymotic diseases.

THE VACANCIES AT ST. BARTHOLOMEW'S HOSPITAL.

WE understand that Mr. W. H. Cripps will not be opposed by any other competitor in his candidature for the appointment of assistant-surgeon to St. Bartholomew's Hospital now vacant. A very strong contest is expected for the next vacancy, for, owing to the appointment of five surgeons, a similar number of assistant-surgeons must be maintained; and, after the coming election, a fifth place on the junior surgical staff will remain unfilled. The principal candidates will be Mr. Shuter and Mr. Macready. The former gentleman recently held the appointment of assistant-demonstrator of anatomy to the hospital medical school for several years; the latter is at present surgical registrar to the hospital. Both these candidates are already surgeons of smaller hospitals, where they have had ample opportunities of acquiring great clinical and operative experience, of which both have taken advantage.

NATIONAL HEALTH SOCIETY.

THE report of the year's work of the National Health Society, presented at its recent annual meeting, includes a record of voluntary work carried out in many directions, and with much success, for the extension and the increase of sanitary knowledge and the strengthening of the means for the prevention of disease. Sixty-four lectures have been given in various poor districts, addressed to mothers' meetings, working men's clubs, etc., by well-known authorities: Dr. Siemens, F.R.S., Mr. H. Power, Dr. Robert Farquharson, M.P., Professor Fleeming Jenkin, F.R.S., and others having taken part in the work of lecturing. Mrs. Johnstone's system for the prevention of the spread of fever, carried out with much success in Hastings, and described in the *Sanitary Record* of June 15th, 1880, and June 15th, 1881, has been personally explained by her to large audiences at one meeting of mission women, and at another meeting of clergymen and medical men. Part of the Society's work has consisted in the presentation of street-seats and trees for planting in wide thoroughfares, so as to supply shade and rest to wayfarers; the most recent gifts for this purpose are twelve seats, which are placed in Hornsey, and twelve in the New Kent Road. Arrangements are being made, when permission of the vestries can be obtained, for similar work in other districts of London. A special report was made on the removal of dust, which suggested methods of preventing the existing nuisance from the collection of dirt and refuse in house-bins, and the imperfect methods of removal employed in London, which contrast very unfavourably with some of the much better systems in operation in northern towns. This subject is in the hands of a special committee, who are in active communication with the London parishes. Upwards of seven hundred plumbers have attended each of the lectures on the Science and Art of Practical Plumbing, given by Mr. Hellyer for the Society, and reported in the *Sanitary Record*, June 15th, July 15th, September 15th, and October 15th, 1881; and a considerable number of names have been entered for the examinations and practical demonstrations of skill in connection with these lectures, for which the Society has offered prizes. These examinations will be held in the course of February 1882. The Society's pamphlet on vaccination has been approved and revised by the Local Government Board, and some hundreds of thousands of copies have been sold at cost price to Unions throughout the country, for house-to-house distribution. The part which the Society has taken in abating the smoke nuisance by initiating the appointment of a Smoke Abatement Committee is well known to the public, and will be the subject of a special report. The whole of the work enumerated has been carried out at an expenditure of something less than £300 during the year. The accounts were presented and various speeches were made, a vote of thanks being proposed to the chairman, Mr. Ernest Hart, by General John Cotton, seconded by

Mr. Domville. Votes of thanks were also given to the Treasurer (Mr. Lawrence), to the Secretary (Miss Lankester), and others who had assisted in the work of the Society. Reports were presented showing the satisfactory results of the prizes offered by the Society to the School Board and other schools, in London and Liverpool, for success in the teaching of Domestic Economy and the Laws of Health.

PICTORIAL AVERAGES OF THE PHYSIOGNOMY OF DISEASE.

AT the Photographic Exhibition at the Society of Arts, there is exhibited an apparatus which is described as the working model shown, when new, in June 1881, at the Photographic Society, by which a large number of composites have been made. It now serves to illustrate the woodcuts that were made from it. A new and more solid apparatus, it is stated, with better means of adjustment, is in use at the studio at Guy's Hospital. The composites exhibited chiefly refer to the physiognomy of phthisis; and some autotype reproductions, on a small scale, are illustrations of a memoir, now being published in the *Guy's Hospital Reports*, by Mr. Galton and Dr. Mahomed on that subject. This process consists in throwing a succession of images of portraits of different persons on the same sensitised plate, and in thus obtaining a pictorial average, having the same scientific value as any other kind of average. Its merits, it is stated, lie in its power of obtaining averages of graphical or pictorial results which cannot be averaged in any other way. The original portraits have to be taken in precisely the same aspects, and under the same conditions of light and shade. All the rest is effected by the camera; it reduces them accurately to scale, and, by means of fiducial tints, it throws them successively in exactly the right place. Lastly, by means of fiducial tints, the images thrown by negatives of different densities are toned to an uniform standard.

SMOKE AND FOG.

ON Friday, February 10th, Dr. Frankland, F.R.S., lectured before the Royal Institution in Albemarle Street on the Climate of Town and Country, with special reference to the causes and remedies for London fogs. Speaking on the subject of fogs, he said that London fog depended principally for its offensiveness upon the products given off by bituminous coal, 30,333 tons of which were burnt in London every day. This coal sent forth watery particles, which became condensed and covered with a tarry substance, also the product of coal. Referring to the recent Smoke Abatement Exhibition, he said that there were at least 1,800,000 fireplaces in London, and to suppose that these could be changed was hoping too much. The only remedy, in his opinion, lay in the total prohibition of the import of bituminous coal into London—a statement which he justified by reference to his own experience with anthracite or smokeless coal. Anthracite coal, he said, could be procured in Wales and elsewhere in quantities sufficient for metropolitan consumption, and the bituminous coal could be relegated to ocean-steamers. As to the cost of altering fire-places to burn this smokeless coal, he said that in his own house all the fire-places had been adapted at a total cost of three shillings. The fact is, however, that the Smoke Abatement Exhibition contained more than one grate which burns ordinary bituminous coal smokelessly. Considering that, in the week ending February 7th, 1880—a foggy week—1,557 persons died in London from diseases of the respiratory organs, the matter was one of vast importance. The lecture, which was illustrated by brilliant experiments with artificial fog, illuminated by the electric light, was received with great applause.

THE SHEFFIELD POISONING CASE.

THE trial of Kate Dover for the murder of Mr. Skinner has terminated in a couple of surprises. The prisoner has been found guilty of manslaughter only; and the presiding judge, after stating that the crime differed by only a shade from murder, sentenced Dover to penal servitude for life. Coupling the sentence with the verdict, the conclusion is irresistible, that the judge thought the jury had taken a very lenient view of the matter. The circumstances of the case are doubtless familiar to most of our readers. Kate Dover, twenty-seven years of

age, was housekeeper to an engraver, one Skinner, thirty-eight years her senior; and succeeded a Mrs. Jones in Skinner's service. The domestic arrangements do not seem to have been happy, notwithstanding that Skinner had promised to marry Dover, and is stated to have made a will in her favour, though this was not found after his death. He had previously made a will in favour of Mrs. Jones. On December 2nd, this Mrs. Jones sent Mr. Skinner a present of vegetables, including onions. On December 5th, he was still in perfect health, though Kate Dover stated that he was very ill, and might die. On that day, the prisoner purchased twopennyworth of arsenic, complying with all the formalities of the statute, and stating that it was for the purpose of colouring artificial flowers. Next day, she purchased and cooked a fowl and herbs. Some sage and onions—sent by Mrs. Jones—were cooked in the same tin, but separate from the fowl. Skinner was soon seized with symptoms of irritant poisoning; and it is stated that the prisoner also suffered in a modified degree. A doctor was sent for by the prisoner; but Skinner died about seven hours after partaking of the fowl. Arsenic was detected by Mr. Allen in the fowl, but none was found in the stuffing in the tin. Some beer which had been sent for also contained arsenic; as did the stomach and other viscera of the deceased—about eight grains. No arsenic was found in Skinner's vomit. The arsenic was confined to the legs of the fowl, which had been cut off, but whether by the deceased or by Dover was not known. The defence was ingenious, and was apparently adopted by the jury. There was no doubt as to the cause of death. The suggestion that Mrs. Jones had anything to do with the matter was repudiated. The arsenic was purchased openly, but no doubt under a false pretence as to its intended use, and in the presence of a witness, only the day before Skinner's death. The jury were asked to believe that the prisoner also partook of the arsenic: but that she actually did so is, perhaps, a matter of doubt. It was suggested that the prisoner was jealous of the influence of Mrs. Jones over the deceased man, whom the prisoner wished to marry; and that she therefore intended to scatter a small quantity only of arsenic over the stuffing, in order to produce sickness. Unfortunately, a safe dose was exceeded. As we have stated, this view was probably adopted by the jury; and the absence of adequate motive; the possibility, if not probability, that the prisoner did herself nearly suffer from arsenical poisoning, perhaps being ignorant as to the dangerous character of very small doses; and the undoubted fact that she showed due anxiety for the application of remedies to Skinner, and promptly summoned medical assistance—all these circumstances no doubt helped the jury to adopt the theory of the defence. It was, however, a dangerous line of defence to pursue, and, as the result proves, one not offering much encouragement for its adoption in future criminal cases.

WHAT IS A MISCARRIAGE?

In a recent trial at the Leeds Assizes for unlawful procurement of abortion, it was alleged that Mr. Clarence Foster, surgeon, had been induced by the prisoner's brother before the birth of the child, and stated to him that the prisoner was about to have a miscarriage. It is not stated whether the woman was delivered before or after the full period; but, in a letter to the local press, Mr. Foster admits that he used the word miscarriage "in the ordinary sense, but not in the sense in which the prisoner's brother and the jury were concerned." In addition, a Mr. Hill, who had been the prisoner's brother-in-law, and was also a witness, stated that Mr. Foster had said to him, "the woman was about to have a miscarriage." The jury were further informed that Mr. Foster had said to the prisoner, "the woman was about to have a miscarriage." We have no doubt as to the propriety of the jury's verdict, and their finding that the prisoner was guilty of the offence. Mr. Foster's position is a very delicate one, and he has taken the position—for what reason we cannot say, that he has remained

with the patient under the circumstances would have been most unjustifiable. The rebuke of the judge was, however, a severe enough punishment; we think that the rider which the jury appended to their verdict, reflecting upon the capacity of Mr. Foster, was a gratuitous insult; and we are glad to see that the local press regards the matter in this light. It should be clearly understood by all medical men that the term miscarriage is a legal one, meaning the premature expulsion of the ovum or fetus at any period of gestation short of the full period of nine months; and cannot be applied to delivery at the full period of utero-gestation.

ALLEGED DANGER IN STORING ETHER.

A SOMEWHAT singular summons has been heard at the Marlborough Police Court, by which the Manager of the General Ice Company was charged with carrying on the business so as to endanger the lives and property of the public. The chief evidence went to show that explosions had frequently occurred on the premises, and that some of those who were working in the upper part of the same house had suffered from dizziness of the head and a burning sensation in the throat. Evidence was also given by a neighbour that his family had suffered injury to health. Two chemists, Dr. Bartlett (Ph.D.), and Mr. Hirsch, who were engaged in the case, gave evidence to the effect that ether, mixed in the air, would cause a burning in the throat, nausea, loss of appetite, headache, and vomiting. It is to be regretted that chemists should not content themselves with simply giving evidence as to the chemical and physical properties of the bodies concerning which they are required to give an opinion. It is also somewhat singular that they did not state that the ether used for freezing water is not pure: as, in that case, the magistrate, who dismissed the summons on a technical point, would have been better able to judge as to its alleged noxious qualities. There can be no doubt that the business is dangerous, owing to the risk of explosion; but, as Mr. Montague Smith stated for the defence, it was a case for indictment rather than for summary proceedings. It seems, however, clear that the business was not carried on in the best practicable manner for preventing risk to property and injury to health, as it was stated that frequent explosions had occurred, and the ether had been allowed to impregnate the air of the adjoining rooms instead of being carried off by efficient means of ventilation.

SMALL-POX IN MAIDSTONE GAOL.

IN consequence of the outbreak of small-pox in Maidstone Gaol, all the prisoners in the ward where the disease first appeared have been vaccinated, together with the officials attached to the establishment. Instructions have also been issued that, for the present, no more prisoners are to be sent to the gaol. So far, all efforts to trace the cause of the outbreak have been unsuccessful: and, in consequence of the representations of the medical officer, an inspector of prisons has been instructed to make inquiries. The disease, it appears, first broke out on the 14th ultimo; and, at an inquest recently held at the gaol by the coroner on the bodies of two persons who had died from the disease, it was stated that, although every precaution had been taken to prevent the spread of the disease, there are still one or two serious cases in the hospital.

TYPHOID FEVER IN 1881.

DR. NORMAN MOORE has recently endeavoured to prove that Sir Thomas Moore, physician to King George I., must be remembered as the first to discover the outbreak of typhoid fever in England. His patient was a no less exalted personage than Henry Stuart, Prince of Wales—a most popular, promising, and amiable youth, who passed away in 1712, at the age of eighteen, leaving the succession to his brother Charles, destined to perish in a very different manner. Dr. Moore began with the subject of Prince Henry's death with great minuteness, describing copious eruptions and ulcers of the stomach, of the throat, and of the bowels, and of the ulceration of Peyer's patches are not described; but, in those days, the morbid anatomy of typhoid fever was unknown.

"What distinctive lesion," observes Dr. Moore, "is described, at this day, in a case of tetanus or of diabetes?" The paper wherein this subject is discussed will be found in the new volume of the *St. Bartholomew's Hospital Reports*. A faithful study of the clinical reports of distinguished doctors, who have flourished in past centuries, may soften our opinions on our own excellence as clinical workers—aided, as we are, by appliances of which they knew nothing; and, moreover, may prove most instructive from a scientific as well as from a purely literary point of view.

THE MEDICAL REGISTER.

THE *Medical Register* for the current year, issued this week, is in a very convenient and handy form, and great pains, we believe, have been taken to make it as correct as possible. In addition to the information required by Act of Parliament, it contains various statistics, including a notice to registered persons as to the importance of their sending notice of any change of address to the Branch Registrar by whom they were originally registered, in order that the address may be duly inserted in the *Medical Register*; as, by Section 14 of the Medical Act, any practitioner omitting to do so is liable to have his name erased from the *Medical Register*, and thus, by Sections 31 and 37 of the said Act, to "lose the right to hold certain appointments, to sign valid certificates; or to recover in any court of law charges for professional aid, advice, and visits, and the cost of any medicines or other medical or surgical appliances rendered or supplied by him to his patients". Every registered medical practitioner "should also send to the registrar by whom he was originally registered notice of any change in, or addition to, his qualification, which he may wish to be inserted in the *Medical Register*". It contains, also, tables showing (a) the names of the president, members, treasurers, and registrars, of the General Medical Council, on January 1st, 1882; (b) the names and periods of their appointment from its formation in 1858, to January 1st, 1882; (c) the number of meetings of the General Medical Council, of the Executive Committee, and of the three Branch Medical Councils for the same period. It further contains copies of the Medical Acts from 1858 to 1882: (a) The Medical Act of 1858; (b) The Medical Act, 1859; (c) The Medical Acts Amendment Bill, 1860; (d) The Medical Act, Royal College of Physicians, 1860; (e) The Medical Act, 1862; (f) The Medical Act Amendment Act, 1868, "relating to medical practitioners in the colonies"; (g) The Medical Act, University of London, 1873; (h) the Apothecaries' Act Amendment Act, 1878; (j) The Medical Act, Royal College of Surgeons of England, 1875; (k) The Medical Practitioners Act, 1876; (l) The Medical Act (Qualifications), 1876; (m) The Dentists' Act, 1878. It also contains returns to both Houses of Parliament of receipts and expenditure of the General Medical Council, and Branch Councils, for England, Scotland, and Ireland; and apportionment of the amounts payable to the General Medical Council by the Branch Councils for the year ending January 1st, 1882 (pursuant to Sections XIII, XLIV, of the Medical Act, 1858); also returns showing the receipts and expenditure of the Dental Registration Fund of the General Medical Council for the year ending 1882 (pursuant to Section XXXIII of the Dentists' Act, 1878); with a table showing the total numbers, with percentages, of the whole of the persons registered in and on January 1st, 1882, remaining in the local registers for England, Scotland, and Ireland respectively; also the several registrable qualifications, etc.

THE DENTISTS' REGISTER.

THE *Dentists' Register* for 1882, though necessarily less bulky than the companion volume above noticed, contains a variety of useful information and statistics in a concise form. Among the information may be mentioned the notice to registered dentists, enjoining them to be careful to send to the registrar immediate notice of any change of address, as any one failing to do this becomes liable to have his name erased from the *Dental Register*, and thus, by Sections III and V of the said Act, to lose the right "to take or use the name or title of dentist (either alone

or in combination with any other word) or of dental practitioner, or any name, title, addition, or description implying that he is a person specially qualified to practise dentistry"; and also the right to recover in any court of law "any fee or charge for the performance of any dental operation, or for any dental attendance or advice". It further contains a list of registration fees; table of registrable qualifications; names of the President, members, etc., of the General Medical Council, January 1st, 1882; ditto from its formation, in 1858, to January 1st, 1882; also in full the Dentists' Act, 1878, returns of receipts and expenditure of the Dental Registration Fund of the General Medical Council made January 1st, 1882; synopsis of papers in respect to registration under the Dentists' Act (1878): (1) Persons entitled to be registered in the *Dentists' Register*; (2) Form duly filled up by all applicants for registration under Clause C of Section VI of the Dentists' Act; table showing the numbers and qualifications, with percentage of the total of persons registered in the *Dentists' Register* for 1882. The *Dentists' Register* is very complete, and includes (1) United Kingdom dentists, (2) foreign dentists, and (3) a list of registered dental students.

A STRANGE STORY.

A STRANGE story of the deaths of two children from the effects of irritant poisoning reaches us from Dairycoates, near Hull. The children died after a brief illness, during which they were attended by a druggist named Cartwright, acting as an assistant for a Dr. William Jackson; and they were not attended by a qualified medical practitioner. Cartwright appears, from the evidence, to have been in the habit of attending patients, professedly for Dr. Jackson, this gentleman never seeing them. In his evidence, Dr. Jackson is reported as saying: "You see, it does not pay me to practise here, and therefore I do it indirectly, through a chemist. It occurred to me the people would have an advantage in having a chemist to go to, and in having cheap medicine." The evidence showed that the stomachs of the children were inflamed and ulcerated, there being several ulcers in each case. Dr. Jackson said the deaths were the result of a small particle of rotten fish, or a small fish-bone. Dr. Thomas Jackson, brother of Dr. Wm. Jackson, attributed the deaths to inhalation of sewer-air. No irritant poison was discovered on analysis; but the evidence points to the fact that a small fraction only of the contents of the stomach reached the analyst. The jury returned a verdict that the deaths were caused by irritant poisoning, and that great difficulty had been thrown in the way by want of care in not preserving the vomits and excreta. They also characterised the system carried out by Dr. Jackson and Mr. Cartwright as unsatisfactory in every respect, to themselves personally, and to the neighbourhood. This censure does not, on the face of the facts, seem to be unfounded; and we trust that the legality of those gentlemen's proceedings will be investigated by a competent tribunal. There is some novelty in the notion that an inflamed and ulcerated condition of the stomach, with rapidly fatal illness, may be the result indifferently of eating a small piece of rotten fish or swallowing a fish-bone, two sisters dying almost simultaneously from such a cause; and, perhaps, no less novelty is the idea that inhalation of sewer-air causes the above results. To ourselves, the finding of the jury that irritant poison was the cause of death seems more likely to be the truth; and by irritant poison is clearly meant some definite irritant other than unsound food or inhalation of impure air.

LOCOMOTOR ATAXY AND THE LATE MR. STANLEY.

THE new volume of the *St. Bartholomew's Hospital Reports* includes an article by Mr. F. S. Eve, entitled "Our Museum and its Associations". The title of this contribution sufficiently indicates its nature. The author, after a careful perusal of the works of the late Mr. Stanley, who contributed largely to the museum of the great City hospital, shows how that distinguished surgeon has described at least two cases of locomotor ataxy from their leading surgical features, and has shrewdly traced their pathology to disease of the great nerve-centres.

It is remarkable, as Mr. Eve observes, that no old specimens showing Charcot's disease of the joints associated with locomotor ataxy have been found in any museum attached to a metropolitan hospital. The absence of these specimens is probably due to accident, and must not be considered as a proof that the joint-affection is a disease that has actually arisen as a new morbid creation or evolution within the last fifteen years. The destruction of the articular ends of the long bones was not known a few years since; therefore pathological demonstrators did not dissect the larger articulations of subjects who had died from locomotor ataxy; and, before that complaint itself was recognised, the chances of an "arthropathy", as the French would say, being detected, was very small. Charcot's typical cases are, moreover, more frequently seen in workhouses than in hospitals; and it is only of late years that good pathological work has come out of parochial asylums, through the energy of competent workers like Dr. Lediard. Mr. Eve shows that Stanley has given accurate details of one very distinct case of locomotor ataxy with disease of the hip-joints, under the heading "Dislocation of both Hip-joints consequent on Disease of the Spinal Cord, and probably of the Brain", in a paper on certain dislocations (*Transactions of the Royal Medical and Chirurgical Society*, vol. xxiv, 1840). A short extract from the history of the case suffices to show its nature. "A gentleman, aged 39, in the year 1824 was attacked with spasms in the pectoral and intercostal muscles, and numbness of the whole of the left side of the body, with the exception of the arm. In the left leg and thigh, sensation was wholly lost, the power of motion remaining. He had no sensation of passing his urine after it had quitted the bladder, and was but just aware of the evacuation of faeces. Vision in the left eye was impaired to the extent that he could but distinguish daylight." The symptoms continued, with increasing weakness in the thighs and legs, to the complete loss of the power of support and of sensation in them. "Unless he saw his legs, he could not tell in what direction they were; but, on looking at them, so as to know their position, he could readily move them. He occasionally suffered most severe pains in the limbs." No signs of inflammation were ever observed around the hip-joint; but, during two attacks of "violent spasms", which compelled the patient to remain for several days in bed, the dislocation of the hips occurred. Stanley's description of the hip-joints after their "spontaneous dislocation" is very suggestive of Charcot's joint-affection. In a second case, the left hip-joint was dislocated as a consequence of what Stanley terms "hemiplegia", chiefly perceptible in the left lower extremity. After death, the lumbar portion of the spinal cord was found to be pulpy, and the femur displaced backwards, the capsule being much elongated. Mr. Eve remarks that, although Stanley understood these cases very imperfectly, yet he attributed the joint-affection to spinal disease even in the title of his paper: and therefore to him belongs the honour of having first drawn attention to this disease. Had he been able to examine the first case after death, the true nature of the affection would probably have been ascertained.

SANATORIA FOR CHILDREN IN GERMANY.

A society, of which the Crown Prince and Princess of Germany are patrons, and Professor Ewald of Berlin is the secretary, has been formed for the purpose of establishing sanatoria on the German seacoast for sick and weakly children. The institutions are intended for the reception exclusively of poor children, as well as of those in better circumstances, for whom a prolonged sea-side residence is advisable, but whose parents are unable to remain with them. The following arrangements have already been made. At Wiek, in Friesland, there is to be a children's hospital of fifty or sixty beds, with a consultation for children; at Norddeich, a provisional hospital is to be fitted up with from twenty to twenty-five beds; at Zippert near Banting, a list of 100,000 marks has been received, and the foundation of a children's sanatorium. Membership of the society is obtained by an annual subscription of ten marks, or a donation of 100 marks. Donors of 1000 marks or more, or the sum are entitled for life to send a child

for six weeks in each year to one of the institutions on the coasts of the German Ocean and Baltic Sea; and a donation of 150 marks will entitle a child to be sent once for six weeks.

MEMORIAL STATUE OF ALBRECHT VON GRAFE.

ARRANGEMENTS have been made between the committee for erecting a memorial of the illustrious ophthalmologist von Gräfe, and the magistrates of Berlin, by which the statue will be presented to the town, while the municipal authorities undertake to preserve it and the ornamental ground on which it stands. It is intended that the ceremony of unveiling the statue shall take place on May 22nd, the anniversary of the birth of von Gräfe.

PRIZES OF THE GENEVA RED CROSS SOCIETY.

THE International Committee of the Red Cross in Geneva offers three prizes, each of the value of 2,000 francs (£80), for the best essays in (1) improvisation of means of treating the wounded; (2) improvisation of means of transport; (3) improvisation of an ambulance or a field-hospital. The essays, which must not have been previously published, may be written in French, German, or English. The successful essays will become the property of the Society, which reserves the right of publishing them either in the original or in translation. Essays in competition may be sent up to April 1st, 1883, to the President of the International Red Cross Committee, 8, Rue d'Athènes, Geneva.

THE REVENUES OF HOSPITALS.

THE *Philanthropist*, a new and excellent weekly record of charities, has calculated the following figures, to ascertain the comparative amount of support accorded to the various philanthropic and charitable works in the metropolis. The following is the average annual income of the metropolitan hospitals: General, £17,600; Consumption, £5,800; Ophthalmic, £2,600; Orthopaedic, £1,600; Skin, £1,200; Women and Children, £3,500; Lying-in, £1,400; special, other than above, £4,200. We have not space for detailed figures in respect to the proportionate sums allotted to other institutions; but we may mention that the percentages are: dispensaries, 0.0; institutions for blind, deaf and dumb, incurables, and idiots, 3.5; convalescent, nursing, surgical appliance, and vaccination institutions, 1.4; institutions for the aged, 10.0; general relief, and food and loan institutions, 9.4; voluntary homes, 3.4; orphanages, 4.2; reformation and prevention, 2.1; education, 10.3; protection, 1.3; social improvement, 1.0.

SMALL-POX UNDER SURVEILLANCE.

SMALL-POX is prevalent in Sydney; and, in a letter which appeared in the *Sydney Echo* of December 5th, attention is called to the fact that the special constables stationed to watch the houses in which the occupants are affected with small-pox may themselves be the means of spreading the disease, the dissemination of which they are specially employed to prevent. It appears that three of these men took small-pox. One, who had never been vaccinated, died; and it is stated that the others had been revaccinated. That they had not been satisfactorily revaccinated may be taken for granted, since those in attendance on small-pox patients in small-pox hospitals do not contract the disease if due precautions have been taken as regards their revaccination. Since the appearance of small-pox in Sydney, the Board of Health have taken steps to have a permanent hospital built, but it is not yet completed; and the writer remarks that it would have been better to have had a temporary wooden building erected, which would have met the requirements of the epidemic. Hospitals built in a hurry are seldom well built. He gives an instance of the necessity for compulsory revaccination of infectious diseases. Five of the family of a milkseller had been attacked with small-pox, and one of these had been ill several weeks; yet the milkman continued to sell milk during this time, and it is not unlikely that the dairy may have been the means of spreading infection to the customers. Small-pox is of rare occurrence in Australia, and this may account for the incomplete precautions which appear to have been taken by the authorities in Sydney to pre-

vent those engaged in watching infected houses from being a means of spreading small-pox. Doubtless they will learn before long the necessity of having all those so employed revaccinated: and we hope that the municipal authorities will see their way to make the registration of infectious disease compulsory.

OVARIOTOMY.

DR. JOHN HOMANS publishes, in the *Boston Medical and Surgical Journal*, No. 4 for 1882, a table of thirty-two cases of ovariectomy which he performed in 1881. There were three deaths. One was from acute mania, in a patient whose parents and family had been insane: the necropsy showed that all was going on well as regarded the operation wound. One patient, aged 73, although the tumour had adhesions to the peritoneum, omentum, and intestine, made a rapid recovery. The pedicle in each case was tied, and burnt off by Paquelin's thermo-cautery. Nothing is said as to the use of antiseptics. Dr. Homans had also three cases in which an exploratory incision only was made; all recovered from the operations.

UNCERTIFIED DEATHS.

THE number of deaths registered as uncertified, viz: where no certificate has been given of the cause of death by a legally qualified practitioner, or no inquest has been held, appears to be on the increase, both in the metropolis and the provinces. In the Board of Works District of St. Giles, these deaths averaged six during the years 1875-8: in 1879-80, they increased to fourteen, and last year (1880-1), they were eleven. The Board have memorialised the Home Secretary, asking for legislation on the subject.

CASE OF GASTROSTOMY PRESENTING UNUSUAL CHARACTERS.

AT the meeting of the Imperial and Royal Medical Society of Vienna on January 27th, Professor Albert showed a boy, aged 11½, on whom he had, on November 25th, performed gastrostomy on account of stricture of the œsophagus, produced by swallowing caustic ley. The contraction had become so narrow, that not even water could pass. In spite of constant enemata, the weakness of the boy increased so much, that an operation was determined on. On the above-named day, the serous membrane of the stomach was fastened to the abdominal wall by catgut suture; and, as the boy was much collapsed in consequence of the anæsthetic used, the operation was completed on the same evening. Nutrient matter was injected into the stomach, which gradually became accustomed to its contents. On the patient's now attempting to swallow water, it was found that a few drops passed. A renewed attempt was made to introduce bougies, which was so far successful, that the boy was enabled to swallow fluid food. Dr. Albert said that it was difficult to explain how the permeability of the œsophagus had been so far restored; perhaps traction had been made on an excentrically situated stricture.

DETECTION OF LEAD-BULLETS BY THE INDUCTION-BALANCE.

THE *Philadelphia Medical News* reports that at the hospital of the University of Pennsylvania, on December 21st, Professor Agnew gave Mr. Gleason, of Boston, an opportunity to demonstrate the operation of Bell's induction-balance upon patients, in whom bullets had been imbedded for years. The apparatus was the same as was used in the case of President Garfield, with some added improvements. The experiment was conducted before the medical class, and in the presence of a number of interested medical men. In one case, the bullet had been received nineteen years ago, and was supposed to be lodged somewhere in the arm. After explaining the *modus operandi* of the apparatus, a careful search was made over the patient's whole arm and shoulder, but entirely without success. Several times Mr. Gleason exclaimed, "There, there it is!" but after all, had to give it up. The second patient was a negro, who had been shot in the left buttock. In his case also, the apparatus failed to give any information. It seemed to show something after Drs. Agnew and John Ashhurst, junr., had found a spot, when they felt with their fingers what they thought might be an

encysted ball; but even then the coincidence was too doubtful and inconsistent to be of any value. Besides the disks, the insulated needle was used, thrust deep down to where Dr. Agnew thought he felt the ball, but even this brought no response. The experiment proved of no use as an aid to determining the location of the missiles in these two cases; though it was easy to hear the modification of tone in the telephone when the disks were passed over Mr. Gleason's cheek, while he held a bullet in his mouth; or when the needle was thrust against a bullet buried in a piece of raw beef. In a case under the care of Dr. Hamilton, the apparatus detected a ball in the anterior wall of the chest, but that was very close to the surface. After the conclusion of the experiments, Dr. Agnew made an exploratory incision behind the trochanter major in the negro, which disclosed that the bullet was not there.

IDIOTS IN THE WESTERN COUNTIES.

AT the annual meeting of the Western Counties Idiot Asylum, recently held at Truro, it was stated that there are in England as many as 30,000 idiots, or about one to every 350 of the population. Of this number 4000 belong to the four western counties, of whom not more than 100 are properly provided for. There are at present 80 inmates in the Asylum—48 boys and 32 girls. The accounts showed a deficiency of £44 on the year, and a debt on the building of £2,500. As an instance of the inadequate support given to the institution, it was stated that, whereas Cornwall had four inmates, who cost £104 a year, only £18 came from the county in subscriptions. The Bishop of Truro, who presided, made a powerful appeal on behalf of the institution. A local committee was appointed to aid in procuring financial support.

PECULIAR PEOPLE.

A MATTER came recently before Mr. Balguy, the Woolwich police-magistrate, which shows in a striking way the lengths to which foolish fanaticism will sometimes lead people. Certain parents belonging to the sect not inaptly called the "Peculiar People", lost one child from small-pox, and had three others suffering from the same disease; but in respect of none of the cases would they employ any medical man. The parents, though able to defy public opinion so far as the illness was concerned, could not do so when a death occurred; in other words, they could not get the body buried for want of a medical certificate. With evident unwillingness, they reported the matter to the police, who informed the sanitary inspector and coroner's officer. These two officials went to the house, armed with a coroner's warrant to remove the body to the parish mortuary, with a view to a *post mortem* examination, but were refused admission, and refused the body. They applied to the magistrate to know whether they might force an entrance, but Mr. Balguy pointed out that nothing could be done till a medical man had seen the body. Eventually, the officials left the court, with the intention of finding the police-surgeon, and, in his company, of breaking open the doors of the house. We are not by any means prepared to say whether, legally speaking, the end could be held to justify the means; seemingly, the magistrate thought not. We allude to the matter here for the more particular purpose of pointing out two things: first, that there is an urgent necessity for further legislation by Parliament with respect to infectious diseases in private houses; and, second, an end ought to be put to the great evil of the metropolis not having the advantage of a consolidated public health code similar to, but better than, the Public Health Act, 1875. We cannot here discuss these two points at length; but, with respect to the first point, we shall never cease strenuously to urge the compulsory registration everywhere of infectious diseases; and, as a branch of this subject, an immediate alteration of the burial laws, to obviate any repetition of so intolerable a scandal as that which has occurred at Woolwich in connection with this "Peculiar People" case. The second point seems unworthy of serious argument. By the Public Health Act, 1875, about thirty fragmentary and contradictory statutes were melted down into one; but, as the metropolis was expressly excepted from this Act, it follows that the health-officers of the four millions of people who

inhabit the capital city of the empire continue compelled to endure these thirty fragmentary and contradictory statutes, and be hampered at every turn by them in the performance of their duties. This is a real parliamentary scandal.

SCOTLAND.

THE honorary degree of Doctor of Laws was conferred, at a recent meeting of the *Senatus Academicus*, St. Andrew's, Edinburgh, on John Hutton Balfour, M.A., M.D., Emeritus Professor of Botany in the University of Edinburgh, author of many botanical memoirs, and an old *alumnus* of the University of St. Andrew's.

AMONG the candidates for the new Chair of Pathology in the University of Aberdeen, is Dr. Creighton, M.A., M.D. Aberdeen, Examiner and formerly Demonstrator of Anatomy in the University of Cambridge, whose numerous contributions to pathological science in the Reports of the Medical Officer to the Privy Council, in the *Journal of Anatomy and Physiology*, in the *Proceedings of the Royal Society*, and in various public monographs, place him in the first rank among the younger school of European pathologists.

THE LATE PROFESSOR SANDERS.

A LIST of the late Professor Sanders has been presented to the University of Edinburgh; it will be placed in the upper library hall, which already is so rich in those mementos of the eminent men who were of its professoriate.

THE ERASMUS WILSON CHAIR OF PATHOLOGICAL ANATOMY.

"THE Sir Erasmus Wilson Chair of Pathological Anatomy" has now been founded and endowed at the University of Aberdeen. The *Senatus* of the University, who have authorised the publicity of this statement, have received the endowment of £10,000, and the deed has been communicated to the Home Office. Sir Erasmus Wilson has nominated the Crown as patron of the chair. The free yearly revenue of the endowment will be devoted, as a salary, to the professor of pathological anatomy, as well as the fees to be paid by students attending the lectures, and to oral instruction, the subject must be taught practically. The whole of the professor's time is to be devoted to the duties of his chair, and he will not be permitted to engage in private practice.

THE SICK CHILDREN'S HOSPITAL.

At the annual meeting of the subscribers to the Royal Hospital for Sick Children, Edinburgh, held recently, it was stated that, during last year, 528 children had been treated in the wards of the hospital, and 6,052 had been treated in the out-door dispensary department, giving a total of 6,580, this number being a slight diminution of the number treated during the previous year. Since the opening of this invaluable institution, 106,333 children have been treated by its medical and nursing staff. During the past year, it had been able to receive 129 cases of scarlet fever while that disease was so prevalent in Edinburgh. The directors had considered it necessary during the year to place the whole sanitary arrangements of the hospital on a more satisfactory basis; and this had led to considerable expense. The income for the year was £1,839, and the expenditure £2,568, thus leaving a considerable deficit to be provided for. A satisfactory arrangement was made, and the possibility of it may possibly lead to its being initiated by others in a position to do so; it was that the Lord and Countess of Liverpool had contributed to the fund, their intention of doing so arising from the congregation which they had in their family chapel, at Temple Church, London, of £25 annually, to be used in the maintenance of two beds in the hospital, to be named "Liverpool Chapel." The Lord and Countess desire to become patrons, and also the Lord and Countess of Liverpool. Lord Cardigan's speech strongly urged the necessity of increased aid for the local authority relieving the Sick Children's Hospital, as well as the Royal Infirmary, of the expense

incurred in the treatment of so many cases of infectious disease, which he considered were more properly a burden to meet from the rates than by the two institutions which had otherwise so many calls on their usefulness.

THE EDINBURGH ROYAL DISPENSARY.

DURING the year 1881, the staff of the Edinburgh Royal Dispensary treated, in the premises in Richmond Street, Edinburgh, 6,428 patients, while 1,190 were visited at their homes, thus making a total of 7,618; in addition to which, 814 children had been vaccinated, and 211 women attended during their confinement. The financial statement submitted at the annual meeting showed the gratifying increase that had taken place in subscriptions, these having been nearly doubled during the year. The income amounted to £374, and the expenditure to £352, leaving a comfortable balance in favour of the institution.

GLASGOW ASSOCIATION FOR RELIEF OF INCURABLES.

THE Glasgow Association for the Relief of Incurables continues to do much good work, not only by receiving many incurables into the home, but also by monthly pensions to many non-resident incurables, no fewer than 410 of the latter having received monthly assistance, averaging ten shillings to each. Since the home was opened, 140 patients have been received into it; at the close of the year, it contained 58 inmates, while there were 132 out-pensioners. The funds of the institution are in a satisfactory condition.

THE FIFTH LECTURE OF THE SERIES.

THE fifth lecture of this series was delivered by Dr. Stirling, in Aberdeen, on Saturday evening. The digestive processes as they occur in the stomach and intestines were described, and also the means by which the products of digestion reach the blood. The action of the gastric juice was shown experimentally on fleshy food and on milk. The action of the bile and pancreatic juice were also shown by simple experiments. The lecture was brought to a close with a description of the microscopic and chemical characters of the blood.

MEDICAL BURSARIES IN ABERDEEN UNIVERSITY.

THE Town Council of Aberdeen have resolved that the bursaries for their medical bursaries shall be upon physics (heat, light, electricity), natural history, botany, and inorganic chemistry.

THE SALE OF INFECTED MEAT IN GLASGOW.

It is noteworthy to see that the health authorities in Glasgow are moving in this matter. It has been agreed that a copy of the medical reports on the subject should be forwarded to the Home Secretary and the Lord Advocate, accompanied by a statement directing attention to the defective state of the existing law as regards the power of preventing diseased meat being brought into the city, and there sold for human food: and urging on the Government the necessity of adopting such measures in the matter as may be deemed expedient for removal of the nuisance complained of, and to take prompt measures for such a sale of diseased carcasses for human food impossible.

THE AMBULANCE ASSOCIATION OF SCOTLAND.

FROM time to time, there has been noted in the JOURNAL the progress which ambulance work has been making in Scotland, and markedly so in Glasgow, especially in the Volunteer ranks. With a view, however, of increasing the movement among the general community, so as to enable them to help the efforts of the volunteers, there has not been formed in Glasgow an organisation under the title of the St. Andrew's Ambulance Association. The proposition, which has not been issued, states that it is necessary to disseminate information as to the kind and to the assistance required, by establishing classes for efficient instruction in ambulance duties; and, further, to place stretchers, ambulance wagons, and other appliances necessary for the relief of the injured, in such situations as may be considered advisable, or as will enable assistance to be given with the least possible delay. The gentlemen

promoting this association are chiefly connected with large engineering and manufacturing works, where accidents are liable to occur; but many others have joined the movement. It is thought that, to carry out the objects contemplated, a sum of about £2000 will be required to provide the necessary material. Of this sum, a considerable part has been already promised, and it is hoped that future maintenance will be covered by members' subscriptions. There can be no question as to the need of such an association, both to furnish the appliances necessary for assisting the injured in case of accident, and to diffuse among the general community a knowledge of how to use these appliances; but its sphere of usefulness will be very much extended, if the different ambulance stations are placed in direct communication, telephonic or telegraphic, with the infirmaries, and also with the neighbouring suburbs, after the plan already mooted in London at a meeting recently held there.

APPOINTMENTS IN EDINBURGH.

THE death of the late Sir Robert Christison has, of course, led to a number of vacancies; one of these has been filled up this last week by the appointment of Dr. Peel Ritchie to be one of the consulting physicians to the Sick Children's Hospital. Dr. Ritchie was for many years one of the physicians to the same institution. It is expected that Emeritus Professor Hutton Balfour, M.D., will be proposed as successor to Sir Robert Christison as one of the assessors in the University Court, by the General Council of the University.

HISTORY OF SMALL-POX IN KILMARNOCK.

AT a meeting of the Glasgow Philosophical Society held on the 1st instant, a very interesting paper was read by Dr. John C. McVail, in which there was given a history of small-pox in Kilmarnock during last century. The facts brought out as to small-pox were derived from a register which had been commenced in 1728 by the then school-master and session-clerk, and had been continued for thirty-six years, giving ample statistics of all who died. In these thirty-six years, there were no less than nine epidemics of small-pox, occurring at intervals of three to five years, the deaths during each varying from 45 to 95 in a population of 4,200. At that time, the general mortality from small-pox was nearly twenty times greater than since the introduction of vaccination. Out of every 1,000 deaths, it caused 161. In 1754, it caused 95 deaths out of 203, being four times greater than during the epidemic of 1873. In seven of the epidemic years, the mortality was such as to exceed very considerably the births. In 1873, 143 persons died of small-pox out of a population of 24,000. Three thousand of the population had been revaccinated; and, while not one of these had died, it was doubtful whether any one of these had been attacked. No doubt, improved sanitation and medical treatment had influenced all zymotic diseases, as shown by the death-rate of measles having decreased at the rate of 100 to 70, and of fevers from 100 to 53; but the great fall in small-pox from 100 to 5 could be in no way attributed entirely to that cause. In the discussion which followed the reading of the paper, Dr. Fergus referred to small-pox in Glasgow as confirmatory of the value which Dr. McVail put on vaccination and revaccination; and he pointed out that, during the last six years, there had only been four deaths *per annum* in Glasgow from small-pox. Dr. McVail received a cordial vote of thanks for his paper, and there was a very general feeling expressed in favour of its publication in the *Proceedings* of the Society. Antivaccinators would do well to ponder such striking facts as the above, which show clearly the great benefits that have been derived from compulsory vaccination, and the necessity there is for maintaining it.

A CURIOUS case of malformation was exhibited by Dr. Hofmokl at a recent meeting of the Imperial and Royal Medical Society of Vienna. It consisted in an arrest of development of the three middle toes and the third and fourth metatarsal bones; the subject, a young man, having on each foot only the great and little toes, situated wide apart.

IRELAND.

DR. JOSEPH E. KENNY, who was arrested on the 24th October last, on a warrant under the "Protection of Peace and Property (Ireland) Act", and who on the following day was dismissed, by a sealed order of the Local Government Board, from his post of medical officer to the North Dublin Union Hospital, was liberated from Kilmainham prison last week. The Court of Queen's Bench has at present before it an application for a *mandamus* to the Local Government Board, to rescind the sealed order dismissing him.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE fortieth annual meeting was held on the 8th instant, when it was resolved that the President, Dr. T. H. Purdon, with Drs. Arnold, Drennan, Browne, and Ferguson, should represent the Branch in Dublin at the annual meeting of the parent Society, to be held in June. Regret was expressed at the loss the Society had sustained of one of its earliest, steadiest, and most liberal members, Dr. Charles D. Purdon. The following office-bearers were duly elected for the ensuing year. *President*: Dr. T. H. Purdon. *Committee*: Drs. Wilberforce Arnold, Browne, Drennan, Ferguson, Cuming, Murney, James Moore, J. T. Smith, Harkin, McCleery, T. H. Purdon, Whitaker, Brice Smyth, Ross, McGee, John Moore, Spedding, McKeown, Willie, Hawthorne, Gray, Musgrave, R. B. McClelland, Filson, Stuart, Higginson. *Honorary Secretary*: Wilberforce Arnold, M.D., J.P. *Honorary Treasurer*: Samuel Browne, M.D., J.P.

SMALL-POX IN BELFAST.

DR. COATES, medical officer of Belfast No. 4 Dispensary District, has recently reported to the sanitary committee of the town council that the great majority of the cases of small-pox, which have occurred in his district, have arisen within a radius of a few hundred yards; the centre of the affected area being the Blackstaff Road, which is about one hundred yards from the Fever Hospital, where all the cases of small-pox have been treated. He is led to believe, after a careful examination into the various cases, that the presence of the hospital for small-pox cases, in such close proximity to a dense population, is the immediate cause of the present outbreak, as far as his district is concerned. Dr. Coates suggests that, as far as possible, arrangements should be made whereby cases of infectious diseases, and particularly of small-pox, would be treated in a hospital removed as far as possible, compatible with convenience, from human habitations.

ATHY UNION: MISTAKES IN DIAGNOSIS.

DR. O'NEILL, medical officer of the workhouse, has called the attention of the guardians to a practice which he states has been constantly taking place—viz., sending patients to the fever hospital who had not fever, and people who suffered from that disease to the infirmary. The danger of such proceedings was obvious; and he threatened that, if medical men persisted in the future in doing so, he should be obliged to mention their names. Further, he was of opinion that, if the dispensary medical officers had not sufficient skill and intelligence, they should be suspended. These are serious charges against the medical officers of the union, and it will be interesting to hear their view of the matter. The board, however, passed a resolution, desiring the several dispensary doctors to act with greater caution in the sending of patients to either infirmary or fever hospital.

THE BELFAST WORKHOUSE.

THE half-yearly report of Mr. Hamilton, Inspector of the Local Government Board, states that the workhouse accommodation is adequate to the present wants of the union, and that the children's infirmary and the men's day-room were the only part of the establishment that appeared to be crowded. The sanitary condition was reported satisfactory; and, although an epidemic of small-pox prevailed in the town, and a large number of cases were in the union hospital,

DR. CARPENTER ON VACCINATION.

AT the monthly conference of the London Society for the Abolition of Compulsory Vaccination, at the Steinway Hall, Dr. Andrew Clark occupied the chair, and an address was given by Dr. W. B. Carpenter, C.B., on the increase of small-pox mortality in London during the year 1880.

The CHAIRMAN, in a few preliminary remarks, expressed his regret that the emotional element had too often been allowed to enter into discussions on the necessity of vaccination. He had great pleasure in introducing to the meeting Dr. Carpenter, and he hoped that all would regard the subject and consider his arguments from a purely intellectual point of view.

Mr. W. TERR, the chairman of the executive committee of the Society, briefly opened the proceedings, and threw down the gauntlet to the advocates of compulsory vaccination, by stating that the Society looked upon vaccination as an unreasonable and indefensible anomaly, the discovery of which was originally hailed with acclamation chiefly because it afforded a substitute for the worse evil of inoculation. He quoted with satisfaction Mr. Canning's remark, that he could imagine no circumstances that would induce him to make vaccination compulsory, and Sir R. Peel's words to the effect that he would never be a party to such a policy. He denied that vaccination gave complete protection against small-pox, but held that, in any case, the alleged benefit to society was of less importance than the rights of individuals that were outraged by coercion.

Dr. CARPENTER then addressed the meeting. He pointed out the inadequacy of the objection that a system of compulsory vaccination outraged the rights of individuals: contending that in health, as in education, it was the paramount duty of the State to secure, as far as possible, the public advantage. The State, in his opinion, was morally bound to intervene in such a matter between the parent and the child, for the good both of the child and of society at large, every member of which was liable to be exposed to infection. He proposed to speak with special reference to the outbreak of small-pox in 1880, which, he understood, was specifically mentioned in the resolution that was to be moved in the House of Commons by Mr. P. A. Taylor. That outbreak, according to his view of the case, afforded grounds, not for the repeal of the Act, but rather for making its operation more complete and stringent. It was necessary first to consider the history of small-pox, with regard to which very important statistics existed in the bills of mortality for the last 200 years. In the case of other exanthemata—scarlatina, for instance—doubts might have been cast on the value of the earlier figures; but small-pox had always been clearly recognised and distinguished from other diseases, and no such doubts could, therefore, be entertained. Now, from 1660 to 1678, the general mortality of the kingdom was 80,000 in every million of living persons, and the small-pox mortality was 4,110; in 1728-57, the general mortality was 52,000 per million, and the small-pox mortality 4,260; in 1771-80, the general mortality was 50,000, and the small-pox mortality 5,020—a slight increase, which was probably due, as Dr. Heberden said long ago, to inoculation. However, the average small-pox mortality in the period from 1660 to 1800, irrespective of inoculation, might be taken as about 4,000 per million. It was noticeable that, at that time, the disease periodically appeared in its worst form, and was the terror of all classes. Thus Louis XV died deserted by all except Madame Du Barry, and the priests who chanted mass by the side of his coffin in the Chapelle Ardente were said to have been "condemned" to do so. Again, in 1750, Horace Walpole wrote, "Lord Dalkeith is dead of the small-pox in three days", his brother having previously died in two days. These, of course, were instances in which the disease appeared in its greatest intensity and attacked the rich, who in these days would ordinarily have little to fear from it. For the decade 1801-10, the general mortality was 29,000 per million, and the small-pox mortality 2,040. In 1831-35, the general mortality, owing to the epidemics of cholera and influenza, was 32,000, and the small-pox mortality had fallen to 830. At that time, he had himself seen as many as 100 cases of blindness from small-pox in unvaccinated persons, and there was evidence that, in the last century, two-thirds of the patients at the blind asylums were blind from the same cause, while the proportion now was only 5 per cent. In 1840, the Legislature provided the means of vaccination, and the result was that the mortality fell to 400 per million. Then came compulsory vaccination in 1853, and the small-pox mortality in the decade 1851-60 was only 278 per million. In 1861-70, the number was 276. He now came to the years 1871-80, which period was unquestionably exceptional. The mortality in these years among unvaccinated persons was so extraordinarily great, and the disease itself was so often violent, as to suggest the notion

that it might be indeed the black death of the middle ages. Yet, as far as he had been able to ascertain, no person who bore good evidences of vaccination had died of that peculiarly malignant form of small-pox (known in medicine as the hæmorrhagic or petechial), the frequency of which among the unvaccinated in the present epidemic raised the average death-rate of that whole class to 44.6 per cent., whilst the average death-rate of the vaccinated had been only 7.8 per cent., ranging from 1.3 to 15.3, according to the character of the arm-marks. In 1871, the disease was severe everywhere in Great Britain, but especially in Scotland, where compulsory vaccination had not been long adopted. Since that time, however, vaccination had been enforced more effectually in Scotland than in England, the result being that, for the last four years, there had not been twelve deaths a year in that country from small-pox. In London, on the other hand, thanks to the efforts of the Society, there was an unvaccinated residuum which kept the disease alive. The epidemic had come to us from France, and had probably arisen there from the unsanitary condition of the French soldiers during the late war. Having regard to all the circumstances of the epidemic, and from a study of epidemics in general, he had no hesitation in saying that the period 1871-80 was altogether exceptional, and that the rate of small-pox mortality during that decade afforded no basis for an argument against vaccination. He need only make one more observation. His opponents would doubtless urge that such places as Dewsbury, Leicester, and Keighley, where the anti-vaccinationists were strong, had had a comparative immunity from small-pox. But the truth was, that the disease had already died out in those towns, and that the mere disuse or neglect of vaccination did not reproduce it. As an illustration of the fact that no sanitation would suffice to exclude small-pox, the case of San Francisco might be cited. In the Chinese quarter of that city, a smouldering fire of small-pox continued to survive, after the subsidence of the general epidemic of 1872 and following years. Five years ago, the Board of Education required that all the children then in the schools should be vaccinated, and that none should be thereafter admitted without a vaccination certificate. Under this order, 80,000 children were vaccinated within the five years 1876-81. In the autumn of 1880, an outbreak of small-pox took place among the most respectable families in the town, causing quite a panic among the citizens; 147 cases occurring in November, and 140 in December, before it could be controlled by the vaccination of the unvaccinated adults, and by the quarantining of those smitten with the disease; and this in spite of the fact that, as the very low annual death-rate showed, the sanitation of the place was singularly good. Of the children, however, all of whom had been vaccinated—mostly with heifer-lymph—only ten or twelve took the disease.

A discussion followed, in which members of the Society and others took part.

A PARK FOR NORTH-WEST LONDON.

THERE is yet, we understand, some hope that the Metropolitan Board of Works will entertain as an equitable basis the proposition to secure the open space for which the Paddington Park Committee are pleading, on the basis of a large public and voluntary subscription to be supplemented by a metropolitan rate. The north and west have contributed to the Finsbury, Kennington, and other parks. If what is now asked for North-west London were asked for St. Giles's, everybody would see the urgent need for it; yet the population in the streets surrounding this space is yet more dense—as has been proved by a street census—than in St. Giles, and is of the artisan and poor working class. The case is a strong one, the opportunity golden, and in the nature of things may never again recur. The Metropolitan Board is right to be prudent and careful of the ratepayers' money. It cannot be right to throw away an invaluable and never to be renewed chance of securing one little lung for purifying the thick and poisoned air of a densely crowded acreage of habitations; and of obtaining for thousands of poor people—men, women, and children, the aged and infirm—the cribbed, cabined, and confined slaves of modern toil and civilised serfdom—the little oasis of verdant beauty, natural freshness, and repose, which such a park would offer. A fit of niggardliness, on such a rare occasion, would bring a lasting reproach, and leave a permanent stain on the record of this board.

M. DARESTE, in a note communicated to the Académie des Sciences, says that recent experiments have proved to him that the partial compression of the amnios in the embryo of birds induces the production of monster or malformed birds. The compression must be performed when the embryo is nothing beyond a mass of homogeneous cells.

have to continue convulsed until a second medical man could come and be a looker-on.—I am, etc.,
 PERCY HAYNES.
 Gloucester House, Malvern Wells, February 7th.

THE DANGERS OF CHLOROFORM, AND THE SAFETY OF ETHER, AS AN ANÆSTHETIC.

SIR,—I regret to find that, notwithstanding all that has been said and written concerning the safe and dangerous anæsthetics, we still week after week meet with the following distressing heading: "Another death from chloroform." Recently, I see three cases of death reported in the JOURNAL from this cause: one as occurring at Malvern, another at Dundee, and a third at a London hospital. To these cases I wish in no way further to refer. I feel sure that all due precaution was attended to, and that the finding of the jury was correct—viz., Died from natural causes accelerated by chloroform judiciously and properly administered. But what I particularly wish to draw attention to is, Why should the use of chloroform be continued as an anæsthetic, when so many deaths have been either occasioned or accelerated by its use? The cool and apparently indifferent manner in which these sad cases are recorded from time to time impresses me with an idea that familiarity with "chloroform deaths" seem to have dulled the feelings of operating surgeons; and that fatal cases of anæsthesia from chloroform have come to be regarded as an unavoidable tribute to convenience, rather than as an evidence of carelessness and misguided judgment. Hospital surgeons, as a body, run their chance of having deaths from misadventure, no matter from what cause; but they certainly should be liable to blame in the eyes of the public if they merely used chloroform because it was rapid in action and pleasant to take, to the exclusion of other anæsthetics, eight times safer, but not perhaps so quick in action or so easy of administration.

The question is now becoming a very important one, and it is high time something should be done so as to arrive at some guiding rule regarding the choice or selection of the means that ought to be employed in rendering patients insensible to pain during the performance of surgical operations.

It is very probable that a day will come when operators will not be allowed to merely explain a death from chloroform as an "unfortunate thing" and a piece of bad luck; or that it was a sort of penalty the surgeon pays for using a rapid but dangerous anæsthetic.

I do think, from all the warnings we have received, that chloroform should be seldom, if ever, used. I am happy to say that in the various hospitals in Dublin very few surgeons use it. Throughout America it is hardly ever used. And why it should be given in England, and in some instances single-handed, is difficult to understand.

A recent writer, when talking of its use, has said: "It is criminal and it is unscientific, and so much so as to justify the stern interference of the law and the summary punishment of those guilty of culpable negligence."

Deaths have no doubt occurred, when other anæsthetics than chloroform have been used. However, it is better for the surgeon and all concerned to think of safety to the patient rather than rapidity of action and convenience. When we learn that only one death from ether occurred in 23,204 administrations, it is quite reasonable for those interested in the subject to urge and recommend its employment.

To place a patient under insensible sleep never to wake again, is a very serious matter; few can realise it except those who have experienced the dreadful moments of doubt and mental depression that take place. Restoratives are quickly employed in the hope of reviving the patient, but all to no purpose, as the person lies dead, who, but a few minutes before, was in full possession of life and strength. The sad news has then to be told to the anxious friends, who are ready waiting to hear of the successful completion of the operation. I have never found the administration of ether difficult with the pocket-inhaler made for me by Coxeter, of London. I have administered it from all ages, ranging from infancy to persons over eighty years of age, with the happiest results. Complete anæsthesia was rapidly produced with a small quantity of ether, and when consciousness returned no bad effects were complained of.—I am, sir, etc.,

LAMBERT H. ORMSBY, M.D., F.R.C.S.I.,
 Surgeon to the Meath Hospital, Dublin.

ON THE RELATIONS OF COW-POX AND SMALL-POX.

SIR,—The JOURNAL of the 28th of last month contains some criticisms by Mr. Veterinary Surgeon Fleming on my account of Mr. Badcock's experiments as printed in the JOURNAL, November 26th, 1881, which demand a reply from me.

It seems to me quite superfluous for Mr. Fleming to point out to me

"that small-pox can no more be converted into cow-pox than that the sowing of carrot-seed can produce turnips; and that the experiments of Pasteur, etc., quite negative the notion that they can be made to lose their identity."

If Mr. Fleming will refer to my paper, he will see that I actually quoted some of Thiele's experiments on vaccination as anticipating and resembling Pasteur's experiments on chicken-cholera, etc. Moreover, he will nowhere see in it the slightest suggestion on my part that any one disease can be converted into another disease. I would maintain that cow-pox is still small-pox, bereft (by its passage through a bovine) of its infectious properties, yet retaining the preservative power, one impression of it largely preventing another of the same disease.

To my mind, Pasteur's researches harmonise with this theory; and so does the behaviour of other infectious diseases in reference to their recurrence in the same individual. Thus, one attack of scarlet fever, of measles, of typhoid, of whooping-cough, etc., protects from a repetition of itself; but no one of the whole category can protect from an attack of any one of the others. What analogy, therefore, can Mr. Fleming advance for the notion that small-pox and cow-pox are entirely distinct diseases, and yet mutually protect from each other? I know of none; whereas there is abundance of proof that diseases and plants may be modified by cultivation.

Mr. Fleming asks me to explain why it is so much more easy to produce vaccinia from humanised vaccine lymph than from small-pox. Without pretending to understand Nature's ways better than other men, I would submit that it is owing to the virus having already been once "bovinised" that the bovine organisation accepts it a second time more readily.

Will Mr. Fleming mention the names of "the scores of more experienced experimentalists than Ceely and Badcock, who hold that it is impossible to produce vaccine from small-pox"? I venture to believe that no other man, living or dead, ever did anything in the way of variolating bovines at all approaching to the amount of it which Mr. Badcock did. His more than two hundred animals, many of them practised upon again and again, and thirty-three of them producing typical vaccine vesicles (the experiments spread over twenty years, and watched by experienced medical men, Ceely one of them), so overwhelm the only *seventeen* bovines experimented on by Chauveau, with the result of not one vaccine vesicle, that one is surprised at Mr. Fleming attempting to advance M. Chauveau's experiments as nullifying Badcock's and Ceely's—not to mention another Englishman, Greene of Birmingham. The mistake on the part of M. Chauveau and his coadjutors seems to have been, that they went to work totally unacquainted with the difficulties of their task. They had never seen Ceely's writings and plates, nor even heard of Badcock's more numerous and protracted doings; and so they misinterpreted their own limited proceedings, and mistook for successes what the more numerous English experiments showed to be failures. My conviction is that any candid person, willing to view this, the gist of the matter, in this light, will, on perusing the report of the Lyons Commission, and also Mr. Fleming's pamphlet, find abundant evidence in them of its being the truth; and, on the other hand, if prejudiced against this interpretation, the reader will meet with much in both the report and the pamphlet that is irreconcilable and contradictory.

Mr. Fleming asks for more public proof from Badcock. I would rejoice: How can a man in his eighty-third year be expected to reprove what it took twenty years of his prime manhood to do? Moreover, we are still living in the midst of the proof. Hundreds of thousands of people have been vaccinated with Badcock's lymph, and no evidence whatever has ever been advanced of it not being genuine. Indeed, so orthodox are its effects, that each of the three public vaccinators in Brighton has repeatedly received a *douceur* from the Government; the last occasion (when Dr. Badcock, a son of the experimenter, was the recipient) occurring only two months since.

In conclusion, I may remark that, if Mr. Fleming will refer to the writings of Sir Thomas Watson and Dr. Bristowe, he will see that he is in error in stating that "the opinion (on this subject) among medical men in England has been handed down from one to another, and transferred from text-book to text-book, *without inquiry*."—I am, etc.,
 G. F. HODGSON, M.R.C.S.Eng.

Brighton, February 11th, 1882.

DEATH-RATE IN DUBLIN.

SIR,—Your Dublin correspondent states: "We regret that the roseate anticipations the Superintendent Medical Officer of Health of Dublin published some months (ago? *sic*), as to the improvement in the health of the city, have not been realised." I beg to state that I have not published any such roseate anticipations, but, on the contrary, have been most guarded in venturing upon any speculations as to the

CHARLES A. CAMERON,
Superintendent Medical Officer of Health.

BISHOP RYLE ON HOSPITALS.

BATTERSEA PROVIDENT DISPENSARY.

THE Battersea Provident Dispensary held its Sixth Annual Meeting at 175, High Street, on January 10th; Canon Erskine Clarke, President, in the chair. The report, presented by the honorary secretary, testified to the remarkable growth of the institution during the last twelve months. The members entered in 1881 were 8,639, against 6,160 last year. The members' payments were £953, compared with £657 last year. This increase of £296, was mainly attributed to the success of an experiment made in January 1881, viz., the appointment of a collector, who came weekly for the members' subscriptions, instead of their having, as formerly, to bring them to the dispensary. In addition to £110 for entrance fees, £617 was the sum divided amongst the five medical officers, after all expenses of the collector, collector, drugs and rent were paid; being an increase of £202 on the residuary balance last year, and an increase of £253 in 1879, when the dispensary commenced in 1844), was recognised as a permanent institution. The work done by the medical staff showed that their office is no sinecure, as in 1881, 5,240 cases of illness were treated, 11,111 prescriptions made by patients at the dispensary, and 14,111 of the services of the members. The report concludes with a general statement of the services of the medical men, and of Mr Whitehead, who has been resident dispenser ever since the institution was founded on a permanent basis.

THE PORTSMOUTH, PORTSEA, AND GOSPORT
HOSPITAL.

The most important finding is that the South-east Asian region has a high prevalence of the disease, which was recently laid bare in the annual general meeting, showing that the prevalence of the infectious disease has been steadily increasing during the past few decades. Still, the prevalence of the disease has been declining and, hence, the importance of the disease has been decreasing steadily over the past few decades. With regard to the disease, it is a very common disease and common to most countries. However, the disease has been found to be a very rare disease, with the prevalence of the disease being very low. The disease has been found to be a very rare disease, with the prevalence of the disease being very low. The disease has been found to be a very rare disease, with the prevalence of the disease being very low. The disease has been found to be a very rare disease, with the prevalence of the disease being very low.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL SERVICE.—The following are the names of the surgeons on probation in the Medical Department of the British Army who were successful at both the London and Netley examinations. The final positions of these gentlemen are not affected by the marks gained at Netley.

	Marks		Marks
*N. M. Reid	7390	J. W. Jerome	1620
W. H. P. Lewis		W. W. Johnson	1670
W. Dick	2268	M. J. Jones	1670
E. J. Jones	2141	L. H. Truitt	1670
E. H. Jones		J. M. Irwin	1855
E. J. Jones		P. J. N.	1850
E. J. Jones		F. O. N.	
E. J. Jones		W. A. N.	
E. J. Jones	2025	F. H. N.	
H. O. Trevor	1990	J. H. N.	1805
A. J. N.	1985	C. E. N.	
E. J. Jones	1971		

Memorial Gold Medal

INDIAN MEDICAL SERVICE. The following is the list of surgeons on probation in Her Majesty's Indian Medical Service who were successful at both the London and Netley examinations. The final position of the gentlemen are determined by the marks gained in London and Netley, and the combined numbers are accordingly shown in the list which follows.

	Male	Female
1. F. V.	4465	4465
2. F. V.	4465	4465
3. F. V.	4465	4465
4. F. V.	4465	4465
5. F. V.	4465	4465
6. F. V.	4465	4465
7. F. V.	4465	4465
8. F. V.	4465	4465
9. F. V.	4465	4465
10. F. V.	4465	4465
11. F. V.	4465	4465
12. F. V.	4465	4465
13. F. V.	4465	4465
14. F. V.	4465	4465
15. F. V.	4465	4465
16. F. V.	4465	4465
17. F. V.	4465	4465
18. F. V.	4465	4465
19. F. V.	4465	4465
20. F. V.	4465	4465
21. F. V.	4465	4465
22. F. V.	4465	4465
23. F. V.	4465	4465
24. F. V.	4465	4465
25. F. V.	4465	4465
26. F. V.	4465	4465
27. F. V.	4465	4465
28. F. V.	4465	4465
29. F. V.	4465	4465
30. F. V.	4465	4465
31. F. V.	4465	4465
32. F. V.	4465	4465
33. F. V.	4465	4465
34. F. V.	4465	4465
35. F. V.	4465	4465
36. F. V.	4465	4465
37. F. V.	4465	4465
38. F. V.	4465	4465
39. F. V.	4465	4465
40. F. V.	4465	4465
41. F. V.	4465	4465
42. F. V.	4465	4465
43. F. V.	4465	4465
44. F. V.	4465	4465
45. F. V.	4465	4465
46. F. V.	4465	4465
47. F. V.	4465	4465
48. F. V.	4465	4465
49. F. V.	4465	4465
50. F. V.	4465	4465
51. F. V.	4465	4465
52. F. V.	4465	4465
53. F. V.	4465	4465
54. F. V.	4465	4465
55. F. V.	4465	4465
56. F. V.	4465	4465
57. F. V.	4465	4465
58. F. V.	4465	4465
59. F. V.	4465	4465
60. F. V.	4465	4465
61. F. V.	4465	4465
62. F. V.	4465	4465
63. F. V.	4465	4465
64. F. V.	4465	4465
65. F. V.	4465	4465
66. F. V.	4465	4465
67. F. V.	4465	4465
68. F. V.	4465	4465
69. F. V.	4465	4465
70. F. V.	4465	4465
71. F. V.	4465	4465
72. F. V.	4465	4465
73. F. V.	4465	4465
74. F. V.	4465	4465
75. F. V.	4465	4465
76. F. V.	4465	4465
77. F. V.	4465	4465
78. F. V.	4465	4465
79. F. V.	4465	4465
80. F. V.	4465	4465
81. F. V.	4465	4465
82. F. V.	4465	4465
83. F. V.	4465	4465
84. F. V.	4465	4465
85. F. V.	4465	4465
86. F. V.	4465	4465
87. F. V.	4465	4465
88. F. V.	4465	4465
89. F. V.	4465	4465
90. F. V.	4465	4465
91. F. V.	4465	4465
92. F. V.	4465	4465
93. F. V.	4465	4465
94. F. V.	4465	4465
95. F. V.	4465	4465
96. F. V.	4465	4465
97. F. V.	4465	4465
98. F. V.	4465	4465
99. F. V.	4465	4465
100. F. V.	4465	4465

† Received the Huxley Prize, the Martin Memorial Silver Medal, and the House of Commons Gold Medal.

MEDICO-PARLIAMENTARY.

[illegible][illegible]

The government of the province has agreed that the only means of the "long" highway will be allowed to compete for the "short" highway, as the "long" highway.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE recently-published report on the Bradford fever hospital shows it to be an institution of a most valuable character. It appears that the number of cases of scarlet fever which occurred in the borough during last year amounted to 1,062. Of these, 350 were taken to the hospital, leaving 712 to be treated at their own homes. Of the cases treated in the hospital, 34 (or a fraction over 10 per cent.) out of the 350 proved fatal, while of the 712 cases treated privately, there were no fewer than 120 deaths, showing a percentage of 17 against 10 in the hospital.

THE INFECTIVE PERIOD OF MEASLES.

A SHORT article has recently appeared in the *Sanitary Journal* on this subject, in which are especially pointed out (1) that judging from the epidemic of measles in the Fiji Islands, and from numerous isolated instances, the incubative period ordinarily lasts from ten to twelve days, but that in some cases it may only be eight, whilst in others it may be fourteen days; and (2) that the disease may be communicated from one child to another during the catarrhal stage and before the rash appears. There is nothing particularly new in either of these statements, but they are often forgotten by many practitioners. Dr. W. Squire, in his valuable monograph on the period of infection in epidemic disease, published in 1874, pointed out not only that measles, but also other zymotic diseases, notably small-pox, are infectious before the rash appears. Dr. Squire divides the incubative stage into the latent, during which no symptoms of disease are observable, which in measles ordinarily lasts for about four days, and the period of invasion, when feverishness, loss of appetite, cough, coryza, etc., prevail. During this latter part of the disease there is plenty of evidence that it is infectious. A good instance of this is related in the *Sanitary Journal*. A child at school, feeling ill, was removed to the house of a friend, where there were several children. After remaining there about a week she was taken home, and on the following day the eruption of measles appeared. The previous symptoms were loss of appetite and those of an ordinary cold. Twelve days after her removal, four of the children, on the same day, were laid up with measles. In a second case a child visited, for a few hours only, another child who had a cough, and two days afterwards the rash of measles. She returned home, and ten days afterwards visited some friends for the day. On the twelfth day after her visit to the first mentioned child she had the rash of measles. Some of her friends whom she visited on the tenth day after exposure and two days before the appearance of the rash also took the disease. Dr. Squire gives the following instance. A boy visited a girl on February 5th, and occupied the same bedroom with her from the 9th to the 12th, returned home on the 13th, and had the rash on the 16th and 17th of February. The little girl had cough on the 20th and the rash of measles on the 24th. Many other similar cases are published. Another important point in connection with the infection of measles is not referred to by the writer in the *Sanitary Journal*, viz., the time during which infection may last after the disappearance of the rash. Dr. Squire states that it is probably limited to three weeks from the time of the eruption, but that infection is evidently as intense in the first week of convalescence as at any part of the illness, is considerable in the second, and may persist in the third week. It is therefore almost certain that measles may be communicated by a sick child for a period of at least a month from the time of his receiving the infection of the disease, and that therefore it is not safe to allow him during that time to mix with healthy children.

PRIZES.—The following are the subjects nominated by the Société Française d'Hygiène for 1882. 1. Hygiene and Physical Education of Children from six to twelve years old. Home life, school life, country life, and life in the workshop, to be discussed separately. 2. Personal and Domestic Cleanliness. Study of personal and domestic cleanliness of rich and poor of both sexes and all ages, in town and country. 1. The essays must not exceed thirty to forty pages of printed matter in 12mo. 2. They must be sent distinguished only by a motto, to the office of the society, 30 Rue du Dragon, before September 1st, 1882. Candidates who make themselves known in any way shall be excluded from the competitions. 3. The successful essays become the property of the Society, and will be published either in full or in an abridged form; the names of all successful competitors to be in the title page of the published pamphlet, which will be largely circulated. In each competition a gold, silver, and two bronze medals are offered.

OBITUARY.

SIR ROBERT CHRISTISON, BART., M.D., D.C.L., LL.D.,
PHYSICIAN IN ORDINARY TO THE QUEEN IN SCOTLAND: VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION, ETC.

[Second Notice.]

A FEW notes collected from various sources, supplementary of the brief record of the life of Sir Robert Christison, which appeared in last week's JOURNAL, will probably be acceptable to our readers, and especially to that large number of them who enjoy the privilege of reckoning themselves among the pupils of the late eminent professor of *Materia Medica*.

The early life of Sir Robert Christison was passed under circumstances well calculated to fit him for the duties which afterwards fell to his lot. When he was nine years of age, his father, Mr. Alexander Christison, became professor of humanity (in English parlance, of Latin) in the University of Edinburgh; and hence in that institution Robert Christison received his education, undergoing a complete course of instruction for five years in the Faculty of Arts before deciding on his future profession. His first choice was not medicine; but, for his medical education, his previous training in literature, philosophy, and physical science, gave him advantages which he never ceased to value. The habits of scholarship and taste for literature which he acquired in his youth never deserted him, although to a great extent eclipsed by his fame as a professor in his special departments. He was, we have been informed, well acquainted with the best English literature, including poetry; and possessed a good knowledge of French, German, and Italian authors, as well as of the Greek and Latin writers. From these he could make apt quotations, though not addicted to parade his learning. His literary style was cultivated and elegant. Of it, so competent a judge as Sir William Stirling-Maxwell said, on the occasion of the jubilee of Christison's professorship in 1872, that he was "remarkable for the literary skill with which he had placed before the world the results of his observation and research. The chapters on Medical Jurisprudence" in his work "may be well studied by the non-professional reader for the grace and charm of their appropriate style".

Possessing the advantages of general education to which reference has been made, and having graduated as Doctor of Medicine, Robert Christison proceeded to London, where he studied medicine at St. Bartholomew's Hospital; and to Paris, where he became a pupil of Robiquet, the eminent chemist and *pharmacien*, in whose laboratory he worked assiduously, and, as he used often to say in after-life, with signal advantage. Here, too, he prosecuted, under the celebrated Orfila, the study of toxicology, and had also the opportunity of hearing the lectures of Vauquelin and Thénard on chemistry, and of Guy-Lussac on physics. He was a regular visitor of the French Institute when La Place still attended it, and when Arago, Biot, Ampère, Pelletier, and Caventon communicated their discoveries. When, in 1822, the promotion in the University of Edinburgh consequent on the death of the celebrated Dr. Gregory, Professor of Practice of Physic, left a vacancy in the chair of Medical Jurisprudence, it was thought by his friends that he was a fitting man for the office, and he was accordingly proposed as a candidate during his absence in Paris. The possession of the chair was keenly contested for some months; and, as an illustration of the condition of medical jurisprudence at the time, Sir Robert mentioned, in his speech at his jubilee festival, that not one of the candidates, except himself, had a practical knowledge of chemistry. He did not, however, attribute his success to this, but to the friendship and interest of one whose acquaintance with him dated from early life, and who, at the time, was a Lord of the Admiralty under Lord Melville, in whose hands lay the disposal of nearly the whole of the Crown patronage in Scotland. Notwithstanding Sir Robert Christison's disclaimer of the influence of his own scientific merits, it will be admitted that, as events afterwards proved, no wiser choice could have been made.

Medical Jurisprudence in Great Britain was, in 1822, in a far different position from that which it now occupies. In proposing the health of Sir Robert Christison at the jubilee, Lord Justice-General Inglis thus tersely sketched its history. "If we would rightly estimate the difficulties that necessarily beset a Professor of Medical Jurisprudence half a century ago, we must consider what were the materials at his command, and what was the state of the science in this country. Forensic medicine had, indeed, made progress since its existence and utility were first recognised by the Emperor Charles V, in his *Constitutio Criminalis Carolina*, promulgated at the diet of Ratisbon; but, though the study had been zealously pursued in Germany, France, and Italy, it had been

1872, the fact that he, alone of all the professors who had ever taught in the university, had completed his fiftieth year of active service, seemed to his brethren of the Senatus a sufficient reason for setting aside a standing rule, and conferring upon him that honorary degree of LL.D.

He was for many years physician in ordinary to the Queen in Scotland, and in 1871 a baronetcy was conferred on him. When the proposal was made, he at first declined the honour on the ground of his private fortune not being sufficiently ample. At last he yielded to the personal solicitation of the Prime Minister (Mr. Gladstone) who urged his acceptance, and pointed out that this was a scientific or literary baronetcy, where wealth was not expected. Speaking of the event subsequently at his jubilee dinner, he expressed his special gratification at the honour bestowed on him. The name of Christison, he said, not common in Scotland, but more frequent in Scandinavia—whence his progenitor had probably come in old time as a "piratical rogue"—was nowhere the name of a family of rank; and the honour was, he said, peculiarly gratifying, "inasmuch as I am able to say that, for the first time, the name of Christison has become the name of a family."

No one can understand Sir Robert Christison without keeping in mind his devotion to his University. His father was a professor in it; he was educated in it; he lived in it, and till he died it held the first place in his affection and regard. "From first to last," he said of himself, "I have made my university office my main and primary object." Nor was it only in his professorial capacity that he showed his deep interest in the welfare of his *alma mater*. As a member of the Senatus Academicus, and assessor for that body in the university court—an office to which he was elected five times in succession—Professor Christison took an active and prominent part in the management of college affairs. No demand thus made upon his time seemed ever to be grudged; and alike by virtue of his untiring energy and force of will, his thorough knowledge of the matters dealt with, and the prudence which marked his counsels in difficult emergencies, he attained among his colleagues a position of commanding influence. The administration of university funds in the hands of the Senatus gave scope for his business aptitude as chairman of the finance committee; nor did he ever lose an opportunity of urging the claims of the institution to an enlarged measure of public support. In cases where difference of opinion arose, his views were always indicated with trenchant emphasis, while his perfect straightforwardness and rectitude of purpose ensured respect. Impressed with the importance of clinical teaching, he was one of the most earnest promoters of the rebuilding of the Royal Infirmary, of Edinburgh. The movement for better endowment of the university also found a warm supporter in him; and no one probably was more gratified than he with the change of constitution, which accorded a great increase of academic influence in the management of university affairs.

Besides being a devoted son of his Alma Mater, and one of the most eminent of professors, Sir Robert Christison possessed certain strongly marked physical and mental attributes, which gained for him the character of being a many-sided man.

His neat-handedness was noted. It displayed itself in his handwriting; and in the laboratory he was known as a peculiarly neat and clean worker. He had a strong turn for invention, which showed itself mostly in his early work, in devising chemical apparatus to suit his own purposes.

His love of music was innate and great. Possessing a splendid bass voice, which retained its power till late in his life, he was great in glees and choruses. His old Edinburgh friends will long remember his performances in this character; and members of the Association who attended the meeting at Edinburgh in 1858, will doubtless recall the fact that—as stated in the BRITISH MEDICAL JOURNAL of the period—the proceedings at the dinner (at which he presided) "were varied by a glee, which was finely sung by Drs. Christison, Bennett, Peddie, and Douglas MacLagan." He has been heard to delight a critical audience by whistling with remarkable power in accompaniment to a piano. In the University, he was a warm promoter of the cultivation of music. Many years ago, he warmly interested himself in the carrying out of the will of General Reid, who left his fortune for the promotion of music. While some diversity of opinion prevailed in the Senatus of the university as to the manner of carrying out this trust, Dr. Christison headed the thorough-going musical party, and opposed all attempts to divert a portion of the fund to general university purposes. The Students' Musical Association ever found in him a cordial supporter; and, besides the countenance afforded in other ways, he not unfrequently lent the aid of his voice in the public concerts of the society. At the meeting of the association, after Sir Robert's election, the president, Professor Sir Herbert Oakeley, in some written remarks, which were read in his un-

avoidable absence, bore cordial testimony to the warm support given by Sir Robert to the chair of Music. "Though not his candidate," Sir Herbert wrote, "I received, from the moment of my election, his warmest support; and with his accustomed high sense of probity, honour, and justice, he did all in his power to strengthen my hands, and to aid me at the commencement of a task fraught with difficulties, proving himself on many occasions the wisest as he was the most experienced of counsellors, and recalling a line of Tennyson's—
'Truest friend and noblest foe.'

The older members of this society know how true a friend he was to its best interests.....In 1874, he said that he 'desired to contribute, as far as he possibly could, to encourage students to join this society; and if there was one reason more than another that he could bring forward for their doing so, it was that every man, whether young or old, required relaxation from the ordinary work, particularly that of sedentary professions requiring constant strain on mental powers. And there was no more agreeable or more suitable relaxation for students than that of cultivating choral music.'

It was, perhaps, to have been expected of one so closely identified with all university matters, that Dr. Christison should be found an active promoter of the Students' Rifle Corps. Although he had at first no official connection with the University Volunteer Company formed in 1859, Dr. Christison took a warm interest in its success; and, about two years afterwards, he was induced to assume the captaincy, the duties of which he for some years discharged with vigour and efficiency, and which he continued to hold till 1877. An ardent lover of all manly exercises, he was himself noted, in his youth, as the most accomplished athlete in the University. He was a dexterous boxer, was fond of quouting, showed astonishing endurance as a walker, and could run, even uphill, with the nimbleness of a mountain deer. A story is told of his having, on one occasion, accomplished the rarely equalled feat of running from the College gate to the top of Arthur's Seat within twenty-five minutes. In after years, athleticism often formed part of the diversions with which the Professor and his friends relieved the cares of professional life. Even as an octogenarian, the vivacious Professor continued to be remarked for the almost jaunty elasticity of his step; and four years have hardly elapsed since, in pursuance of experiments as to the sustaining virtues of the cuca leaf, he walked twice to the top of Ben Voirlach.

In further illustration of the many-sidedness which was a noteworthy characteristic of Sir R. Christison, reference may be made to some of his appearances in the general capacity of a citizen. Among the societies which he took a leading part in establishing, and which he assisted with all the weight of his advocacy, are those which seek to preserve from pollution the rivers and lochs of Scotland, and to secure the health of families by efficient sanitary inspection of their houses. In former years, he rendered good service to the citizens of Edinburgh, in connection with an early stage of the water question. The ceaseless activity of a mind, whose bent was always towards scientific research, found employment, even for spare half-hours and seasons of relaxation, in the investigation of curious and out-of-the-way questions—such as the exact proportions of a well-built man. By way of supplement to the graver inquiries involved in criminal jurisprudence, he bestowed no small amount of attention on handwriting, as an index to individual character and a means of identification. At his public festival, it was mentioned by Professor Sir William Thomson, that Sir Robert Christison had, as a means of relaxation from his other pursuits, engaged in the study of deep-sea thermometry; and that one of his vacations was devoted to determining the temperature at the bottom of Loch Lomond. The results of the observations thus made were communicated by him to the Royal Society of Edinburgh.

His oratorical powers were great, and when he was roused to anger, he carried his elocution and rhetoric on with him without disturbance by his emotions. He indulged little in invective—but still a little. Great field days of speech-making frequently occurred in the early medical reform debates in the Edinburgh College of Physicians; and many of the fellows of the College were strongly disinclined to follow Christison in what they believed to be his plans for giving everything up to the university interests. So greatly, however, did they admire the man, that they unanimously voted that a portrait of him should be hung in the College hall; this motion was seconded, if not proposed, by one who had been his most vigorous opponent. This, Sir Robert regarded as a great honour; "but," he said, "it was a double honour to me, and highly honourable too to my fellow-members"—on account of the differences which had existed.

In politics, he was a Tory of a somewhat old school. Some years ago, he appeared as the champion of that interest in an unsuccessful competition with Lord Rosebery for the Lord Rectorship of the University; and, at the last general election, he warmly supported the

Physicians of Edinburgh in 1859. As warden and a magistrate, and for many years as a member of the corporation of the ancient royal borough of Sutton Coldfield, he took an active part in local politics and administrative matters, especially devoting himself to educational and sanitary questions. He continued an active member of the corporation till May last, when he resigned his seat through ill-health, amid the widespread expression of sorrow of the people amongst whom he lived, and by whom he was always regarded with respect and affection. He was the author of several essays which were published in our pages.

MEDICAL NEWS.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—DOUBLE QUALIFICATION.—The following gentlemen passed their first professional examination during the February sittings of the examiners.

John James Oakeshott, Highgate; John Fitzgerald Burke, Ennis; Charles Horace Eurlley, London; Lawrence John Raymond Louis Quinn, Belfast; Charles Cumberland Brodick, Jersey; Arthur Charles Kemble, Essex; Arthur Foulds Thomas, Halifax; Richard Cody Rowan, Hamilton; Arthur Herbert Butcher, Ripon, Yorkshire; Michael Joseph Molony, Caher, Ireland; Hunter Urquhart Walker, Madras; Charles Alfred Mitchell, Dewsbury; George Easingwood Blanshard, Edinburgh; Robert Buck Caruthers, Wigton, Cumberland; John William Dunbar Hooper, Dinapore, India; John Powell, South Wales; William MacDermott, Ballymoney; John Charles King, Galway; Charles Maxwell, Lockerbie; Samuel William Brierley, Victoria, Australia.

The following gentlemen passed their final examination, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh.

Hamilton Meikle, Alabama; Joseph Balfe, Dublin; Augustus William Thomas, Swaffham; George Reginald Eakins, County Tyrone; John Burdon, County Durham; Joseph Hysanth Tynan, Edgeworthstown; Walter Spencer, Yorkshire; Francis Moore, Guernsey; William Robert Allen, County Antrim; William Pennefather Warren, Queenstown; Thomas Galland Charis Hesk, Derbyshire; Arthur Edward Blacker, Somersetshire; George Wiston Baker, London; George Arthur Patrick, Bolton; Frederick Anastasius Saunders, London; Marcus William Alatton Keane, Whitby, Yorkshire; John Fitzgerald Burke, Ennis; Joseph Wallace Duncan, Donegal; Alfred Ellison Muncaster, Manchester; Adam Robert Hamilton Oakley, Highgate; George Dobson Crowther, Yorkshire; Arthur Edward Cecil Spence, Allahabad; Henry Ralph Gatley, Park, near Truro; George Jukes, Cumberland; Thomas Wyld Fairman, Biggar; Thomas Aitchison, Northumberland; George Savage Martin Baxter, Brighton; William Patrick Kirwan, Galway; Henry Hele Bate, Swansea.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following gentlemen passed their first professional examination during the recent sittings of the examiners.

Harry Graham Smith, Edinburgh; Frank Sturges, London; Elwes Steele, Monmouthshire; Thomas Tenison Collins, Tipperary; Frederic John Bateman, Norwich.

The following gentlemen passed their final examination, and were admitted Licentiates of the College.

Charles Dundee, Bruslee, Ireland; Hormasjee Edaljee Banatvala, Bombay; George Henry Butler, Christchurch, Hants; Archibald Clarke Robinson, County Antrim; Septimus Lowes, Newcastle-on-Tyne; Michael Joseph Collins, Cork; James Shedden Elder, Eaglesham.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 9th, 1882.

Crone, John Smyth, Evershot Road, Tollington Park, N. Dunn, Louis Albert, Cavendish Place, Brighton. Erulkar, Solomon Abraham, The Avenue, Acre Lane, Brixton. Phillips, Henry Astley, 27, Leicester Square, W.

The following gentlemen also on the same day passed their Primary Professional Examination.

Cardwell, Thomas, Guy's Hospital. Hoyland, Stanley Stenton, St. Bartholomew's Hospital. Littlewood, John Osocroft, Guy's Hospital. Milnes, John George, Guy's Hospital. Spencer, Walter, Charing Cross Hospital.

At the Examination in Elementary Chemistry, held at the Hall on January 27th, the following gentleman passed his examination. Jollye, Francis William.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, February 6th, 7th, 8th, and 9th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—Frederick William Elsner, William Dargan Gray, James Thomas Laffan, John Patrick Nicolls, Michael Joseph O'Doherty, Francis Edward Pim, Charles Frederick Porter, John Alfred Scott, Charles Henry Freeman Underwood.

For the Licence to practise Medicine alone.—Henry Vincent Dillon, Thomas James Hennessy.

The following Licentiates in Medicine, having complied with the by-laws relating to Membership, have been duly admitted to the roll of Members of the College.

John Guinness Beatty, 1866, Dublin; Charles Philip Coppinger, 1871, Dublin; James Barclay Clibborn, 1876, Surgeon R.N., China; George Edward Twiss, 1878, Surgeon A.M.D. (The numerals indicate the year in which the Licentiate in Medicine of the College was obtained.)

MEDICAL VACANCIES.

The following vacancies are announced:—

ABERYSTWTH INFIRMARY AND CARDIGANSHIRE GENERAL HOSPITAL—House-Surgeon. Salary, £175 per annum. Applications to Evan Evans, Solicitor, Aberystwith, by 28th instant.

ANDERSON'S COLLEGE DISPENSARY—Physician. Applications to David Wilson, Honorary Secretary, 42, Bath Street, Glasgow.

BELMULLET UNION—Medical Officer for Workhouse at a salary of £50 per annum, together with £5 per annum as Superintendent Medical Officer of Health. Election on the 9th proximo.

BRISTOL GENERAL HOSPITAL—Physician's Assistant. Salary, £50 per annum. Applications by February 18th.

CASTLEBAR UNION—Medical Officer for Castlebar Dispensary District. (North Division No 2). Salary, £110 per annum, with £15 yearly as Medical Officer of Health, registration, and vaccination fees. Election on the 25th instant.

DROGHEDA UNION—Medical Officer for Monasterboice Dispensary District. Salary, £110 per annum, with £30 yearly as Medical Officer of Health, registration and vaccination fees. Election on the 21st instant.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square, W.C.—Two extra Visiting Physicians. Applications by the 21st instant.

MONAGHAN UNION—Medical Officer for Kilmore Dispensary District. Salary, £110 per annum, with £15 yearly as Medical Officer of Health, registration, and vaccination fees. Election on the 21st instant.

MONTROSE ROYAL LUNATIC ASYLUM—Assistant Medical Officer. Salary, £120 per annum. Applications to Dr. Howden.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—House-Surgeon. Salary £50 per annum. Applications by February 24th.

NEWCASTLE-UPON-TYNE INFIRMARY—Senior House-Surgeon. Salary, £100 per annum. Applications by February 22nd.

POPLAR HOSPITAL FOR ACCIDENTS, Blackwall, E.—Honorary Surgeon. Applications to the Secretary by 21st instant.

RADCLIFFE INFIRMARY, Oxford.—Junior Resident Medical Officer. Salary, £60 per annum. Applications by February 22nd.

ROTHERHAM HOSPITAL—Resident House-Surgeon. Salary, £100 per annum. Applications by February 28th.

ST. GERMAN'S UNION RURAL SANITARY AUTHORITY—Medical Officer of Health. Salary, £100 per annum. Applications, marked "Appointment Medical Officer of Health", by March 9th.

ST. MARK'S OPHTHALMIC HOSPITAL, Dublin—House-Surgeon. Salary, £52 10s. per annum. Applications to the Registrar by February 18th.

TEIGNMOUTH, DAWLISH, AND NEWTON INFIRMARY AND CONVALESCENT HOME, Teignmouth—House-Surgeon. Salary £65 per annum. Applications by February 26th.

TIVERTON INFIRMARY—House-Surgeon and Dispenser. Applications to E. F. C. Clarke, Honorary Secretary, Tidcombe Villas, Tiverton, Devon.

WESTERN GENERAL DISPENSARY—Marylebone Road—Honorary Physician. Applications by March 6th.

WEST LONDON HOSPITAL, Hammersmith, W.—Assistant Physician. Applications by 1st March.

WESTERN OPHTHALMIC HOSPITAL, 155, Marylebone Road—Surgeon. Applications by the 28th February.

MEDICAL APPOINTMENTS.

BERESFORD, F. J., L.R.C.S., appointed Resident Medical Officer to the Heckmond-wike Industrial Co-operative Society (Limited), Medical Aid Department, *vice* J. Stewart, L.R.C.P., resigned.

BOND, Thomas, M.B., appointed Medical Officer to the Great Western Railway Company, *vice* Thomas Cooper, M.R.C.P., deceased.

CHAVASSE, T. F., F.R.C.S., appointed Honorary Surgeon to the General Hospital, Birmingham.

COXWELL, C. F., M.B., appointed Resident Medical Officer to the National Hospital for the Paralysed, *vice* C. E. Beevor, M.B., resigned.

EMERY-JONES, A., M.D., M.R.C.S.Eng., appointed Honorary Surgeon to the Manchester Royal Eye Hospital.

FIELD, J. W., M.R.C.S., appointed House-Surgeon to the London Lock Hospital, *vice* F. N. Cook, M.R.C.S., resigned.

FOTHERBY, H. A., M.R.C.S., appointed House-Surgeon to the Royal Cornwall Infirmary, *vice* W. Allsworth, M.B., resigned.

HASLAM, W. F., F.R.C.S., appointed Assistant-Surgeon to the General Hospital, Birmingham, *vice* T. F. Chavasse, F.R.C.S., resigned.

KEENAN, J., L.R.C.S.I., appointed Resident Medical Officer to the Mercers' Hospital, Dublin, *vice* C. B. Gaffney, L.R.C.S.I., resigned.

KNOTT, W., M.B., appointed House-Surgeon to the North Ormsby Cottage Hospital, *vice* J. P. Sleightholme, deceased.

LAURENT, E. A. O., M.B., appointed Resident Surgeon to the Bedford General Infirmary, *vice* C. J. Bond, M.R.C.S., resigned.

LUBBOCK, M., M.D., appointed Assistant-Physician to the Charing-Cross Hospital, *vice* W. B. Houghton, M.D., resigned.

POPE, Charles, L.R.C.S., appointed Medical Officer to the South Shields Work-house, *vice* J. S. Denham, M.D., deceased.

PRENTICE, Z., M.R.C.S., appointed Junior House-Surgeon to the Huddersfield Infirmary, *vice* Robert Farrer, M.R.C.S., resigned.

FRIDAY.—Clinical Society of London, 8.30 P.M. Report of Committee on Dr. Finlay's case of Aortic Aneurysm. Mr. R. J. Godlee: On a case in which a Piece of Grass swallowed by a Child made its exit in an Intercoastal Space. Dr. George Johnson: On a Case of Sudden Perforative Pneumothorax, with rapid and complete Recovery. Mr. Spencer Watson: Sequel to a case of Typhoid Fever, reported in *CLIN. MED.* (1881), vol. xiv. Mr. George Lawson: On a case of Chimney-sweeps' Cancer of Axilla, treated by Excision of the Growth, Ligation of Axillary Artery, and Amputation of Arm at Shoulder-joint. Dr. T. H. Green will show a case of Subcutaneous Fibroid Nodules in Rheumatism. Mr. B. Squire will show a case of Lupus of the Forehead, treated by Excision and Linear Scarification.—Quekett Microscopical Club, 8 P.M. Mr. T. Charters White (President): On the Histological Development of the Larva of *Corethra Plumicornis*.—Royal College of Surgeons of England, 4 P.M. Professor W. K. Parker: On the Morphology of the Mammary Skull.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

NEW TREATMENT OF SMALL-POX.

At the meeting of the Paris Académie de Médecine on August 30th, M. du Castel gave an account of a new therapeutic method instituted by him in his wards at the St. Antoine Hospital during a severe epidemic of small-pox. He stated that he had obtained most successful results from this method, which should be resorted to at an early stage of the disease, before the stage of suppuration has been reached, but when many symptoms indicated a serious attack. The method is as follows. Subcutaneous injections of ether are made twice daily with one of Pravaz's syringes, completely filled. Opium is administered in the form of thebaic extract, to which is added perchloride of iron in hemorrhagic cases. The opium and perchloride are taken internally every hour, and a rather large quantity of alcohol is given to the patient daily. The effects of this treatment are affirmed to comprise diminution of the morbid phenomena, desiccation of the pustules before suppuration in the majority of the patients, arrest of the development of the pustules, absence of salivation, and convalescence between the sixth and the ninth day from the appearance of the eruption. The drawbacks are very slight, and can easily be avoided. The operation is not very painful. If the injection be badly done, it may produce small eschars and indurations under the skin; but to prevent these occurrences it is only necessary to push the handle of the piston of the syringe very deliberately. M. du Castel reports that, out of seventy-six cases, thirteen only died during the suppurative stage. He was able to determine that the ether acted specially on the suppurative of the pustules, and that this action was weaker in unvaccinated cases. MM. Hérard, Lasguez, and Marotte, were delegated to inquire into M. du Castel's statements; and, at a subsequent meeting, M. Marotte presented a report on the subject. He noted with satisfaction the good effects of this method, but it seemed to him too complex to allow a thorough explanation of the action of the remedies. He recommended that, if there were sufficient reason to encourage trials so fortunately commenced, a greater number of cases should be waited for, before expressing a decided opinion as to the value of the method.

F. W. J.—Chloral is already on the poisons list. The other matters, relating to business questions, should be addressed to the General Manager. The advertisements in the JOURNAL are not in the Editor's department.

EARLY VACCINATION.

SIR,—In your leader on "How Small-pox Spreads," I see that last year only seven out of two hundred children born in Marylebone Workhouse were accounted for as being vaccinated. Had the medical officer there adopted the plan I always do, this would not have occurred. I vaccinate all children born in the city of Exeter Workhouse when a fortnight or three weeks' old, and before the mothers leave the house. The cases always do well.—I am, sir, yours truly, JOHN WOODMAN, F.R.C.S.

DR. DRURY'S communication respecting the non-arrival of the JOURNAL is referred to the General Manager, to whom, as Dr. Drury will note, it is requested, by the standing notice which appears every week, that all communications respecting advertisements, forwarding of the journals, and similar business matters, should be addressed, to the Manager, Mr. Fowke, 161A, Strand, and not to the Editor.

AMBULANCE COT OF DR. GORGAS.

SIR,—It appears, by the recently published *Transactions of the International Medical Congress*, that, in the discussion on Professor MacDonald's paper (vol. ii, p. 570, Section, Military Surgery), an erroneous impression was entertained with regard to the Gorgas Cot. It was supposed certain changes were improvements of mine, whereas they were suggested by Dr. Gorgas himself in a letter to me in 1870. The *Transactions* have omitted from their account of the words "suggested by Dr. Gorgas" which followed that portion of my letter read at the Congress. In justice to my friend Dr. Gorgas, I request you will allow me to correct the mistake through your columns.—I am, sir, your obedient servant, ROBERT W. L. DEAN, Deputy Inspector-General, R.N.

LECTURES ON PUERPERAL FEVER.

SIR,—If any of the readers of the JOURNAL may wish for a copy of the Lectures on Puerperal Fever which I delivered at the College of Physicians, and were published in the JOURNAL, I have requested Mr. Richards, 37, Great Queen Street, W.C., to forward one post free on receiving notice before the end of this month.—Yours truly, ROBERT LEE.

6, Savile Row, W., February 7th, 1882.

J. H.—The most useful would be Barnes, Thomas, Galabin, or Edis, on *Diseases of Women*.

RAILWAY ACCIDENTS AND SURGEONS.

MR. ROBERTS (Keighley) brings before our notice the case of a patient who, having injured his leg, and being insured in the Railway Companies' Accident Insurance Company, was attended by a medical man sent by the company seven weeks after the accident. The doctor, he says, carefully examined the patient, and asked what treatment he had adopted. The doctor never in any way communicated with him as to his going to see the patient. Mr. Roberts asks:

"1. Ought not the doctor to have told me or written to me that he was going to see the patient, and also the time, so that I could have met him?"

"2. Had the doctor any right to ask the patient how his leg was treated?"

The practice of surgeons making examinations on behalf of railway companies, and of surgeons reporting for the Accident Insurance Company, is somewhat different. The railway surgeon knows, or it is his own fault if he do not have inquiry made for him by the railway officials, who is the private medical attendant, and he makes an appointment with him before seeing the patient. The Accident Insurance Company merely gives instruction to Mr. So-and-so to go and see an injured person and make a report, so that the compensation due by the terms of the agreement may be forthwith paid; and does not know, or does not take the trouble to inform him, who the private attendant is. And thus it happens, we believe, that examinations are often made for the Insurance Company without the presence and without the knowledge of the private doctor. It would doubtless be much better if the practice were in both cases alike, but it would be hardly practicable for this to be so when the surgeon for the Insurance Company had to see perhaps many cases in one day, as for example in London. In this particular instance, it would have been wiser had the doctor sent by the Insurance Company informed the private attendant that he had been. We see no objection in questions as to how the limb was being treated, for they might have been questions necessary to enable the surgeon to arrive at an accurate knowledge of the facts. We could pronounce no judgment unless we knew the motives of the questions. A mistake, it seems to us, has perhaps been made, but not one of a gross character.

DR. ALLFREY'S suggestion, that the whole of the outlying metropolitan districts within the Metropolitan Police range should be included within the hospital ambulance system, is one in which we entirely concur, and which will, we hope, be included in the scheme when carried out.

UTERINE PAINS.

SIR,—Some recent cases have impressed upon my mind a condition of uterine contraction to which, I think, sufficient attention has not been drawn. In a case of slight contraction of the pelvic brim, of large head on the part of the child, or of malpresentation, when the os is fully dilated, but the head does not descend, we sometimes find pains, which seem slight and insufficient; and we are apt to attribute our slow progress to deficient uterine action. In such a case, the painful work of stretching the os is over or nearly over, and distension of the vagina has not begun. These elements, then, of suffering to the patient are absent, and she may seem comparatively easy, while the strain upon the uterus caused by its ineffective exertions may be quite as great as at other times, when the patient shows much greater signs of distress. In such a case, if by means of the forceps we pass the rubicon of the pelvic brim, we find that we have to do with powerful down-bearing pains, which perhaps render further traction unnecessary. On the other hand, if we leave the case to nature, we soon find that what we considered slight pains have exhausted the strength of the uterus. This is, of course, a condition which has often been studied from the point of view of the obstruction; but if this be slight we may be led by the pains into the error of waiting or administering ergot.—I am, etc., Glossop, Derbyshire.

DUNCAN J. MACKENZIE, M.D.

HISTOLOGIST.—Dr. Schwann, who died on January 11th, was successively Professor of Physiology at Louvain and Liège. His celebrated work on the cellular structure in animals was published in 1838, and was first made known to English readers through a review, containing a copious extract of its contents, in the ninth volume of the *British and Foreign Medical Review*. A summary of his views also appeared in Baly's translation of Müller's *Physiology*, published in 1841. Several years after this, his work was translated for the Sydenham Society by Mr. Spencer Smith.

OZENA.

SIR,—I recently, after a long interval, saw a patient, aged 21, who has been under my care for the last seven or eight years on account of ozæna (erosions of coverings of spongy bones without necrosis). About a year ago, he spent five months at Davos, whence he was recommended to proceed to the Engadine, etc., and to spend as much time as possible on the glaciers. He has certainly, both to his own sensations and his parents' observation, as well as on physical examination, made immense progress: that is to say, that similar remedies, as pursued previously with but little effect, have been much more beneficial in their results. One nostril is quite well, and in the other there was but one slight erosion remaining when he returned a fortnight since, which has since healed, after two applications of the galvanocautery. His mouth was so bad when I first saw him, that he begged his father to remove him from Harrow, a course which his house-master also advised, as he was becoming quite a refuse, always shunning, and indeed being shunned by his schoolfellows. He is now, at his own request, proceeding to Oxford, because he feels himself, if not cured, at least on the high road to cure.

This is only one case, but it encourages me to advise a similar plan where practicable in the future. The result is certainly far better than that obtained by sea voyages.—Yours faithfully, LENNOX BROWNE.

P.S.—It may interest G. A. to learn that the hot dry air of a Turkish bath is very beneficial in many cases of ozæna, and this, as it appears to me, by its local as well as by its sudatory action.

MEDICS.—If you were summoned to attend the child, we think you were entitled to receive a fee from the coroner. It might, however, be alleged that the child being dead on your arrival, you were in the position of a common witness, and only able to testify as to medical facts by hearsay. The proper course was not to retain any portion of the medicine, but to seal up the whole with your own seal, and mark the bottle before delivering it to the police.

REPORTS

TO THE
SCIENTIFIC GRANTS COMMITTEE OF THE
BRITISH MEDICAL ASSOCIATION.

THIRD CONTRIBUTION TO THE LIFE-HISTORY OF CONTAGIUM.

By PETER MURRAY BRAIDWOOD, M.D., F.R.M.S.,

AND
FRANCIS VACHER, F.R.C.S.ED.

(Concluded from page 222 of last number.)

Review of Former Experimental Researches.

LIKE many other diseases, pyæmia and septicæmia have been subjected to scrutiny by experiments on animals. The general inference derived from these experiments is, that the introduction into animals of solutions of different substances, organic and inorganic, as also the injection of variable quantities of many different fluids, will induce in animals a pathological state, followed by definite visceral changes resembling, more or less, some of the Protean forms of pyæmia. Such researches have not, however, cast any important light on the elucidation of the essential nature of this disease or its cause. We do not on this account esteem lightly the labour and time expended by the several observers who conducted these researches; and we must exclude from this category those of Dr. Burdon Sanderson and Professor Koch, inasmuch as from their experimental inquiries Drs. Sanderson and Koch are able to draw definite conclusions, and to trace out a very important essential difference in the pathological conditions induced in animals by inoculation with various fluids.

Among the earlier workers in this field are Castelnau and Ducrest, who obtained the following results from injecting into animals such substances as milk, urine, semen, putrefying fluids, pus, metallic mercury, etc. *a.* Visceral abscesses following the injection of other fluids than pus are situated almost always in the lungs; while those induced by pus may occupy various other parts of the body, and may even be met with in them while the lungs continue exempt. *b.* There is no single symptom arising from purulent poisoning which may not be caused by the injection of some of these substances; but this is not the case as regards the combination of the symptoms. *c.* Each category of foreign bodies has its own mode of action. They injected pus into the saphena vein of seven dogs, and of this number five died. In these latter were found either "multiple" abscesses completely formed, or lesions indicative of the incipient stage of such abscesses. They arrived at the following conclusions from their observations. 1. "Multiple abscesses are due to an altered condition of the blood, which is most frequently, and perhaps always, produced by the presence of a foreign principle in this fluid." 2. "In those abscesses which are developed in the puerperal state, after traumatic lesions, surgical operations, or phlebitis, this principle is pus." 3. "When abscesses are developed in certain other diseases, the principle is that which gives rise to the disease itself." 4. "The progress, prognosis, and treatment of these abscesses depend entirely upon the nature of the cause which has produced them."

In the next place, Sédillot obtained the following results from forty-five experiments on dogs. After the single injection of 61.736 grains (Troy) of pus, the animals recovered. After inoculation with 231.510 to 308.680 grains of pus, the animals also recovered, but suffered with much more severe symptoms. After the injection of foetid pus, they recovered; but a much smaller amount than that last stated was fatal. This he ascribed to the foetidity of the fluid. Sédillot observed also that inoculation with diluted chyme produced very analogous, and, when in equal quantities, perhaps even more serious, symptoms. In two instances, putrid water was injected, and both terminated fatally. In three instances, he injected pus diluted with water, and these died. Into three more animals he injected the serum of putrid pus, and these died from gangrenous lesions in the lungs. Four others had serum of pus (not putrid) injected into their veins, and of these three terminated fatally, one showing distinct metastatic abscesses. Blood and its serum were injected separately by Sédillot, and induced severe symptoms; but only in one instance caused death. He found further that the insertion of the septic fluid into the mesenteric veins gave rise to exactly the same appreciable changes as when it was injected into the jugular vein—"the liver seeming to offer no obstacle to its passage

to, and arrival at, the lungs." Sédillot considers that there are "two distinct diseases, though connected by some appearances in common: the one is determined by the solid elements of the pus; the other, by the putridity of some animalised substance." He holds that the products of the putrefactive alteration of pus do not induce pyæmia, but give rise to gangrenous affections (septicopyæmia). He sums up his conclusions thus. 1. After single injections of pus (into a vein), animals, if previously healthy, usually recover; but this is not invariably the case. 2. The simple inoculation with pus of the tissues surrounding a vein is followed by slight local suppuration, the blood remaining unaffected in the adjacent vessels; no change results from the application of pus to the edges of wounds in venous trunks, although, in these experiments, some pus-globules probably pass into the circulation, and the wounded veins are repaired in the usual manner. 3. Repeated injections of small quantities of pus are usually followed by secondary deposits. 4. If the animal be healthy, the secondary appearances pass off. 5. Secondary abscesses can be induced by injections repeated at intervals in animals constantly enfeebled by disease. 6. Similar results follow the injection of many other substances besides pus. Lastly, remarks Sédillot, it happens sometimes that pus, and it is only of pus the fact has been noted, slips by one set of capillaries.

Another experimental observer to whom we would refer is Mr. Henry Lee. He concluded from his experiments that "the introduction of pus into the system through an injured or inflamed vein can rarely be the first step towards purulent infection of the system. Some change must have previously passed in the blood, by which its coagulating power is impaired, or some unusual mechanical means must have been employed, before the pus can find its way into the circulation. It would appear, therefore, that there are two principal conditions under which local disease can produce a general infection of the system: the first of these is connected with defective union in injured veins; the second is associated with want of healthy adhesion in inflamed lymphatics."

Gaspard found that many substances which he introduced into the circulation produced no effect on the coats of the veins which they traversed; and yet the general symptoms were precisely similar to those arising from genuine phlebitis. He found that greasy fluids, and such as contained sediments did not readily make their way from the small arteries into the veins. Some clear fluids, on the other hand, as solutions of tartar emetic, of opium, or of nuxvomica, when introduced into an artery, passed readily into the course of the circulation, and produced their full effect upon the system without irritating the blood-vessels through which they passed. An infusion of tobacco, a solution of acetate of lead, putrid fluids, etc., Gaspard observed, did not offer in themselves any mechanical impediment to the circulation of the blood, and did not produce the same constitutional symptoms when injected into an artery as when thrown into a vein; but they all excited violent local irritation in the parts to which the branches of the injected artery were distributed, and the constitutional symptoms were due to the local irritation. He noticed that the injection of putrid matter into the blood-vessels of living animals "sets up inflammation of the whole alimentary and respiratory mucous membranes," and explained thus the occurrence of diarrhoea and pneumonia in cases of septicæmia. Gaspard further injected into a dog's vein the blood of another dog which had died from inoculation with putrid matter, and succeeded thus in inducing blood-poisoning. "It is certain," he says, "that putrid substances injected into the veins affect the general mass of the blood, notwithstanding their successive passage and their filtration through the two systems of the lungs and other organs. It is evident that putrid fluids injected into the jugular vein circulate through the whole body, and are not arrested in the capillaries, like mercury, fat, oil, viscid substances, and powders." (*Vide Braidwood, On Pyæmia, page 230.*)

The experimenters whose observations next require notice are Magendie, Leuret, and Hammond. They concluded from their researches that putrid animal and vegetable fluids, when introduced into the cellular tissue or injected into the blood, produced symptoms very similar to those of typhus and yellow fever; and that dogs confined over and breathing the effluvia proceeding from decaying animal and vegetable matters experienced similar symptoms and the same alterations of the blood, of the secretions, of the excretions, and of the viscera, as are observed in yellow fever. Leuret induced charbon in horses by placing under their skin and by injecting into their veins the blood of horses which had died from this disease. (*Copland's Dictionary of Practical Medicine, page 193.*)

Abscesses in the lungs, and in one instance purulent pleurisy, were found by Batailhé in "dogs into whose veins pus had been injected, provided the animals were not poisoned in a few hours after the injection of the pus." After making manifold experiments, he concluded

that "putrefied pus, mixed with the blood in very small doses, produces metastatic abscesses, provided the pus be injected in small quantities, so as not to kill the animals at once, and to allow their living long enough for the formation of the abscesses." (BRITISH MEDICAL JOURNAL, October 3rd, 1863, page 377.)

Braidwood (*Astley Cooper Prize Essay*, 1868, page 235) endeavoured to induce pyæmia in animals by the intravenous injection of various solutions, and drew the following inferences from his experiments. 1. Yeast gives rise to the same symptoms, and produces like results with other foreign bodies injected amongst the living tissues of an animal—namely, local irritation terminating in sloughing. 2. Though exposed to the injurious influences of pus and of unhealthy suppuration, animals are not necessarily infected from this source with the constitutional condition termed suppurative fever. 3. The intravenous injection into an animal of a small quantity of pus from a pyæmic patient might induce a state like that termed suppurative fever. 4. But even if the symptoms (as far as such are recognisable in animals) and the pathological alterations we have described as characteristic of pyæmia could be thus (experimentally) produced in animals, it would still be unwarrantable to assert that the disease thus induced, and that met with in the human subject, are identical.

G. Clementi and G. Thin (*Wien. Med. Jahrb.*, 1873, page 292, instituted experiments "for the purpose of comparing the results of inoculation with healthy and putrid blood; of seeing whether the blood of animals infected by putrid inoculation would produce the same condition in other animals; and of discovering how small a quantity would produce such a condition, and whether the septic power of the blood might be modified by dialysis, boiling, etc." Among 123 rabbits and guinea-pigs experimented on, of 23 rabbits inoculated with healthy blood, only 4 died; of 68 inoculated with blood taken from artificially infected animals, 54 died; and of 23 rabbits inoculated with putrid blood, 11 died. They found that "boiling had very little effect, and dialysis none, in modifying the septic power; while, in the case of animals inoculated with blood which had been previously distilled or digested in alcohol, no death occurred. The necropsies in the fatal cases showed suppurative infiltration of the skin and subcutaneous tissue in the neighbourhood of the punctures; in addition to the presence of ordinary pus-cells, they found countless large and small, round or irregular, granules, as to whose nature they express no opinion. In some instances, there was swelling, and in one ulceration of Peyer's patches."

Orth (*Untersuchungen über Puerperal Fieber*, in Virchow's *Archiv*, Band lviii) "finds numerous micrococci, but no bacteria, in the peritoneal fluid in cases of puerperal fever. Injection of this fluid into the abdomen of animals was followed by similar results, so far as inflammation and the presence of organisms were concerned."

Puky (Virchow's *Archiv*, Band lxi, lxx, page 331) experimented on rabbits, and used the yolk of egg as his septic medium, believing this to be safer than putrefying blood or muscle, and the like. The yolk, freed from albumen, was placed in a carefully cleaned dish, covered, and not in contact with the air. None of the animals were killed after experimentation; the septic fluid was examined microscopically, and found to contain "bacteria, crystals, and globules, more or less actively moving, and some minute molecules, and globules seldom forming groups (fibrils)." He gave his experiments as follows. 1. Those injected with an emulsion of fresh yolk in salt water, gave no results; all recovered. 2. Those injected with yolks two to four weeks putrid, as emulsion or as watery supernatant fluid. 3. Those injected with emulsion from yolks, which had stood four to sixty days, filtered through fine cloth or through paper. From these three groups of experiments, Puky learned that only one death resulted from the subcutaneous injection of putrid yolk emulsion; while all the animals except one died when injected with the supernatant fluid in the vein in the amount of like quantity. The animals which recovered showed local inflammation, diarrhoea, and wasting. When the septic fluid was given in small amounts, with repeated dosing or even after the first dose, and in several instances, when it was given a neutral reaction, death took place in the same manner. Puky divided the animals into two distinct groups: those of the first group received the septic fluid in the vein, and the other in the subcutaneous space, and the results were as follows. 1. In the first group, the septic fluid used in these two instances was of purely vegetable origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 2. In the second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 3. In the third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 4. In the fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 5. In the fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 6. In the sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 7. In the seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 8. In the eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 9. In the ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 10. In the tenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 11. In the eleventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 12. In the twelfth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 13. In the thirteenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 14. In the fourteenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 15. In the fifteenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 16. In the sixteenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 17. In the seventeenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 18. In the eighteenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 19. In the nineteenth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 20. In the twentieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 21. In the twenty-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 22. In the twenty-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 23. In the twenty-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 24. In the twenty-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 25. In the twenty-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 26. In the twenty-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 27. In the twenty-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 28. In the twenty-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 29. In the twenty-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 30. In the thirtieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 31. In the thirty-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 32. In the thirty-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 33. In the thirty-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 34. In the thirty-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 35. In the thirty-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 36. In the thirty-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 37. In the thirty-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 38. In the thirty-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 39. In the thirty-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 40. In the fortieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 41. In the forty-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 42. In the forty-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 43. In the forty-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 44. In the forty-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 45. In the forty-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 46. In the forty-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 47. In the forty-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 48. In the forty-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 49. In the forty-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 50. In the fiftieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 51. In the fifty-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 52. In the fifty-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 53. In the fifty-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 54. In the fifty-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 55. In the fifty-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 56. In the fifty-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 57. In the fifty-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 58. In the fifty-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 59. In the fifty-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 60. In the sixtieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 61. In the sixty-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 62. In the sixty-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 63. In the sixty-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 64. In the sixty-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 65. In the sixty-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 66. In the sixty-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 67. In the sixty-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 68. In the sixty-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 69. In the sixty-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 70. In the seventieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 71. In the seventy-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 72. In the seventy-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 73. In the seventy-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 74. In the seventy-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 75. In the seventy-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 76. In the seventy-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 77. In the seventy-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 78. In the seventy-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 79. In the seventy-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 80. In the eightieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 81. In the eighty-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 82. In the eighty-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 83. In the eighty-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 84. In the eighty-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 85. In the eighty-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 86. In the eighty-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 87. In the eighty-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 88. In the eighty-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 89. In the eighty-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 90. In the ninetieth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 91. In the ninety-first group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 92. In the ninety-second group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 93. In the ninety-third group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 94. In the ninety-fourth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 95. In the ninety-fifth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 96. In the ninety-sixth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 97. In the ninety-seventh group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 98. In the ninety-eighth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 99. In the ninety-ninth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death. 100. In the hundredth group, the septic fluid was of animal origin, and was of the same nature, and was such. The fluid produced local inflammation, and, after standing for six weeks, when it was injected in the vein, it was putrid, but did not produce death.

the emulsion was less as the boiling was longer. Five to ten minutes of boiling postponed death for three-and-a-half days, but did not destroy the power of producing micrococci in the animal. Boiling for an hour destroyed the septic property of the fluid. The entrance of putrid substances into the living body produced (a) poisoning by means of bodies resulting from the disintegration of organic substances (putrid or septic infection); (b) the alterations which arose when the micro-organisms concerned in putridity grew and increased in the living body (micrococcic infection). These experiments proved that the latter resulted only when the emulsion used had been putrefying for some weeks; when it was only a few days old, putrid poisoning alone took place. The acid reaction seems unfavourable to germ-growth, while the putrid poison was (according to these experiments) most active during acid reaction. Micrococci were only developed in animals when emulsions which had putrefied by themselves were used, not when the yolk had putrefied from something added, and had been emulsified just before the experiment. The dilution, and perhaps also the larger exposure to air during emulsion, seem to influence germ production. 5. The last form of emulsion, mixed with glycerine and filtered through paper.

A. Hiller mixed glycerine with putrid solutions, especially those from the blood of poisoned animals, and found these mixtures very efficacious—so that glycerine is very useful for the reception of the septic poison, as well as for the extraction of certain ferments. Puky's researches do not coincide with Hiller's. The latter mixed putrid yolk emulsion with glycerine, filtered them, and injected two-and-a-half cubic centimetres of this mixture subcutaneously into one rabbit, and into the veins of another, producing no effect. Among Puky's experiments, almost all the fatal cases occurred in those where injection into the jugular vein was used, while only three infected by the method of subcutaneous injection succumbed.

Chauveau, who, for many years past, had been studying the mode of action of the infective products of virulent inflammation, recently instituted experiments to show the effects of introducing the infective fluid into the arterial blood-stream. The infective liquid was obtained from subcutaneous suppuration produced by setons. In fourteen of the twenty animals experimented on (horses and asses), this infective fluid "produced either a transitory swelling, or an abscess; but, in the remaining six, a diffuse gangrenous suppuration," which became fatal in four instances. It was observed that, throughout the series, there existed a "complete correspondence between the intensity of the transmitted inflammation and that of the primary inflammation from which the infecting liquid was obtained." As regards the pathological lesions found after death, in this series, Chauveau found in one instance "infective foci of inflammation in the lungs"; but "in general the lesions were confined to the area of distribution of the artery into which the infecting agent was introduced." (*London Medical Record*, January 15th, 1876.)

In December 1872, Davaine communicated to the Académie de Médecine the following results from his experimental inquiry. "Putrefied blood, injected into guinea-pigs and rabbits, does not kill more than half of the animals operated on, when the quantity injected is less than one drop. But, by the injection of a minute portion of the blood of animals that have died from septicæmia, the toxic power increases; and this to such a degree, that blood, taken from animals of the 25th series of experiments, is able to kill in the injected dose of one trillionth of a drop." The septicæmic virus, he found, was gradually destroyed during the putrefaction of the animal it has killed. Davaine's observations have been confirmed by Vulpian, H. Bouley, and Stricker. That the septicæmic poison acquires wonderfully increased power when transmitted through living animals, has been since noted by Stricker, Bardon-Salomon, and Koch.

Onimus (*Ann. Med. et Chir.*, March 7th and 14th, 1873) concluded, from his experiments with putrid and with septicæmic fluid, that "bacteria are not the cause of the transmission of putrefaction or of the septic poison." The poison of septicæmia he considers to be a micrococcic infection. In this last observation, Onimus is opposed to Stricker.

Dr. T. F. Satterthwaite, of New York, published the following conclusions, derived from experiments instituted by himself and Dr. Curtis. 1. Putrid matter, when introduced into the system, is capable of inducing a well-marked train of symptoms, which are extraordinarily like those generally known as septicæmia. 2. The putrid poison does not result in the septicæmic fever, when animals are freed from granules. 3. The putrid poison is sometimes separated by coarse materials of filtration—that is, through ordinary filtering paper, though on this point the results were not sufficiently uniform to establish certain conclusions. 4. Continued boiling and evaporation to dryness will not destroy the poison. 5. Continued boiling and evaporation to dryness, and boiling thereafter with absolute alcohol, will not destroy the poison. 6. The

dry alcoholic extract, freed from alcohol by evaporation with heat, was poisonous. (The liquid alcoholic extract furnished uncertain results.) 7. Of putrid matter which, after several filtrations, was boiled down to dryness, then boiled with absolute alcohol, again dried and extracted with water, the filtrate was poisonous. 8. This aqueous extract failed in a number of instances to produce bacteria under circumstances favourable for their development; and hence the granules, which are the bodies most likely to represent the poisonous principle, appear not to be bacteria nor their spores. (*London Medical Record*, January 15th, 1876.)

F. A. Kehrer (*Versuche über Entzündung und Fieber-erregende Wirkungen der Lochia*, in *Centralbl. für die Med. Wissen.*, January 15th, 1876) states that the subcutaneous injection of lochia, from healthy parturients into rabbits, excited always severe inflammation, and increased growth of connective tissue; and that lochia, in a few days later, produced great abscesses, which could not be distinguished from those induced by putrid lochia of an earlier date. Lochia, of the fourth to the sixth day, killed the animals with the symptoms of inanition. The temperature rose somewhat (but this varied), and sank before death. Inoculation of the parturient herself on her legs, with lochia of the third day, was always followed by an inflammatory process at the site of puncture. Kehrer concludes, from his experiments, that this phlogistic character of lochia explains the febrile state met with so commonly after parturition. Fever is avoided by the abrasions and wounds produced during labour having become granulated, and covered with a film, before the lochia had become infective—that is, before the third day. In practice, he says, it must be borne in mind that the lochia of every woman is infective; and that any means or procedures which cause wounds or abrasions of the mucous membrane are to be regarded as dangerous and to be avoided.

We will state shortly, in the next place, the results obtained by a committee appointed by the Pathological Society of London (*Transactions*, vol. xxx, 1879).

The observations detailed in this report were based on clinical study. The reporters state that at present the terms septicæmia and pyæmia are used in a confused manner which prevents definite results being obtained. Under each of these names they have classed two affections, "one which is not infective, and in which the poison does not multiply in the organism, and another in which a true general infective process is established." "There may be a local thrombosis, with decomposition and disintegration of the thrombus, followed by embolism, causing local abscesses in the viscera only, which cause the death of the patient; or there may be a true general infective process, the local manifestations of which are congestions, inflammations, and suppurations disseminated through the body, both in the viscera and elsewhere. At the same time, there is nothing improbable in both these conditions co-existing in one patient." Further, in almost every case reported, the secondary disease (septicæmia or pyæmia) arose "in connection with decomposing discharges." "Microcytes were rarely seen" in the blood; the "white corpuscles were greatly in excess;" but neither classes of corpuscles showed any alteration in appearance or contour. Bacteria of different forms were found in some instances in the blood. In a large number of cases, micrococci were detected in many of the viscera, nearly always in blood-vessels, and chiefly in capillaries, but "their distribution is most unequal." Bacteria were found in three instances, in one case in the kidney, in another in the heart, and in the third case in both kidneys and heart; but this appearance may have been of *post mortem* origin. "In almost all the tissues, the endothelium of blood-vessels has been found detached to a greater or less extent from the walls of the vessels." "Frequently, the deeper layers of the intima were much hypertrophied." Thrombi were very common in the veins, leading frequently to minute abscesses in various organs.

We have, lastly, to refer to the recent important contributions of Drs. Koch (New Sydenham Society Series for 1880) and Sternberg (*National Board of Health Bulletin*, April 30th, 1881).

Koch (*Investigations into the Etiology of Traumatic Infective Diseases*) found that at first he obtained perplexing results, due to his methods for examining the tissues being imperfect. By a new and beautiful mode of staining and illuminating specimens, he at last overcame this difficulty. He says (page 64): "In the materials used for inoculation, bacteria were without exception present, and in each disease a different and well-marked form of organism could be demonstrated. At the same time, the bodies of those animals which died of the artificial traumatic infective diseases, contained bacteria in such numbers that the symptoms and the death of the animals were sufficiently explained. Further, the bacteria found were identical with those which were present in the fluid used for inoculation; and a definite form of organisms corresponded in every instance to a distinct disease. These artificial traumatic infective diseases" he considers to

"bear the greatest resemblance to human traumatic infective diseases, both as regards their origin from putrid substances, their course, and the result of *post mortem* examination." Koch observed that "a definite pathogenic bacterium—*e.g.*, the septicæmic bacillus—cannot be inoculated on every variety of animal" (a similar fact is also true with regard to the bacillus anthracis); and hence the septicæmia of mice, rabbits, and man, are not, under all circumstances, produced by the same bacterial form.

The most important conclusions drawn by Koch, from his experimental inquiry, are these. *a.* "A distinct bacteric form corresponds to each disease, and this form always remains the same, however often the disease is transmitted from one animal to another. Further, when we succeed in reproducing the same disease *de novo*, by the injection of putrid substances, only the same bacteric form occurs which was before found to be specific for that disease." Each form of bacterium is "distinctly characterised by its physiological action, by its conditions of growth, size, and form, which, however often the disease be transmitted from one animal to another, always remains the same, and never passes over into other forms, *e.g.*, from the spherical to the rod-shaped." He says: "One has it completely in one's power to cultivate several varieties of bacteria together, to separate them from each other, and eventually to combine them again;" so much so that when, in examining a traumatic infective disease, several different varieties of bacteria are found, as, *e.g.*, chains of small granules, rods, and long oscillating threads, we may conclude that "we have to do with either a combined infective disease—that is, not a pure one—or, what is more probable, an inexact and inaccurate observation." *b.* The number of the species of pathogenic bacteria is limited; for, "of the numerous diverse forms present in putrid fluids, one, or but few, can, in the most favourable cases, develop in the animal body. Those which disappear are, for that species of animal at least, not pathogenic bacteria. If, however, as follows from the foregoing, there exist hurtful and harmless bacteria, experiments performed on animals with the latter, *e.g.*, with bacterium termo, prove absolutely nothing for or against the behaviour of the former—the pathogenic—forms." *c.* "In all my experiments," says Koch, "not only have the form and size of the bacteria been constant, but the greatest uniformity in their actions on the animal organism has been observed, though no increase in virulence, as described by Coze, Feltz, Davaine, and others. For the first infection of an animal, relatively large quantities of putrid fluids are necessary; but, in the second generation, or at the latest in the third, the full virulence was attained, and afterwards remained constant. If one inject a large amount of the septic poison, and a large number of that variety of bacteria which increases locally, but only a very small number of the bacteria (bacilli) which pass into the blood, the first animal experimented on will die, as a result of the preponderating influence of the first two factors, before many bacilli can have entered the blood and multiplied there. Of the blood of this first animal, containing, as it does, proportionately very few bacilli, one-fifth to one-tenth of a drop must be inoculated, in order to convey the disease with certainty. Into this second animal, however, only the bacilli are introduced, and develop undisturbed in the blood. For the infection of the third animal, the smallest quantity of this blood which can produce an effect is then sufficient; and, after this third generation, the virulence of the blood remains uniform." The anthrax bacilli have this advantage, that, "provided they be inoculated in considerable numbers, they kill even within twenty hours, while the septicæmic bacilli only destroy life after fifty hours."

Lastly: Dr. G. M. Sternberg, in a special report to the National Board of Health in America, describes "a fatal form of septicæmia in the rabbit, produced by the subcutaneous injection of human saliva" (Baltimore, 1881). He has demonstrated the following facts by repeated experiments. 1. His own saliva, "in doses of 1.25 cubic centimetres to 1.75 cubic centimetres, injected into the subcutaneous connective tissue of a rabbit, infallibly produces death, usually within forty-eight hours." 2. One cubic centimetre of his own "blood failed to kill a rabbit; one cubic centimetre of putrid urine, containing bacterium termo in abundance, failed to kill a small rabbit; one cubic centimetre (each) of liquid feces and distilled water (1 to 10), failed to kill two rabbits; 1.25 cubic centimetres of bouillon, undergoing putrefaction and loaded with bacterium termo, failed to kill a rabbit; one cubic centimetre of sediment from Baltimore water, rich with organic debris and organisms, failed to kill a rabbit. 3. "The saliva of four students, residents of Baltimore (in March), gave negative results; eleven rabbits, injected with the saliva of six individuals in Philadelphia (in January), gave eight deaths and three negative results; but, in the fatal cases, a less degree of virulence was shown in six instances by a more prolonged period between the date of injection and the date of death." 4. As regards the susceptibility of different animals to this

authentic case, recorded by Baron Percy, the fistula gradually contracted, and ultimately closed". The other is the well known case of Alexis St. Martin, made famous by Beaumont, who, nearly fifty years ago (1833) published an account of the digestibility of various articles of diet as observed in the stomach of St. Martin. Beaumont states that St. Martin, a Canadian, of French parentage, was about eighteen years old when wounded (June 6th, 1822) at Fort Mackinac, where Dr. Beaumont was stationed as surgeon to the post. As St. Martin died only a few months ago, he survived his anomalous injury about fifty-nine years.

Dr. Otis sums up wounds of the stomach in the following words. There were "four fatal punctured or incised wounds; one incontestable recovery from a shot perforation; a few recoveries from shot-wounds in the gastric region, in which the diagnoses were not determined unequivocally; and nearly sixty fatal cases of more or less complicated shot-wounds of the stomach".

The records of military surgery (according to Otis), from its earliest period to the present time, furnish but six or seven well-authenticated cases of recovery from shot-wounds of the stomach, with or without fistula. To this list must now be added another example of recovery from undoubted shot-wound of the stomach. It is the case of the distinguished gynecologist, Dr. R. Beverley Cole, of San Francisco. I have just received a letter from him, dated London, January 17th, 1882, detailing the following particulars. Dr. Beverley Cole, at the age of twenty-five, resided in San Francisco, where he had suffered from repeated attacks of intermittent fever. When just recovering from one of these, he left his house, on June 3rd, 1854, without taking breakfast; his stomach was therefore empty. Whilst in the act of packing his trunk, preparatory to making a visit to the country, a Colt's six-inch revolver (old pattern) fell from his inside breast-coat pocket, the body being bent over the trunk at the time; and, the hammer of the pistol striking the edge of the trunk as it fell, the cap was exploded, and the ball entered the breast—the muzzle being not more than eight inches from the body. He did not fall, but, raising himself up, he tore open his vest and shirt, and saw that he was wounded. Syncope occurring, a friend caught and laid him on a sofa near by. When consciousness returned, he found himself surrounded by a number of his medical friends, amongst whom were Drs. C. S. Tripler and H. S. Hewitt, of the United States army; and Drs. Valentine Mott, jun., A. B. Stout, and Charles Bertody. He was totally blind, but recognised them all by their voices. He heard Dr. Tripler say to his comrades: "Never mind the ball; it can be sought for at any future time. We must first bring about reaction." Soon after this, he was suddenly seized with an indescribable pressure in the rectum, and a desire to defecate. Morphia was administered; sinapisms were applied to the extremities; and ammonia was given internally, in very minute quantities—minute, for fear of its escaping through the gastric wound into the peritoneal cavity. As reaction came on, the sensation in the rectum increased till he vomited nearly a wash-hand bowlful of blood, black and partially coagulated. It was estimated by the attending surgeons to be from a quart to a half-gallon, or more. This gave some relief. But the rectal pain and tenesmus were not completely relieved till he was brought fully under the influence of morphia. As he lay on his back, his clothing was all cut away without turning him on either side, and he was then placed in bed. The collapse was very complete, and several hours elapsed before reaction was fully established. During all this time, he could not see; but, from the conversation of the surgeons, and from the frequency with which they examined the cardiac region, he inferred that death was imminent. The sinapisms were forgotten, and were not removed for four or five hours; and they produced sloughing ulcers, which were nearly twelve months in healing. When reaction was fully established, Dr. Tripler passed the end of the little finger along the track of the ball, through the conjoined cartilages of the seventh and eighth ribs—an inch and a half to the left of the median line of the ensiform cartilage. He then passed a probe along it into the stomach. The lodgment of the ball was not discovered for two weeks or more later. It was then found between the eleventh and twelfth ribs on the back, two inches to the left of the median line. This showed that the course of the ball was directly through the body—the difference between the parallels of entrance and exit being due to the difference between the bent and the erect posture.

For three weeks, he was nourished by the rectum. Beef-tea was thus given every three hours: at first one ounce, then two, then three, and finally four ounces. During this time, a small quantity of beef-tea was given by the mouth; but it produced such severe pain, as it entered the stomach, that it was not soon repeated. Small lumps of ice were allowed to quench the thirst produced by the morphia, which was given in half-grain doses three or four times a day, or whenever needed. On the twelfth day, the bowels were moved by enema. On

the twenty-first day, he was removed to his own home. He then began to suffer from severe paroxysms of pain in the back, which were so intense as to obstruct respiration. They continued without abatement for three weeks. Dr. Tripler then removed the ball, and they ceased. He was confined to bed six weeks. When he got up, it was discovered that the left shoulder was lower than the right, the result of a constrained position while in bed; and there was a dragging sensation in the gastric region, not only disagreeable, but quite painful, as if the stomach had formed unnatural adhesions. On account of these disabilities, he was compelled to go on crutches for two years before his body attained its natural erect manner of carriage.

The posterior wound closed in a few days after the removal of the ball; but the anterior wound did not close for four years, which was doubtless due to the injury of the cartilages, which are always tardy in reparation. For many years, an ordinarily hearty meal (in consequence of adhesions between the stomach and contiguous parts) produced a dragging uneasy sensation, which rendered life very uncomfortable.

Recovery was eventually complete; and no one now would suspect that he had ever been the subject of such a serious accident. A peculiar feature of the case was total loss of vision for three days, during which time he could not distinguish daylight. There can be no doubt that the ball in this case perforated the stomach. The large quantity of blood vomited, soon after the wounding, establishes the diagnosis beyond question. From the point of entrance and direction of the ball, it must have passed through the stomach, below the lesser curvature. As the ball was very small, the wound of the stomach was likewise very small: hence there was less probability of gastric effusion than if the ball had been larger. But recovery was chiefly due to the fact, that the stomach was quite empty at the time of the accident. If it had been even partially full, there would have been effusion into the peritoneal cavity, followed by certain death.

The history of Dr. Beverley Cole's case was published in the *Detroit Medical Journal*, in 1855 or 1856, by Dr. C. S. Tripler, United States Army. But, as Dr. Otis insinuated, in a note in the *Surgical History of the War* (Part II, "Surgery"), that the case was not incontestably one of wound of the stomach, I place it on record here that others may judge for themselves.

2. *Wounds of Small Intestines.*—Of about six hundred and fifty cases of penetrating wounds of the abdomen, during the war, fifty were of the small intestines; eighty-nine of the large intestines; and over five hundred in which the location of the wound was not discriminated, or was complicated with other lesions. Very few sword or bayonet wounds of the abdomen came under treatment; but a number of such injuries were observed amongst the slain on the field of battle. Wounds of the small intestines are more frequent than those of other portions of the alimentary canal, and are attended with higher mortality. They are more exposed to injury, being less protected by bony structure than other viscera. The ileum is most exposed, the jejunum less, and the duodenum still less. Wounds of this portion of the canal are regarded as almost necessarily fatal. Of shot-wounds of the small intestines during the war, Otis says: "It may still be doubted if an incontestable instance of recovery was observed." There were five cases of wounds of the duodenum, all complicated with wounds of other organs. They all died. One survived eight days; another twenty-four days. If the external wound had been sufficiently enlarged in time, the wounded portions might have been excised, and the ends sutured, with chance of recovery.

3. *Wounds of Large Intestines.*—Injuries of this group are less fatal than wounds of small intestines. There were a few instances of recovery from shot-wounds of the transverse colon; many after perforation of the cæcum and ascending portion of the bowel; and a still larger number in wounds of the sigmoid flexure and contiguous part of the descending colon. Many of these were complicated with injuries of the innominate. Nearly all resulted in fecal fistulæ, which usually closed after a while without surgical interference. There were, in all, fifty-nine recoveries out of eighty-nine shot-wounds of the cæcal and sigmoid extremities of the large intestine. Fecal fistulæ persisted in nine, and were closed in fifty; seventeen within a month, twenty-eight within a year, and five at periods from one to five years. Ten per cent. of all slain in battle die of wounds of the abdomen; and from three to four per cent. of the wounded who come under treatment are wounded in the abdomen.

4. *Wounds of the Bladder.*—Baron Larrey was the first to show that gun-shot wounds of the bladder were less dangerous than those made by puncture or incision; because the tissues are so crushed by the missile, that eschars are produced, which protect the connective tissues from urinary infiltration. There was no case of punctured, incised, or lacerated wound of the bladder in our war. Of one hundred and eighty-three shot-wounds of the bladder, eighty-seven (47.5 per cent.) survived. A

large majority of these suffered from grave disabilities, and many from distressing infirmities, a few of them dying after years of suffering; several recovered, with permanent urinary fistulæ. Some had recto-vesical fistulæ, which closed early in a few, and later in others. However, it is rare to find the functions of the bladder perfectly restored after shot-injuries. Shot-wounds of the bladder are often complicated by the presence of foreign substances in it—such as bullet, bone, or other material—which serve as nuclei for calculus deposits. There were twenty-one cystotomies for the removal of such formations. Many cases died from infiltration of urine into the cellular tissue, and many from extravasation of urine into the peritoneal cavity. Cystorrhaphy, recommended by Legouest, was not practised.

The teachings of Vincent of Lyons, and of Fischer of Buda-Pesth, at the late International Medical Congress, alluded to in the early part of this paper, prove that we may now safely undertake cystorrhaphy in all wounds of the bladder. Abdominal section, and cystorrhaphy, and clearing out thoroughly the peritoneal cavity, are the only means of safety in shot or other wounds of the bladder, where there is urinary extravasation into the peritoneum.

5. *Shot-Wounds of the Rectum.*—One hundred and three shot-wounds of the rectum were reported, of which forty-four (or 42.7 per cent.) resulted fatally. Thirty-four of the cases, of which four were fatal, were complicated with wounds of the bladder. Fæcal fistulæ, after shot-perforation of the rectum, were not uncommon, and were more persistent than cæcal or sigmoid fistulæ. Shot-wounds of the rectum are not so dangerous as those of the upper bowels, but are about on a par with wounds of the cæcal and sigmoid ends of the colon. Hæmorrhage was not a frequent complication of shot-wounds of the rectum.

[To be continued.]

ABSTRACT OF LECTURES ON THE MORPHOLOGY OF THE MAMMALIAN SKULL.

Delivered at the Royal College of Surgeons of England.

BY W. K. PARKER, F.R.S.,
Hunterian Professor of Anatomy in the College.

LECTURE I.—INTRODUCTORY.—ON THE VERTEBRATA AS A GROUP, AND ON THE VERTEBRATE EMBRYO.

TAKING the Vertebrata as a group, we are now able to make a more accurate classification of them than that introduced by Cuvier. This arrangement divided them into (I) Fishes, (II) Reptiles, (III) Birds, and (IV) Mammals. It is now usual to separate those forms which have aquatic respiration, either permanently or for a time during their larval state, from those which never develop gills, but breathe by lungs from the first. The former are also characterised by never developing either amnion or allantois, and are hence called Anamniota or Ichthyoptera.

All the remaining groups of the vertebrates develop both amnion and allantois, and their respiration is pulmonary from the first. These are classed together as the Amniota, which group is again subdivided into two main divisions, the Sauropsida, including reptiles and birds; and the Mammalia, which develop a placenta as a rule, and nourish their young in the maternal uterus.

Several of the lowest of the Vertebrata present, besides the gills and lungs, also the possibility of aquatic respiration from other structures. Certain forms of the lowest Vertebrata, and also the lowest of the Amniota, can at certain periods of their life change their mode of respiration, and thus they have been called *Amphibious Vertebrates*. These are the *Amphibians*, which are divided into the *Amphibians* and the *Amphibians*. The *Amphibians* are those which, at certain periods of their life, can breathe by gills, and at other periods by lungs. The *Amphibians* are those which, at certain periods of their life, can breathe by gills, and at other periods by lungs.

The *Amphibians* are divided into the *Amphibians* and the *Amphibians*. The *Amphibians* are those which, at certain periods of their life, can breathe by gills, and at other periods by lungs. The *Amphibians* are those which, at certain periods of their life, can breathe by gills, and at other periods by lungs.

the labours of many hands and much time are required, even to lay the foundations of a true scientific study of the vertebrate form.

The only true test of all morphological theories is the study of development; although a gradational study of the vertebrate forms is very important and instructive, especially if it be made to include the forms presented to us by palæontology, as well as existing forms.

If the palæontological list were perfect, and could be made to take its place as the great and deep substratum of the countless forms belonging to the vertebrates, the gradational study would yield much more light than is possible in its present most fragmentary state. It is impossible to construct a genealogical tree showing the descent of any existing type, because of the loss of countless forms during time. Moreover, a very large proportion of the existing forms of Vertebrata belong to types which have acquired the last degree of specialisation, and are therefore, as far as possible, removed from the simple generalised types from which we suppose they first arose.

Embryology will do very much, though not all, for us. For not only do the lower forms pass through their transformations, some of which are true metamorphoses, but all the higher forms, during their development, pass more or less quickly through stages which are the equivalents of what is persistent in types beneath.

The ovum of Vertebrata presents two important types: 1. Those in which the entire ovum divides into segments, hence called holoblastic, in which case the egg is usually very small, and possesses only a small amount of good yolk; and 2. Those in which only a part of the egg divides up to form the blastoderm, called mesoblastic, these being large, and containing a sufficient quantity of good yolk to nourish the embryo for a considerable time. The fact of two groups possessing the same kind of ovum does not, however, indicate their close relationship; e.g., both Mammalia and the lamprey have holoblastic ova.

The germ of all vertebrates primarily consists of two layers, the epiblast and the hypoblast; and between these another layer, the mesoblast, is soon developed. It is this latter that the subject of these lectures most concerns, as from it is derived the entire skeleton, as well as the muscular, vascular, and urino-genital systems. The epiblast is the source of the entire axial and peripheral nervous system, the organs of special sense, and the epidermis; while the hypoblast gives rise to the epithelial lining of the alimentary canal and its appended glands.

The mesoblast on each side of the vertebral column early splits into two layers—an outer, which applies itself to the epiblast to form the somatopleure; and an inner, which joins with the hypoblast to form the splanchnopleure, the cavity between these being the pleuro-peritoneal cavity. The upper or vertebral part of the mesoblast, lying on each side of the neural axis, also becomes divided transversely into what are usually spoken of as protovertebrae, or mesoblastic somites; and these soon lose their connection with the lower or lateral portions of the mesoblast. Thus each protovertebra contains a small isolated portion of the primitive body-cavity.

This transverse splitting of the mesoblast into somites only extends a very short way into the cephalic region; but the body-cavity proper extends far into each side of the pharynx to a point a short distance in front of the mouth.

The opening of the gill-pouches from the hypoblast of the pharynx, which meet and fuse with the epiblast—the gill-slits being formed at their junction—necessarily breaks up the primary body-cavity of this region into a series of head-cavities. These are very transitory, and the cells forming their walls become transformed into the muscles of the face and throat.

The mouth opening is formed by an invagination of the epiblast in front of the primitive hypoblastic alimentary cavity, which it encloses. The body-cavity in the region of the mouth is thus completely separated from the body-cavity proper, which is also formed as invagination, but is smaller than with the protovertebrate cavity.

The first stage of gill seen in the Vertebrata is met with in a few of the lowest of the Amniota, and is represented by the *Amphibians* and the *Amphibians* of all. The *Amphibians* have an open gill-cavity, which is not enclosed by the epiblast, and the gill-slits are open to the exterior. In the *Amphibians*, the gill-cavity is closed by the epiblast, which thus forms a common with all true fishes. In an early condition of sharks and rays, there are two distinct gill-cavities, which, however, are hypoblastic, and are not connected with the exterior.

The *Amphibians* and the *Amphibians* have a gill-cavity, which is not enclosed by the epiblast, and the gill-slits are open to the exterior. In the *Amphibians*, the gill-cavity is closed by the epiblast, which thus forms a common with all true fishes. In an early condition of sharks and rays, there are two distinct gill-cavities, which, however, are hypoblastic, and are not connected with the exterior.

The *Amphibians* and the *Amphibians* have a gill-cavity, which is not enclosed by the epiblast, and the gill-slits are open to the exterior. In the *Amphibians*, the gill-cavity is closed by the epiblast, which thus forms a common with all true fishes. In an early condition of sharks and rays, there are two distinct gill-cavities, which, however, are hypoblastic, and are not connected with the exterior.

ANALOGY BETWEEN THE MOVEMENTS OF PLANTS AND THE MUSCULAR MOVEMENTS OF CHILDREN, CALLED CHOREA.

By FRANCIS WARNER, M.D.Lond., M.R.C.P.,

Assistant-Physician and Lecturer on Botany at the London Hospital; Assistant-Physician at the East London Hospital for Children.

If an analogy can increase knowledge, give more precise ideas, or guide observation, it is useful, and not a mere indulgence of the imagination. The analogy between plant movements and muscular movements appears to me to be legitimate. We will examine a few cases of the movements of plants, as demonstrated by Charles Darwin in his work on *The Movements of Plants* (1880). In the *oxalis* (wood-sorrel) tribe, and in the *mimosa* (sensitive plant), movements of leaves are seen. In each case, the movements are effected by an arrangement of cells at the junction of the leaf with its main stalk; this group of cells is called a *pulvinus*. The pulvinus is the mechanism by which move-

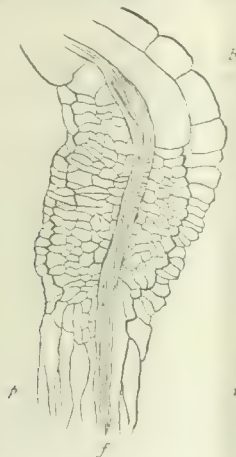


Fig. 1.—After Darwin. Longitudinal Section of a Pulvinus, magnified seventy-five times. *p* *p*, Petiole, or Leaf-Stalk; *f*, Fibro-vascular Bundle; *b b*, commencement of Blade of Cotyledon.

ment of the leaf is effected; it consists of a mass of small cells, destitute of chlorophyll, and therefore incapable of performing any nutritive function in the plant, or of taking any direct part in the elaboration of its nourishment. This pulvinus is the lower portion of the petiole or leaf-stalk; and the movements of the leaf depend upon its cells, which expand alternately, first on one side, then on the other. Structurally, the pulvinus consists of small cells arrested in their development while still young. These, when turgescient with sap, swell up, thus increasing suddenly the bulk of the structure composed of them; and this turgescence leads to motion only. It is not followed by growth; no nutrition of the plant results from the turgescence. It must be noted that the cells possessing this special function of producing motion only, fulfilling no direct nutritive purpose, are smaller than their neighbours, arrested in their growth, and destitute of chlorophyll. This is the condition of the cells of the pulvinus as long as it is capable of producing movement. In the *oxalis corniculata*, the pulvinus is developed imperfectly and to an extremely variable degree, so that it is apparently tending towards abortion. Its cells contain chlorophyll; that proves they have nutritive functions to perform, as well as the production of movement. These cells are more like the normal cells of the petiole than those usually characteristic of a pulvinus.

In the young seedling plant, the root and seedling leaves (cotyledons) are constantly moving (circumnutating); this movement being due to the order and method of growth of the cells of the part. In many cases, all parts of a plant are constantly moving; and, under special circumstances, this movement may be modified in one direction. Thus, with the sensitive plant, under the influence of light, a rapid movement of the leaf may occur in one direction; such movement being but a modification of the motion constantly occurring in a manner usually imperceptible. These facts are borrowed from Mr. Darwin's book, which is full of such illustrations.

Now, it seems to me, after carefully watching the conditions of spontaneous involuntary movement in children under different circumstances,

that a very fair analogy may be made between these movements of plants and the choreic movements of children. If we assume that in the brain of a child there be certain nerve-cells in a condition analogous to the vegetable cells in the pulvinus, they would be smaller than healthy ones, lacking in full development, more liable to turgescence (active determination of blood or nutriment), such turgescence causing the liberation of motor force only, which is transmitted by the nerves to the muscles, the mechanism of movement. The turgescence leads to motion only, not to nutrition. We should, then, expect to see in the patient an excess of spontaneous irregular movement, nutrition being defective. Again, there might be supposed to exist in a child's brain cells analogous to those of the rudimentary cells of the pulvinus of *oxalis corniculata*, apparently passing over, in the stages of development, from the condition of cells above described, to acquire the power of receiving nutrition from turgescence, and thus produce growth and their own specific functions in place of motor power only. In such a case, the brain would become less mobile, less choreic, but more capable of its own proper functions.

Again, if we inquired as to the movements of the primary leaves (cotyledons) of seedling plants, we should see what a large amount of movement the young growing parts produce; how the movement is mostly due to the growth of cells alternately on each side of the leaf—that side on which growth is for the time occurring more rapidly becoming convex; then, as the seat of most rapid growth is transferred to the other side of the leaf, the side of convexity is reversed. Here, then, in the young rapidly growing cellular vegetable organism, without circulatory or nervous systems, spontaneous movement is constantly occurring, owing to that unknown law which causes the cells to be specially nourished first in one part, then in another. Many other analogies might easily be suggested between the known action of vegetable cells in causing movements, and the spontaneous involuntary movements produced by the nervous system, which we may observe in children and other young animals. The inference is, that there may be a true analogy between the conditions of life and development of vegetable cells producing movement, and the nerve-cells which produce movement in animals; and that, as in the plant, so in the animal, the arrest of development of cells may cause them to be liable, on stimulation, to produce motion in place of their proper functional effects; and that, in plants and animals, growing young cells often produce much motion.

In children, I have often observed that "the weak and nervous" have much spontaneous finger-twitching; and I described this as one of the physical signs seen in children who suffer from recurrent headaches and associated pathological conditions (BRITISH MEDICAL JOURNAL, Dec. 6th, 1879; see also *Brain*, 1881, parts XI, XII, XIV). Such muscular unsteadiness seems very analogous to the movement of young, growing, sensitive vegetables.

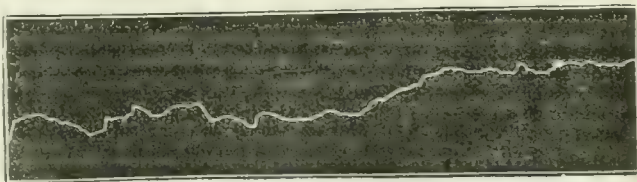


Fig. 2.—Tracing of Involuntary Movements of the Finger in a Nervous Child.

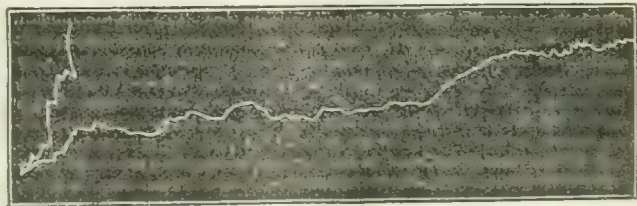
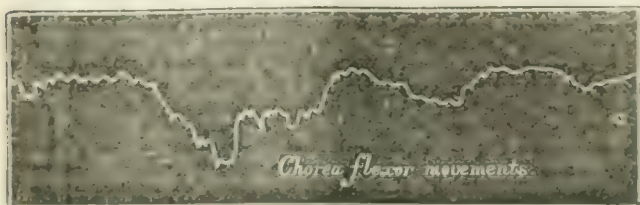


Fig. 3.—Tracing of Involuntary Movements of the Finger in a Nervous Child.

These two tracings indicate the continuous condition of spontaneous muscular unsteadiness of the finger of a nervous child; and the continuous involuntary movement appears analogous to that indicated by the tracing of the movements of some plants. Now, if this analogy between unstable mobile vegetable cells and unstable nerve-cells be legitimate, it should guide us to further useful observations.

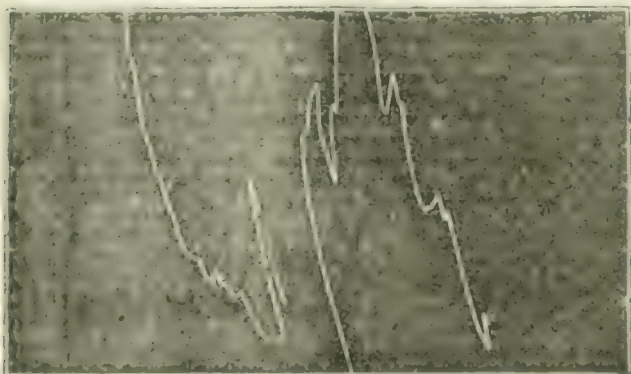
To be brief, Darwin's observations show that movement produced by the growth of vegetable cells is constant in the leaves, stems, and roots of many young plants. If the movement of nervous children be produced

by a condition of brain-cells analogous to that of the growing parts of plants or the cells of the pulvinus, it should be liable at times, under certain conditions, to spontaneous movements. This being so, I have taken tracings of the finger-movements of nervous children and of dogs suffering from epilepsy. Examples are presented here, and seem to resemble the following tracings.



1. The tracing shows a series of irregular, but more or less continuous movements, resembling the spontaneous movements of a finger.

2. The tracing shows a series of irregular, but more or less continuous movements, resembling the spontaneous movements of a finger.



3. The tracing shows a series of irregular, but more or less continuous movements, resembling the spontaneous movements of a finger.

4. The tracing shows a series of irregular, but more or less continuous movements, resembling the spontaneous movements of a finger.

5. The tracing shows a series of irregular, but more or less continuous movements, resembling the spontaneous movements of a finger.

6. The tracing shows a series of irregular, but more or less continuous movements, resembling the spontaneous movements of a finger.

7. The tracing shows a series of irregular, but more or less continuous movements, resembling the spontaneous movements of a finger.

left them; indeed, after a blow on the leaf with a twig, the foliage would fall, but almost immediately regain its horizontal position.

Many other useful analogies might, I think, be made in this direction; and the subject is one full of interest to all who look upon the conditions of health or disturbance of the system throughout the whole organised world. Among other matters, we might consider the transmission of sensitive impressions from one part of the plant to another; the metamorphosis of parts of a plant according to the functions discharged; the irritability or sensitiveness of plants, which is in some cases far greater than anything seen in man; the production of acid secretions in mobile plants; and numerous other facts easily observed in plants—facts of great interest to the physiologist and pathologist; and in this direction Mr. Darwin's researches, following those of Sachs, are a climax to investigations carried on since the time of Sprengel; facts which Sir James Paget would have us apply to the study of human pathology.

NERVE-STRETCHING IN INFANTILE PARALYSIS.*

By R. M. SIMON, B.A., M.B. CANTAB., M.R.C.P. LOND.,

Assistant Physician to the Hospital for Sick Children, Great Ormond Street.

IN bringing the subject of infantile paralysis before this Society, I do not propose to enter at length into the etiology or symptoms of the disease, but, by briefly recording the accepted views as to its pathology and treatment, attempt a justification of the treatment adopted in the case to be brought before you.

Numerous *post mortem* examinations have proved beyond question "that the earliest condition is one of subacute myelitis, with softening and destruction of the nerve-elements of the anterior cornua of the spinal cord exclusively. Some of the nerve-cells of this portion of the cord are sometimes filled with granular pigment-deposits, while others are disintegrated and broken up. The nerve-tubes of the anterior horns are found shrunken, the myelium absent, but the axis-cylinder nearly always intact. In other cases of longer standing, there are evidences of atrophy of the anterior horns, perhaps amyloid degeneration, and sometimes sclerosis. The nerve-cells are found in an atrophied condition or absent altogether" (Hamilton on *Nervous Diseases*). However the disease may be caused, the multiple paralysis which may be observed at the beginning soon disappears, leaving behind a paralysis, or paresis, of some limb, or more often group of muscles, or perhaps of one muscle. With this paresis are associated a rapid atrophy of the affected muscles, and a lowering of temperature in the paretic part. Unless, as scarcely ever happens, a rapid recovery occur, the atrophy continues, and after a time the muscular tissue becomes replaced by connective tissue and fat. The blood-vessels diminish in size, and the bones do not develop in equal ratio with those of the corresponding limb on the other side of the body, but become friable and thin.

I may, I trust, be excused for recapitulating these trite facts to show the appalling nature of the disease, and the great need of the suggestion of useful treatment. Hitherto, any success attending treatment has been not with the use of electricity, generally galvanism, to the nerve, and the use of the affected muscles. Success has attended such treatment, but only in so small a number of cases as to furnish no basis for a favourable prognosis. What the rationale of such treatment has been is difficult to understand, as, beyond keeping the muscles in a state of order by electrical stimulation, no direct benefit has been proved to emanate from it, I think, be expected. The atrophied nerve-cells cannot be repaired, or have been repaired through the atrophy of the corresponding limb.

Experiments have been found by experiments on rabbits, that most of the nerves supplied by more than one root of a spinal cord, and further, nerves that are supplied by several spinal roots for the same muscle. It is possible, therefore, that the nerves of the paretic limb, by stimulation, the other nerve roots are induced to supply the limb, and so the recovery is effected from the atrophy of the anterior horns, and the paresis is corrected in the paretic limb by the stimulation of the other nerve roots.

With these considerations in my mind, I asked Mr. Channing, of the Hospital for Sick Children, to try the effect of the treatment in the case of a patient I had seen. He has now recovered, and for this year has been able to walk, and to do all the ordinary work of a child of his age.

The patient, a boy, had been born with electrical treatment, and the result was that the right leg was longer and more developed than the left, and the muscles of the right leg were more developed than those of the left.

Read at the meeting of the Society on Feb. 25, 1882.

of the right leg remain fairly nourished. Tested by the application of forty Leclanché cells, the following results were noticed; free contraction of the gluteus maximus; slight contraction of the muscles of the ham; the tensor vaginæ femoris and rectus femoris contracted readily and well, while the contraction of the sartorius and adductor muscles was slow and feeble. Below the knee, there was free contraction of the gastrocnemii, the peronei, the extensor proprius pollicis, and the muscles of the sole of the foot; while the anterior tibial and the extensor brevis digitorum responded only faintly to the electrical stimulus, and the extensor longus digitorum not at all. It is important to bear in mind from these facts, that the muscles supplied by others than the sciatic nerve were affected.

Though the little boy had not got worse during the last twelve months, he was not improving, and fell easily on coming into contact with slight obstacles. He used to swing the right leg in walking, bringing it down with a jerk, and not moving it straight forward.

The operation was done antiseptically in the out-patient room, without difficulty. Mr. Chavasse raised the sciatic nerve, and pulled it strongly three times. The boy was treated as an out-patient, and made a good recovery from the operation.

Two months later, Mr. Chavasse kindly made a series of measurements for me, and found that there had been a gain of a quarter of an inch in the circumference of the right thigh and calf respectively (owing to a slight diarrhoea and bronchitis, the boy's health had not been good in the interval), and no difference was found between the measurements of the left leg on the two occasions. There seemed to be a slight gain in the length of the limb, but of this I am not sure. However that may be, there was a very decided improvement in the manner of walking; he no longer swung his leg, and I was informed that he rarely fell.

On January 2nd, it was found that, while the sound thigh and calf had gained respectively three-quarters and one-eighth of an inch in circumference, corresponding measurements on the right or affected side showed a gain of one inch and a quarter in the thigh and three-eighths of an inch in the calf, while there was a decided improvement in the manner of walking.

I should not have ventured to bring forward a novel treatment to be judged by its results in a single case, had I many opportunities of seeing such cases; but at a general hospital they are rare, and I have brought this one forward in the hope of inducing others with greater opportunities to put this treatment to the test. It is a procedure at the worst harmless, and it seems to me to be likely to do great good in a class of patients, regarded by many as beyond the hope of improvement, or even outside the pale of treatment.

ON THE TREATMENT OF HYPERTROPHY OF THE TONSILS.

By JOHN BISHOP, M.D., F.R.C.S.E.,

Assistant-Surgeon to the Royal Infirmary, Edinburgh.

THE BRITISH MEDICAL JOURNAL for January 28th, 1882, page 130, gives an interesting annotation on various methods of treating hypertrophied tonsils. Probably every practical surgeon will read with satisfaction that the inefficient or dangerous methods for the "removal of diseased tonsils by the help of the finger, ligature, cauterisation by caustics or the actual cautery.....have fallen into disuse"; and many, especially those of the Edinburgh School, will hear without surprise that "the fashionable treatment by the guillotine has given rise to very serious and often fatal hæmorrhages". There must be surprise at the remark that, "in Europe, the bistoury only reckons a few partisans", in view of the fact that, from the beginning of Mr. Syme's practice to the present day, the surgeons of this, the largest medical school of Great Britain, have practised and recommended "the curtailment of enlarged tonsils" by means of the probe-ended curved bistoury and vulsellum.

Though I have served in various capacities under three successive professors of clinical surgery—the late Mr. Syme, his successor Mr. Lister, and the present professor Mr. Annandale—and have seen them operate very frequently, have heard of the work of the other surgeons of the school, at the head of whom stands the venerable professor of surgery Mr. Spence, and have operated frequently myself, yet I have never seen nor heard of any injurious effects from the operation, nor of the use of the guillotine in Edinburgh.

The operation by bistoury causes little pain or bleeding, admits of the removal of much or little of the tonsils; and, being thus safe, easy, and satisfactory, it is not likely that the surgeons who have gone out from this school in such great numbers during the past fifty years have abandoned this simple method in favour of more complicated and less efficient means.

Mr. Syme used to point out that this was an operation "perfected in the first instance, and subsequently impaired through alterations in the mode of its performance proposed by would-be improvers. All other means having failed to remove the swelling, it is the duty of the surgeon, says Celsus, 'hamulo excipere et scalpello excidere'". The operation, as performed by Mr. Syme and others in Edinburgh, may be described as follows. The patient sits opposite the light, with mouth open and tongue depressed by an assistant; the surgeon seizes a tonsil with the vulsellum, and draws it towards the middle line, whilst with a probe-ended curved bistoury, thoroughly sharp, he rapidly cuts from above downwards, so as to remove as large a portion as seems needful. The patient is allowed to rinse the mouth with cold water, and then the process is repeated on the other tonsil, if necessary. It is better to remove the right tonsil first, because to most men the operation is slightly more difficult, on account of the crossing of the hands. Injury of the carotid artery is impossible, because, during the act of cutting, the knife is never allowed to pass further out than the line of the molar teeth. The most useful vulsellum is that designed by Mr. Syme, with a special hook to hold the gland more securely.

The patient is told to stay in the house for two days, and perhaps to gargle with Condy's fluid.

THERAPEUTIC MEMORANDA.

THE TREATMENT OF PEMPHIGUS.

VARIOUS communications have recently appeared in the BRITISH MEDICAL JOURNAL as to the value of arsenic in the treatment of pemphigus. As a contribution to the literature of the subject, I beg, under sanction of Professor MacLagan, in whose ward it was treated, to send the short notes of the following case, illustrating the effects of simple local treatment.

A. C., aged 23, a shepherd, from the neighbourhood of Dunfermline, was admitted to the Royal Infirmary on December 5th, 1881. He was in good condition, and felt perfectly well, except for the annoyance of the skin-eruption. His family history was good, and his circumstances comfortable; but he was often exposed to cold and wet in his occupation. The eruption covered the whole body, and had begun to appear a week before admission, in the form of red spots, on which bullæ soon formed and became rapidly larger, varying in size from a pea to a hen's egg. The bullæ were at first clear, but in a day or two became opaque, and then burst, leaving excoriated surfaces, on which crusts formed. The patient was put to bed; and a layer of cotton-wool was put under the back, to keep the raw surfaces left from being rubbed. In order to soften the crusts which had formed over the rest of the body, a little vaseline was applied to them. The bullæ were punctured at the most depending part, the serum which they contained allowed to escape, and care taken that the raised epidermis was laid down flat on the derma, so as to form a complete covering for it. Around the bullæ, which had become opaque, and their contents puriform, there was a ring of inflammatory redness and a good deal of irritation; but when they were punctured while the contained serum was still clear, there was no such irritation, new epidermis formed beneath quickly, and little or no discoloration of skin remained. The last crop of blebs appeared about a week after the patient was admitted; and a week later he was dismissed quite better, with only a few blains on the site of the bullæ, which had been followed by crusts. No internal treatment by arsenic or other drug was adopted, no medicine being given except a laxative; and the patient was put upon ordinary diet.

At the clinical lecture on the case, Professor MacLagan stated, as the result of his experience, that acute pemphigus in a healthy subject, as in the present instance, needed nothing but the local treatment as described above, which opinion was confirmed by the result of the case; that in chronic pemphigus, as in other forms of skin-disease, arsenic was useful; and that, in pemphigus foliaceus, neither arsenic nor any other treatment was of real avail.

CHARLES KENNEDY, M.B., C.M.,
Resident Physician, Royal Infirmary, Edinburgh.

THE TREATMENT OF DIPHTHERIA.

THERE is little doubt that, if the formation of the membrane go on unchecked, fresh absorption of the poison takes place, and the disease becomes more intractable. I believe that the application of caustics to the throat is in all cases harmful, except where there is distinct syphilitic ulceration; and, as we have in boracic acid a powerful non-irritant antiseptic, I most certainly prefer this in cases of diphtheria. The formula I adopt is twenty or thirty grains of the acid to a drachm

of glycerine and seven drachms of the compound infusion of roses. It can either be applied as a gargle or by means of a camel's hair brush frequently during the day. I have used iodine in the shape of a gargle (twenty minims of the tincture to the ounce of water), but am not so satisfied with it as with boracic acid. As to the internal treatment, all, I think, are agreed as to iron being positively essential. A very good way of prescribing it is the following: fifteen minims of dilute tincture of iron, ten grains of chlorate of potash, fifteen minims of the tincture of perchloride of iron, with a little syrup of essence of lemon, and water, every four hours. The patient should be, of course, well supported with beef-tea, barley-water, and milk; and port wine should be given in quantities strictly regulated according to the necessity of the case.

F. P. ATKINSON, Kingston-on-Thames.

OBSTETRIC MEMORANDA.

INSTRUMENTAL v. NORMAL PARTURITION.

I have received a communication on the above subject from Mr. Greenwood in the JOURNAL of February 11th, I venture to suggest that, by rubbing the perinaeum, when rigid, with lard, has a relaxing effect on the rectum. This plan I have frequently used with good effect, causing, as I believe, satisfactory results. If the rectum is rigid, this method can be explained to the patient, no objection can be well made to it. J. T. KNIGHT, Carlton near Nottingham.

SURGICAL MEMORANDA.

SPONTANEOUS CURE OF SPINA BIFIDA.

THE spontaneous cure, by absorption, of the spina bifida, recorded in the JOURNAL of February 11th, must surely be unique. May I suggest that the tumour belonged to the class of so-called congenital cystic tumours, to which reference was made at a recent meeting of the Pathological Society, also recorded in the JOURNAL? These not unfrequently disappear spontaneously; while spina bifida, in my experience, never does. The facts that the bones were completely restored so soon after the disappearance of the tumour, and that the patient remained but an indurated cicatrix, lend, I think, support to the view I venture to submit.

ROBERT WILLIAM PARKER.

CHRONIC OEDEMA OF THE EPICLOTIS, CAUSING
GREAT DIFFICULTY OF DEGLUTITION,
CURED BY CARBIFICATION.

[illegible]

It is important to point out that the results for the 1990s are not statistically significant, and the results for the 2000s are only marginally significant.

It is interesting to find that the same was true of the other two. The first of these was Henry, a student of the University of Chicago, who was a member of the same class as the other two. He was a member of the same class as the other two. He was a member of the same class as the other two.

[illegible]

solution of tannin used as a gargle, ultimately arrested it. Several careful examinations have been made during the past year, but now it looks tolerably healthy; and all that the patient complains of is occasionally a slight tickling in the throat.

ROBERT TORRANCE, Surgeon to the Newcastle-upon-Tyne
Throat and Ear Infirmary.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

KING'S COLLEGE HOSPITAL

CENTRAL NECROSIS OF THE HEAD OF THE HUMERUS: EXCISION:
RECOVERY.

(Under the care of Mr. HENRY SMITH.)

[Notes by Mr. SEPTIMUS FARMER, House-Surgeon.]

THE patient, J. L., a man aged 29, had been employed in a bakery. There was a history of phthisis in the family. He stated that he had always been temperate; and in June 1879, after working continuously for twenty-two hours, he had a fit and fell on to his right shoulder; he at the same time burnt his hands and legs. He was taken to the London Hospital, and remained there for six weeks. After this he returned to work, and continued at it for twelve months; at the end of that time his right shoulder commenced to swell, and rapidly became three times its ordinary size. He suffered constant pain, and was unable to raise his arm at the shoulder-joint. He was admitted into St. Bartholomew's Hospital, and was under treatment for some weeks, and was discharged on August 17th, 1880. The pain, however, still continued, and he was totally unable to use his arm. In October, an accidental blow over the shoulder was followed by an abscess, which was opened by one of his fellow-workmen with an ordinary penknife; a quantity of yellow pus escaped. Three weeks after this, on November 1st, 1880, he was admitted into St. George's Hospital. On admission, he was an anemic and evidently debilitated man. There was tenderness over the right arm at the shoulder-joint, and pain of a dull and aching character was more or less continuous. There was no increase of pain on pressing the joint surfaces together. A sinus, situated at the anterior border of the right deltoid muscle, and discharging a few drops of yellow pus, could be traced along its walls the distance of three inches, and then it terminated. It had a firm, tubular wall, and persisted in its discharge. The skin over the apex was healthy, and the granulation could be traced there. The urine was normal. He was under the influence of a large store of cod-liver-oil, and of quinine.

On November 20, 1962, it was noted that the temperature had been hectic for the last 2 days, varying from 104.0 to 104.5, and from 104.0 to 102.0 the previous day. No response to treatment had been very good.

The X-ray, however, with the use of the "cut-out" film, was freely made, but no fracture could be detected. Mr. Smith laid the arm in a plaster cast, and a small bare surface of bone could then be seen. A large drainage-tube was put in the wound, and the wound closed by two sutures. It was hoped that by means of free drainage the wound would heal.

On January 15, 1904, the condition of things had not improved; the wound was still, and a sinus remained. The temperature was still of the fever type, night perspiration being profuse, and the patient was unable to do any work. Mr. Smith then resorted to a moderate massage and on January 15th, either having been given, an incision was made for drainage from the sinus, the process being the same as that described previously. On January 16th, a piece of drainage tubing was put to be lying in the sinus in the line of the sinus. The drainage was not successful, the line was removed and the patient returned to the wound, and kept at rest with the lower members of the leg. The drainage was partially successful. The wound was washed out with a solution of sodium chloride, 1 gram in the liter. A large dressing was put on, and the edges of the wound were brought into contact, and secured by a wet band and oursement. On January 17th, the dressing was removed, it was found that there was no abscess, rather than that it filled with in diameter and that the blood had in the interior of the incision, new living portions of the wound material were exposed. A long incision in the center of the wound was made, and a large amount of drainage

From this data the system number was determined to be 10. In a way, the system number is the number of times the system is used as a COC.

and within a week his temperature became normal, and remained so until the time of his discharge. Passive motion was commenced on the fourth day after the operation; on the twentieth day the wound was healed. He was discharged on March 23rd (having been kept in the hospital longer than was necessary for the purpose of clinical observation).

On discharge, he had an exceedingly useful arm, being able to perform all the movements at the shoulder-joint with ease; the power of raising the arm was somewhat defective, but was improving every day.

ROYAL ALBERT EDWARD INFIRMARY, WIGAN.

RECTO-VAGINAL FISTULA, AFTER CONFINEMENT WITHOUT USE OF FORCEPS.

(Under the care of Mr. WM. BERRY.)

MRS. D., aged 28, was attended by a midwife on September 28th, 1880, in her first confinement. She was in labour for twenty-four hours, with very strong pains during the last three or four hours; the midwife stating that medical aid was not required, she was kept out of bed between two women all through the second stage. The midwife described the head as being suddenly expelled, the rest of the child immediately following. I was called to the patient three days after confinement, as she was said to be suffering from piles. On examining her, I found the perinæum torn through the sphincter ani into the rectum. Next morning, I put in two deep wire-sutures, and kept her knees well together; these sutures were removed on the fifth day, and she passed, the same day, a hard motion, although castor-oil and laxatives had been administered. The discharges, also, had been abundant; therefore very little union was effected; the wound, however, granulated fairly well, leaving a small band for a perinæum, but, unfortunately, a small opening existed between the vagina and rectum. She was admitted into the infirmary on March 19th, 1881.

March 26th, 1881. The menstrual period was just over. I operated, cutting away the band which was formed by granulations, and pared the edges well; quill-sutures were used, the raw surfaces being well in apposition. The urine was drawn off by the catheter two and three times a day. On the fourth day, the stitches were removed. A little ulceration was taking place around the threads. The bowels were moved slightly after a colocynth pill on the sixth day, but, the motion being hard, an enema of castor-oil was administered, when a good motion followed. Union was found to be complete. She was discharged cured April 16th, 1881.

GENERAL INFIRMARY, LEEDS.

A CASE OF HYSTERICAL PARAPLEGIA IN A BOY.

(Under the care of Dr. CLIFFORD ALLEBUTT.)

[Reported by A. G. BARRS, M.B., Resident Physician.]

JOSEPH A., aged 12, was admitted on November 23rd, 1881. He had been attending in the out-patient department for some months previously to admission, suffering from nocturnal incontinence of urine, for which galvanism, bromide of potassium, and many other remedies had been tried with no appreciable result. He had been circumcised, according to the Jewish rite, in infancy. Seven days before admission, up to which time he had been in his usual condition, and while walking, his left leg suddenly gave way under him, and he appears to have become completely paraplegic in a few minutes. There was no pain in the limbs, and no convulsion.

On admission, he was a perfectly healthy looking lad, lying in bed. He was a little emotional. The pupils were widely dilated. The hands and arms were unaffected. He said he was quite unable to move the legs in the least degree. On turning down the bedclothes, one was at once struck with the completely healthy appearance of the legs. The skin was quite natural; the muscles of good volume and tone. There was no evidence of any trophic changes in the skin, bones, or joints. The limbs were held in a completely extended position. There was no absolute spasm, but decided increase of resistance to passive flexion of the knee. There was complete and absolute anaesthesia, with analgesia of the whole circumference of the limbs, from the level of the patellæ to the roots of the toes. The upper and lower limits of the anæsthetic area most sharply and clearly defined. The plantar, patellar tendon, and cremasteric reflexes, were all normal. There was no ankle-clonus. Voluntary power was completely lost. Since the onset of the paraplegia, he had not once wetted the bed at night.

On November 25th, the anaesthesia had entirely disappeared, and some movement was returning in the legs. On the 26th, he could stand and walk with assistance; and, on December 6th, he left the hospital well and, for the time being, free from incontinence of urine.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 21ST, 1882.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

Report by Drs. Gowers and Savage on Dr. Harbinson's Case of Hereditary Cerebral Sclerosis.—The report (read by Dr. PAYNE, Secretary of the Society) stated that evidence of nerve-degeneration was found throughout the brain, with an increased quantity of leucocytes. There was no distinct evidence of sclerosis. The changes seemed to come under the head of chronic atrophy or chronic cerebritis.

Hypertrophy of the Heart.—The specimen was shown by Dr. SAMUEL WEST, who stated that the patient had only suffered from symptoms of heart-disease for about three months; when admitted to the Royal Free Hospital, the heart was enlarged, there was some pulmonary emphysema, and the urine contained a little albumen. The cardiac hypertrophy was, at the time, attributed to this latter condition. After death, the kidneys, liver, and spleen were congested, but otherwise unaltered; the heart, which was fatty, weighed twenty ounces; the hypertrophy was limited to the left side; there was no disease elsewhere to account for the hypertrophy. The explanation of such a case as this was very difficult; he attributed the break-down to some failure in the circulation of the heart; he believed that the coronary arteries in these cases did not enlarge in proportion to the enlargement of the heart, and that this resulted in faulty nutrition of the organ.—Dr. STEPHEN MACKENZIE said that there were many cases now on record which proved that hypertrophy did occur independently of degeneration of the kidneys; it seemed that there was a disease of the arterial system which could lead to this hypertrophy. He wished to inquire whether the arteries had been examined microscopically in this case.—The PRESIDENT said that several cases of disease of arteries and hypertrophy of heart without kidney-disease had been brought before the Society.—In reply, Dr. WEST said that the arteries of the kidneys had been examined, and found free from disease.

Acute Fatty Degeneration of the Heart.—This specimen also was shown by Dr. WEST. The patient was aged 16. Two months before admission, he had a mild attack of rheumatic fever; he recovered to some extent, but soon began to get worse; and, when first seen, he had evidence of disease of both the mitral and aortic orifices. After being a few days in hospital, he died. Beyond some old phthisis at the apex, the only important lesion found was in the heart. That organ was yellower than natural; and, when it was cut under water, the fat ran off in greasy drops. There was no pericarditis, and no endocarditis, except of the valves. There was fatty degeneration of the muscular fibres, but no interstitial change. He thought that the cases of acute degeneration of the heart fell into three groups. Firstly, fatty degeneration might occur acutely in extreme anaemia, as, for instance, in idiopathic anaemia; cases of acute degeneration occurring in the course of acute fevers and in phosphorus-poisoning formed another group; the third group comprised cases where there had been an antecedent myocarditis. He thought this case fell into the last group.—Mr. ALBAN DORAN asked whether Dr. West believed that fatty degeneration of the heart could occur without symptoms which were more pronounced, and of longer duration. The question was important from a medico-legal point of view, and also in relation to death from chloroform. There was a fallacy underlying the descriptions of fatty degeneration of the heart; decomposition very rapidly produced an appearance of the muscular fibres which, he believed, had often been described as fatty degeneration. Such an error might be of great importance.

Joints from Three Cases of Gout; Osteoma of Tibia.—These specimens were shown by Dr. NORMAN MOORE. The first consisted of the great toe-joints from a cellarman, aged 37, who died, with three cerebral hemorrhages. He had very small granular kidneys. The left toe showed an abundant uniform deposit of urate of soda, while the corresponding right joint, and all other joints examined, were quite free. As the deposit was too large to have been the result of one attack, the specimen was interesting as showing that the symmetrical affection of joints occurs late. The second specimen was the left knee-joint of a man aged 47, who died of cerebral hemorrhage. He had small granular kidneys. The knee-joint showed a scattered deposit of urate of soda, with erosion of the patella. The left toe was coated. The joints on the right side were normal. The case showed an appearance not hitherto recorded—a considerable deposit of urate of soda in the prævertebral fascia of the neck. The third specimen consisted of the tibia and great toe from a man who died of pneumonia, aged 45.

The great toe-joints on the right had a scattered deposit of urate of soda; the left none; the other joints were free. The tibia showed a slight enlargement following the long axis of the lowest third of its shaft. The outer layer of the tibia looked normal. The enlargement was of greater diameter than the shaft of the bone, and was not continuous with the shaft. The periosteum was very thin, and the bone was covered over it. It was certainly not a node, probably an osteoma; possibly, however, it might have been produced by a very oblique fracture, which had occurred early in life.—Mr. GODLEE thought the possibility of the deformity in the last case being a fracture ought to be carefully considered; he was inclined to think, from the appearance of the medullary cavity, that it had been thus produced.—Mr. BUTLIN thought that it was either due to inflammatory changes, or to some early fracture, as suggested by Mr. Godlee.—Mr. BUTLIN pointed out that there was no evidence of any injury to the bone; he also thought the new material lay upon the surface of the bone, and that the bone was not expanded over it, as might have been the case if it had been the case if the thickening were due to callus. For these, and for other reasons, he thought the enlargement must have been produced by some form of new growth.

Dr. HALE WHITE exhibited sections showing these changes. He had seen them especially the medulla of three children who had died without any cause of death being detected by the naked eye. On section, however, one of these cases exhibited these changes; the other two were healthy. There was extreme vascular dilatation over the entire extent of the medulla, with several hæmorrhages. These were situated just at the margin of the vagal nucleus; this, Dr. HALE WHITE considered, had, by stimulation of the cardio-innervatory centre, caused the sudden death that occurred in this child. For a few days before death, the temperature had been up to 100° Fahr., and the patient had breathed badly. It was suggested that this was due to the fact that the vascular changes were in the vital spot. It was pointed out that these vascular changes differed from those described as occurring in the brain in cases of epilepsy, hysteria, and diabetes, inasmuch as they were not limited to the margins of a vessel nucleus; whilst in the case of the child, the medulla might be affected, there was no evidence of any of the special centres being affected, such as the cardio-innervatory; and in these cases, that recovered, there were no hæmorrhages, and no vascular dilatation, as a result of the changes. This was, in fact, the only case of the kind on record, and is an example of the "apoplexie sudroyante" of French authors.

Dr. HALE WHITE also exhibited a case, during the course of a lecture at the National Hospital, Hammersmith, and showed a case of infantile paralysis in which there was extreme vascular dilatation. He then remarked on the possibility of an early change in the facial nucleus, in which case the patient would die, as in the case of the child. Dr. HALE WHITE had seen two cases which bore on the subject under consideration. In one, in which infantile paralysis suddenly occurred, an examination of the brain showed a small area of infarction in the middle of the medulla. In the other case, there was paralysis of one side of the face, and of the palate, and of the arm and leg; such a case, however, would not be a case of infantile paralysis. The patient had been a healthy child, and the lesion was in the same place as in the case of the child. Dr. HALE WHITE, in reply, said that it had been the suggestion of Mr. GODLEE in the lecture to which he referred, that the case was a case of infantile paralysis.

Dr. HALE WHITE also exhibited a case of infantile paralysis in which there was extreme vascular dilatation. He then remarked on the possibility of an early change in the facial nucleus, in which case the patient would die, as in the case of the child. Dr. HALE WHITE had seen two cases which bore on the subject under consideration. In one, in which infantile paralysis suddenly occurred, an examination of the brain showed a small area of infarction in the middle of the medulla. In the other case, there was paralysis of one side of the face, and of the palate, and of the arm and leg; such a case, however, would not be a case of infantile paralysis. The patient had been a healthy child, and the lesion was in the same place as in the case of the child. Dr. HALE WHITE, in reply, said that it had been the suggestion of Mr. GODLEE in the lecture to which he referred, that the case was a case of infantile paralysis.

Dr. HALE WHITE also exhibited a case of infantile paralysis in which there was extreme vascular dilatation. He then remarked on the possibility of an early change in the facial nucleus, in which case the patient would die, as in the case of the child. Dr. HALE WHITE had seen two cases which bore on the subject under consideration. In one, in which infantile paralysis suddenly occurred, an examination of the brain showed a small area of infarction in the middle of the medulla. In the other case, there was paralysis of one side of the face, and of the palate, and of the arm and leg; such a case, however, would not be a case of infantile paralysis. The patient had been a healthy child, and the lesion was in the same place as in the case of the child. Dr. HALE WHITE, in reply, said that it had been the suggestion of Mr. GODLEE in the lecture to which he referred, that the case was a case of infantile paralysis.

Dr. HALE WHITE also exhibited a case of infantile paralysis in which there was extreme vascular dilatation. He then remarked on the possibility of an early change in the facial nucleus, in which case the patient would die, as in the case of the child. Dr. HALE WHITE had seen two cases which bore on the subject under consideration. In one, in which infantile paralysis suddenly occurred, an examination of the brain showed a small area of infarction in the middle of the medulla. In the other case, there was paralysis of one side of the face, and of the palate, and of the arm and leg; such a case, however, would not be a case of infantile paralysis. The patient had been a healthy child, and the lesion was in the same place as in the case of the child. Dr. HALE WHITE, in reply, said that it had been the suggestion of Mr. GODLEE in the lecture to which he referred, that the case was a case of infantile paralysis.

Comparative Pathology.—Mr. EVE exhibited the following specimens: 1. Chronic synovitis of the radio-carpal joint of a horse, with hernial bulgings of the synovial membranes into the sheaths of the extensor tendons. These herniae corresponded, he thought, to the cysts described by Mr. Morratt Baker as occurring in chronic cases of knee-joint disease on the posterior aspect of the joint.—Mr. MORRATT BAKER did not think that the cysts in the cases he had described were due to hernial protrusions; they were situated among the muscles of the calf, and had their origin, he believed, in the escape of small quantities of fluid from an over-distended joint.—2. Sarcoma of the breast in a plover. Microscopical examination showed that the growth was an alveolar sarcoma. 3. Overgrowth of hoof and deformity of bones of the forefoot of a horse. Mr. EVE attributed the overgrowth to the horse having inhabited soft marshy ground; Prof. Flower had told him that in wild horses, when they left the hard stony ground in which they usually dwelt, and came down to marsh lands, such an overgrowth commonly occurred. 4. Lympho-sarcoma of the mesenteric glands of a *Dasyurus*.

Arteries Tied for Aneurysm.—Mr. R. J. GODLEE showed the arteries of the lower limbs, dissected out in a case where both superficial femoral arteries had been tied. The patient suffered from popliteal aneurysm first on the right and then on the left; the patient died one year later of pulmonary phthisis. On the right side, the vessel was converted into a firm fibrous cord, both above and below the seat of ligature. On the left side, the vessel at the seat of ligature was converted into a fibrous cord; below, the artery was only partly converted into a fibrous cord, other parts were filled with recent clot; and the vessel just above the aneurysm was dilated. There was atheroma of the vessels, but no disease of other organs. The ligatures used had been of catgut.

Chronic Hydrops of the Brain.—Dr. E. B. BAKER said that the head had commenced to increase in size at the age of three months. A prominence appeared on the right side of the forehead, and rapidly developed. There was no paralysis of limbs, and no impairment of intelligence; on the right side of the forehead was an elongated prominence, tense and fluctuating; it could not be emptied by pressure, but grew more tense when the child cried. Ophthalmoscopic examination showed that one of the discs was partially stretched, while in the other eye a similar change was commencing. Death was preceded by a little fever and vomiting; immediately before death the prominence sank inwards, so that it was replaced by a depression. On removing the skull-cap after death, about two parts of fluid escaped; the convolutions were flattened; over the surface of the pons was evidence of recent inflammation, and a thin layer of fluid over the cerebellum, but no tubercle was seen. The cerebral ventricles were closed. The gap in the frontal bone at the seat of the prominence was covered in, not by the dura mater, but by the cerebral pia mater and skin only. Dr. BAKER remarked on the unusual site of the hernial protrusion, which was not in the middle line. This was also the first case in which he had found evidence of closure of the cerebro-spinal opening. The optic chiasma was examined by Dr. Walter Edmunds, who had demonstrated a partial detachment of the optic nerves. In this case, optic neuritis had been carefully watched by the ophthalmoscope, so that the case, Dr. Edmunds remarked, confirmed the view that neuritis might exist for some time without affecting the papillitis.—Dr. STEPHEN MACKENZIE said that he had found evidence of the cerebro-spinal foramen in three cases of hydrocephalus which he had examined. In these cases were examined, then the continuance of the secretion of fluid from the choroid plexus, but the degeneration of the arachnoid plexus. Dr. BAKER had seen a number of cases in which the foramen of Monro was closed, and in all there was hydrocephalus. He found a certain number of cases in which a retraction of the head, with other symptoms of meningitis, occurred; if the patient survived, the retraction might persist, and it was safe to prophecy that hydrocephalus would develop.

Mr. MACKENZIE would know whether the foramen and vessels were in any way changed. It had been contended that the great vessels of the brain were the cause of pressure in the head, but sometimes hydrocephalus, Mr. BAKER said, had been shown a patient before the Society not a year ago, in whom a tumour of the bones had been removed, and a hydrocephalus. The tumour was removed prematurely, but gave way at one point. The development of the hydrocephalus had been gradually continued to the death, and under the scalp. After the death at which it was shown, the child lived five or six years, and then became much heavier. After one year, the child died of meningitis, after an operation performed by another surgeon. The weight of the brain was found to be increased with other changes. Dr. BAKER said that the most interesting point in the case was that the hydrocephalus was a chronic one. He wished to ask

whether the condition of the bone as to ossification had been examined. Mr. EVE said that the preceding speakers who had related cases of hydrocephalus appeared to ascribe the shutting off of the subarachnoid spaces at the base of the brain from the subarachnoid space of the spinal cord to adhesions blocking up the foramen of Magendie. He had investigated the relations of the spinal and cerebral subarachnoid spaces by injecting coloured gelatine injection into the subarachnoid space of the cord, and had found that the fluid passed freely over the anterior surface and sides of the medulla oblongata and pons Varolii into the subarachnoid spaces at the base of the brain; therefore the free communication which existed between them could only be occluded by a basimeningitis, which glued the arachnoid to the pia mater around the whole circumference of the medulla. The injection also passed into a large subarachnoid space formed by the reflexion of the arachnoid from the posterior pyramids and posterior surface of the medulla on to the inferior surface of the cerebellum, and thence through the so-called foramen of Magendie and "iter" into the ventricles.—Dr. BARLOW thought Mr. EVE's criticism a perfectly just one; he did not think that mere closure of the foramen of Magendie could lead to hydrocephalus. Investigations had been published in *Revue Mensuelle* which showed that the communications between the ventricles, the cranial subarachnoid, and the spinal subarachnoid were very free. In the cases referred to by Dr. LEES, there was much false membrane which was adherent, even to bone. There was not merely closure of the foramen of Magendie, but a large mass of false membrane about the pons and medulla which was firmly adherent on all sides; for instance, it was with difficulty removed from the bones. Leaving out of count truly congenital hydrocephalus, he believed that most if not all cases arose in the way and with the premonitory symptoms described by Dr. LEES: that is to say, that there first occurred a limited basal meningitis, manifesting itself clinically by the retraction of the head; and then, if the meningitis so far subsided that the patient survived, hydrocephalus came on.—Dr. BAXTER, in reply, said that, though he had for the last ten years carefully searched for this blocking of the foramen of Magendie, he had only found it in this one case. In a case of retraction of the head and meningitis recently under his care, there was a good deal of fluid in the ventricles, but no evidence of basal meningitis.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 10TH, 1882.

JOSEPH LISTER, D.C.L., F.R.C.S., F.R.S., President, in the Chair.

Suppression of Urine threatened several times after Ovariectomy.—Mr. KNOWSLEY THORNTON brought forward this case. On each occasion, packing the arms in cold wet towels relieved the symptoms, and the patient made a good recovery, and has remained in perfect health since. The following is a brief outline of the case. J. W., aged 39, married, and the mother of two living children, the youngest aged 7½, was admitted into the Samaritan Hospital in October 1880. An abdominal tumour was first noticed early in the last pregnancy (September 1879). A few weeks before admission, Dr. Pierce of Denbigh tapped the tumour, and removed twenty-four pints of greenish fluid. On admission, she looked older than her age, and had a waxy skin. The kidneys acted badly, and the skin was dry and harsh. There was no albuminuria. Ovariectomy was performed on November 4th, 1880, and a tumour of the right ovary removed, weighing, with contents, twenty-eight pounds. The operation was of average difficulty; a good deal of sponging was necessary; it occupied an hour. The temperature and pulse rose rather rapidly; and on the day after the operation the urine was scanty and dark, and the kidneys were very irritable. Digitalis and citrate of potash were given, and next day the urine was free and loaded with lithates. On the fourth day, the renal irritability returned, and the temperature and pulse rose again. Sympathetic vomiting came on; and on the sixth day, the condition appearing critical, the arms were bared and packed in cold wet towels, which were kept wet with iced water. In twelve hours, all bad symptoms had disappeared. The towels were allowed to dry, and in five hours the patient was as ill as ever. The towels were wetted again, and were kept on for forty-eight hours, during which time the patient appeared quite well; and the wound was dressed for the first time, and found soundly healed, and all the sutures were removed. The towels were removed; but during the day the kidney-symptoms and sickness gradually returned, and they were reapplied. Temperature and pulse remained unaffected; but the kidney-symptoms at once yielded. On the eleventh day, they were again removed; and on the twelfth, the temperature being normal, the patient was allowed to get up. A few

days later, she went home; and Dr. Pierce wrote that she was now in better health than she had enjoyed for some years. Mr. Thornton remarked that Mr. Doran had shown by his *post mortem* observations that advanced granular disease of the kidneys was common with large abdominal tumours; and this condition frequently existed without any clinical evidence of its presence. In the present case, no albumen was detected; and, though the kidneys acted badly before the operation, they were equal to the excretion of a fair quantity of urine, loaded with urates, on the second day after operation. The symptoms, detailed at length in the paper, were clearly due to the condition of the kidney and the application of cold wet pack to the arms on three separate occasions acted like a charm. To what was this rapid action to be ascribed? The author discussed the method of applying dry and wet cold, not only to reduce temperature, but to relieve serious internal congestions. In the latter class of cases, he believed the action to be a reflex one through the nervous system, and not a mere cooling of the blood generally. He referred to the action of external chill in producing inflammations, and to the well-known action of counterirritants. While believing that ordinary cases might be explained by one or other of the theories mentioned, he was still at a loss to explain the rapid action on the kidneys in this case from such a very restricted pack. The repetition of the treatment, and its unfailing effect on three separate occasions, and especially on the last, when the pulse and temperature remained unaffected, made it clearly a case of demonstrated therapeutic action, not a mere coincidence.—The PRESIDENT said that in the case just narrated the same effects had been produced time after time. Had this not been so, it might have been said that the coincidence was accidental. Besides, Mr. Thornton had found the ice-cap of use in other cases, and this could hardly be due to a general cooling of the blood, or even of the brain itself, by the local application. It might, however, be brought about by the local influence of the ice-cap on the capillaries, in turn affecting the centres, and so ultimately the kidneys. He had shown that raising the arms produced not only an emptying of the veins, but a contraction of the arteries; and raising the hands was often useful in arresting epistaxis. So, too, in the same way, raising the feet was sometimes useful in disease of the pelvic viscera; in one case he had known it allay pain in the testicle, even though the action would seem to favour the accumulation of blood there.—Dr. C. T. WILLIAMS had tried the ice-bag to the head in some cases of pneumonia and some acute tubercular attacks. He had usually found it fail when there was much local change, but it seemed to do good when the pyrexia was of a more general character.—In reply to Dr. Wiltshire, Mr. THORNTON said the operation had been done antiseptically. He had found the ice-bag of most service when the congestion was local.

Case of Erythema Iris.—Mr. BALMANNO SQUIRE read notes of this case, exhibited at the last meeting; it was that of a woman, aged 28, presenting a copiously sprinkled eruption limited to the palms of her hands and fingers, and the backs of the ends of her fingers. The eruption had lasted a month. Within the last two years she had had two previous attacks, each lasting three weeks. Each spot of the eruption consisted of a circumferential, definitely raised, faintly pink ring, enclosing a disc-shaped, flat, unraised, dark-coloured, brown-crimson, abruptly limited stain, disappearing completely for the moment on pressure, the centre of the dark-crimson stain being faded, and of a pale buff-yellow hue. The average diameter of the spots, including the ring, was eight millimetres. The eruption was attended with a sensation of itching, and occasionally of burning. There was also considerable tenderness of the affected skin, so as to preclude any use of the hands. There was no desquamation, nor was there any vesication; but, by the patient's account, the previous attacks had terminated in free desquamation.

Aneurysm of the Ascending Aorta.—Dr. FINLAY showed this patient, a woman, aged 32. She complained only of shortness of breath on exertion, and a slight cough at times. She had no difficulty in swallowing, and the pupils were equal. An oval-shaped pulsating swelling, three inches by two-and-a-half, and projecting about half-an-inch from the surface of the chest, appeared to the right of the sternum, and extended in an almost vertical direction from the lower border of the second to the lower border of the fourth costal cartilage. There was no discoloration of the skin, nor enlargement of the cutaneous veins. Over the swelling there were a thrill and a loud double murmur, the diastolic part being loudest and longest. A double murmur was also heard at the heart's apex, which appeared in the fifth interspace in the nipple line. The murmurs were heard generally all over the chest, both back and front. They were also heard in both carotids, and there was visible pulsation of the vessels of the neck. Dull percussion was found over the tumour, shaded off for some distance beyond. Inspiration was wavy at the left apex in front, and expiration was prolonged over the right upper

meter, some paraffin, a pair of forceps, a scalpel, vaccinating-needle, etc., together with ivory points, glass tubes and squares. The calf was fastened to the table, with the head between the iron horns, the fore-legs strapped together, the hind legs separated and lashed respectively to the posts and left-hand corner. The abdomen of the calf was then shaved, washed with a solution of thymol or carbolic acid, and scarified in fifty to eighty places for the secretion of lymph. If the vaccination were direct, an equal number of punctures with the needle answered better. Within twenty-four hours, each insertion was reddened, and a vesicle developed and acumined from the third to the fifth day; later, its contained lymph slowly passed into pus, and, by the seventh or tenth day, dropped off. During this time, the animal remained free from constitutional disturbance. To collect the lymph, the animal was again placed on the table; the vesicle, pinched up with forceps, was removed with a double-edged scalpel, and drained by slight pressure on to a piece of glass; the dry scab was left alone, but the pool of lymph running from it was used for coating points or glasses, and filling tubes. The points were dried in the oven at a temperature of 100°. The glasses were each coated with lymph and put together; and their edges were plunged into paraffin, melted over the water-bath. The tubes were filled with lymph which was defibrinated by exposure to the air and gravitation, and then closed with paraffin or hermetically sealed.—In the discussion which followed, Dr. Drysdale, Dr. Renner, Mr. George Turner, Mr. Wynter Blyth, Dr. Corfield, and the President took part.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, JANUARY 13TH, 1882.

B. WILLS RICHARDSON, F.R.C.S.I., in the Chair.

Obturator Hernia.—Mr. CROLY exhibited the intestine of a woman aged 70, who had died under his care in the City of Dublin Hospital, from obturator hernia. The case was admitted into hospital in a state of collapse. The history given was that, up to four days previously, the bowels had acted regularly. She then got colicky pains in the abdomen. Two days afterwards, she vomited, first the contents of the stomach, and subsequently stercoraceous matter. The abdomen was painful on pressure, but there was no tension. On the following day, symptoms of collapse set in, and next day she died. All the sites of external hernia were carefully examined, and the obturator spaces were also examined, but no hernial tumour could be felt. The diagnosis of internal obstruction was made; and abdominal section was considered, but was not carried into execution, owing to the collapsed state into which the woman sank, and from which she could not be roused. The *post mortem* examination showed some peritonitis to exist. A hernia of the size of a filbert-nut was discovered in the right obturator foramen. Owing to its small size, it had produced no dulness on percussion, or tension or fullness of the space during life; pain down the thigh, a symptom often found in obturator hernia, was also absent, as the nerve lay to the inner side of the tumour, and was not therefore pressed upon by it.

Obstruction of Pharynx by Food: Death.—Mr. WILLIAM THOMSON exhibited a piece of boiled beef which a pensioner had tried to swallow, but which stuck in his pharynx, and caused his death. The man was eating his dinner at an eating-house, and was observed to fall off his seat, apparently choking; he was at once conveyed to the Richmond Hospital, where the resident surgeon endeavoured to remove the mass of meat with his fingers, but, though he could catch a firm hold of it, he was unable, owing to its size, to get it out of the mouth. A forceps had to be employed for the purpose, and succeeded, but too late to save the man's life. The piece of beef removed weighed two ounces, and seemed to have caused death, not by sticking in the larynx, but rather by mechanical wedging of itself into the pharynx, and pressing on the epiglottis.

Therapeutical and Poisonous Effects of Carbolic Acid.—The discussion of Mr. WARREN's paper on this subject was renewed.—Mr. WHEELER, quoting from a paper which he had read before the Society last session, stated that, in a series of cases treated by Listerism, the temperatures ran higher than in a similar series treated by simple antiseptics; and mentioned one case, dressed after Lister's method, which he believed died of "aseptic fever".—Mr. T. STOKER had used the spray in several hundred cases, and had never seen a single case of poisoning by the acid so used. In one case of a large superficial burn, poisonous symptoms were exhibited when the surfaces were dressed with carbolic oil; in such cases, he had now abandoned that mode of dressing.—Mr. CROLY never had a case of carbolic poisoning in his practice, though he used the spray freely.—Mr. STOKES compared the present complete immunity of the Richmond and other Hospitals from hospital-gangrene and erysipelas, since the introduction of Listerism,

with the frequent occurrence of such cases before that method was adopted.—Surgeon-Major MYERS stated that, in military circles, there was no question as to the value of Listerism in the treatment of wounds; the only question was, how could the method be best adapted for use in the field of battle?—Mr. O'GRADY had, for sixteen or seventeen years, not seen a case of surgical erysipelas or hospital gangrene in Mercer's Hospital, although Listerism was not employed there; he did not think the diminished frequency of such diseases could properly be ascribed to the use of Lister's dressings. In one case of ovariectomy, when subsequently washing out the cavity with carbolic lotion (1 in 40), the woman became suddenly insensible, and died in five minutes, he believed from the effects of carbolic acid. The *post mortem* examination failed to discover any morbid appearance in any part of the body. Some people seemed to have a strong idiosyncrasy against carbolic acid, therefore the greatest caution should always be exercised in its use.—Dr. ATTHILL had performed ovariectomy thirty or forty times under the spray, and never saw a sign of carbolic acid poisoning from it. He had, however, now given up the use of the spray in such cases, in consequence of the undue coldness produced by it, not because of its toxic effects.—Mr. CORLEY considered that wide differences existed in the quality of the acid used, and that many of the apparently irreconcilable results obtained were due to the use of impure acid, which had a numbing and otherwise detrimental effect.—Mr. Hamilton, Mr. Thomson, Mr. Arthur Benson, and Dr. Duffey also took part in the discussion; and Mr. Warren replied.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, JANUARY 14, 1882.

WILLIAM STOKES, M.D., President, in the Chair.

Melanotic Sarcoma.—Mr. WHEELER showed the right index finger of a woman, aged 50, which was the seat of a melanotic sarcoma of two years' standing. The tumour was seven inches in circumference, four inches and a quarter in diameter. The finger was amputated through the metacarpo-phalangeal articulation. The new growth originated in the subcutaneous tissue. There was no glandular engagement. On microscopical examination, numerous blood-vessels were seen, and many spindle and oval cells, with marked pigmentation. Evidences of secondary fatty degeneration were visible in places.

Vesical Abscess.—Brigade-Surgeon JACKSON, C.B., showed a sacculated bladder, with an abscess in the recto-vesical fascia, from the body of a private in the Coldstream Guards, aged 23. The patient had suffered from gonorrhoeal orchitis in July 1880, and became the subject of chronic cystitis early in 1881. Owing to increasing retention of urine, Surgeon Barrow tapped the bladder *per rectum* on October 28th, 1881, when a pint and a half of most foetid dark green purulent urine escaped through the cannula. Urethrotomy was performed on December 3rd, but the patient died on the 12th of that month. The walls of the bladder were found to be half an inch thick; its mucous surface was dark purple. To the right of its floor was a circumscribed opening into a well defined sac, in Tyrrell's fascia, from which a thin pus escaped into the bladder. The wall of the sac was three-sixteenths of an inch thick; its upper surface was covered by the peritoneum, to which it was firmly adherent. After a discussion, the specimen was referred to the Committee of Reference.

Ciliary Staphyloma.—Mr. ARTHUR H. BENSON exhibited a specimen of ciliary staphyloma. He had, the same morning, enucleated the left eyeball of a stonecutter, aged 62, who had been struck by a splinter of stone in the left eye sixteen years previously. The sequence of events was probably as follows. The wound set up acute iridocyclitis and general inflammation of the anterior structures of the globe. This never totally subsided, but gradually changed into the chronic form of sclerotic-choroiditis anterior, with effusion of lymph into the anterior chamber, and blocking up of the iritic angle and of the percolation-spaces therein, thus producing a secondary glaucomatous condition, with increased tension of the intra-ocular fluids. Intense pain was produced in the same way. The increased tension, then acting on the anterior coats of the eye, weakened by the chronic inflammation which deprived them of their normal resiliency, produced the staphylomatous swelling, thus relieving the tension, and at the same time the pain.

Ovarian Dermoid Cyst.—Dr. WALTER SMITH presented a large dermoid cyst of the ovary from the body of a girl, aged 17, the subject of an abdominal swelling of some months' standing, and who died of gradual exhaustion. On examination, the tumour presented a multiplicity of tissues, all referable to the connective tissue series. The outer wall of the cyst consisted of true skin, and the tumour contained numerous loculi, filled with various matters, including fat, cartilage, hair, and bone.

lymph over the lung, which was completely collapsed and airless, except at the extreme apex, where some cheesy deposits were discovered. The left lung was largely hyperæmic. Blood was present in all the chambers of the heart, as well as in the pulmonary artery and the aorta. The cause of death was not very plain. It may have been a systolism of the heart, due to extreme obstruction to the pulmonary circulation; or a twisting of the inferior vena cava from pressure of so great an effusion in the right pleura.

REVIEWS AND NOTICES.

MONACO, THE BEAUTY SPOT OF THE RIVIERA. By T. H. PICKERING, M.K.Q.C.P., etc. Illustrated by M. Trautschold. London: Fleet Street Printing Works. Dublin: W. McGee. Monaco: A. Sinet. 1882.

IN about one hundred and fifty pages of pleasant reading, Dr. PICKERING has given an interesting account of this last and sweetest addition to the many attractive health and pleasure resorts of the Riviera. It must be admitted that Dr. Pickering is well qualified to form and state his opinion of the advantages and merits of the various places scattered about the coasts of France to which our invalids resort; for he has passed fifteen years—ten of them abroad—in studying different winter-stations. He sums up the advantages and drawbacks of Pau, Arcachon, Hyères, Cannes, Nice, and San Remo; and very fairly and finally fixes upon the principality of Monaco as possessing the highest attributes of a health-station. It is placed well above the sea-level; the air is dry, fresh, and never stagnant; the average temperature is as high as or higher than in any other spot; it is also more equable, because, as there are no rifts in the great rock barrier behind it, so the cold north wind cannot rush down any ravine or river-course to catch the unwary invalid, as at Nice and Cannes. The grand limestone rocks which wall it in reflect the sun's rays; and the luxuriance of its vegetation and the gorgeousness of its flower-gardens are remarkable, and are not exceeded by those of Dr. Bennet and Mr. Hanbury at Mentone. Monaco, so far as visitors are concerned, is comprehended in its lovely suburb of Monte Carlo—a spot than which no fairer can be found in Europe, and none fitter for an invalid, no matter whether it be his respiratory or his nervous system which is defective; he is invigorated, amused, and probably restored. It is objected to Monte Carlo, that its moral atmosphere is bad; that it is a paradise inhabited by devils. But devils should not be allowed to have all the lovely places to themselves; and Dr. Pickering is right when he says, in reply to the remark that, what with the casino and the rush of elegant and fashionable society, invalids would be exposed to dangerous temptation: "As a matter of fact, however, these so-called elements of danger are in reality a great advantage to the patient. No one can have wintered at stations solely devoted to the reception of invalids, such as Mentone and Hyères, or even at Cannes, and in a less degree at Nice, without being impressed by the baneful moral effect of the close proximity of fellow-sufferers. In these winter towns, the invalid is the only companion of the invalid; and hotels degenerate into infirmaries, *minus* the sanitary advantages and medical supervision of such establishments. Under these circumstances, the conversation even at meal-times turns naturally to the question uppermost in everybody's mind—the complaints from which they are suffering. Society, instead of diverting the thoughts of the patient, helps, on the contrary, to restrict them; and he is ever lamenting over his ailments, comparing his symptoms with those of his neighbour, or listening with bated breath to the doleful story of vain efforts, of intense suffering, and of fatal collapse." At Monte Carlo, on the other hand, the number of invalids, even should they greatly increase, will always be a minority as compared with the mere pleasure-seekers, and the patient will be insensibly drawn to think and talk of other things than his own malady. He can avoid the gaming tables, as he can avoid the gambling clubs of other towns; he can stroll along the broad sunny terraces, or sit under the shade of palm-trees in the exquisite gardens; and, if his health permit, he can enjoy in the afternoon daily a concert of the best kind, and this without fatigue or exertion. In short, nature and art here combine in fullest abundance to invigorate the strength and raise the drooping spirits of the careworn sufferer.

Dr. Pickering has included in his little volume a brief account of Monaco, the history of its reigning house, of its industries, and of the district around it. He is enthusiastic in his subject, and he may well be so; for it would be difficult to find a country without taxes, without pauperism as we know it, without a public debt, a chancellor of the exchequer, or a budget, and without a prison, and in which the children of the poor are educated without charge. Yet such is the happy condition of this miniature principality.

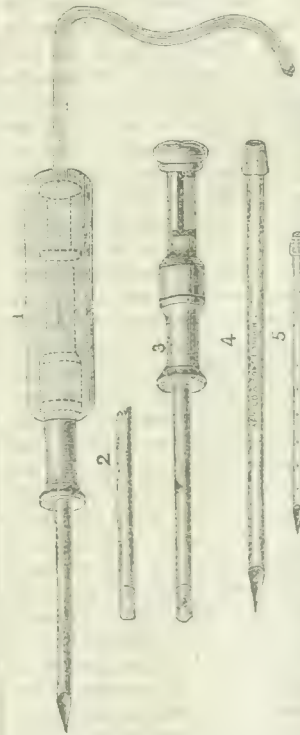
REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

TAPPING, AND A NEW ANTISEPTIC TROCAR.

It was an old-established rule in surgery, long before the introduction of antiseptic treatment, that every precaution ought to be taken in all tapping and exploring operations to prevent atmospheric contact with the interior of the cyst or cavity. The old-fashioned trocar is not well adapted for this purpose. Some years ago, I used a flexible tube attached to the cannula, and through its side I introduced the trocar, so that, on its withdrawal, the perforation was closed by the elasticity of the tube. This, however, was a very clumsy proceeding.

The siphon-trocar, invented by Mr. Charles R. Thompson of West-erham, has been very generally employed of late years, and a modification of it has been introduced by Mr. Spencer Wells for the purposes of ovariectomy. The protection against the admission of air depends wholly upon the action of the piston, which must fit the cannula accurately, and also be well greased, so that its action may be easy and secure. Sometimes this instrument is furnished with a stopcock which can be turned upon the retreating trocar; and this certainly affords additional protection. In my experience, however, piston-trocars are very liable to derangement.

The new trocar which I desire to introduce to the notice of the profession is a very simple and handy instrument. The special feature in its construction consists in this: that it is perfectly air-tight, and can be opened and shut within an India-rubber case (see Figs. 1, 2, and 3). It is composed of two metal tubes; the outer carries a pen-shaped lance, and the inner is round at the point, with a lateral opening. By a bayonet-joint, the trocar is opened and shut, at the same time the point of the lance is protected from injuring any internal part. The orifice and joints are introduced into the enlarged end of the India-rubber tube, which is slipped over a metal block, and then secured by a ring, and this serves for a handle to the instrument. It is adapted for all kinds of tapping; it can be used also for exploring or injecting purposes; or it can be very readily attached to the exhausting-apparatus of the aspirator. The trocar is manufactured by Messrs. Arnold and Sons of West Smithfield, in three convenient sizes. I have now employed it in every variety of operation, and with special advantage in cases of paracentesis thoracis. The opening and closing action within the India-rubber case is very readily accomplished, and the necessary movement can be easily performed by any



one after a little attention to the construction of the instrument. Fig. 4 represents a simple form of exploring-tube, to which an India-rubber bag can be adjusted. The capillary drainage-tube (Fig. 5) is intended for the treatment of anasarca; and it can be left in the subcutaneous tissue without any risk of injury to the deeper parts; and its position can be altered without another puncture of the skin.

JOHN WARD COUSINS, M.D. Lond., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital.

ALLEGED MEDICAL NEGLIGENCE.—An inquest has recently been held at Lidford, Devonshire, on the body of a woman, whom it was alleged that Dr. Pullin had neglected to attend, though summoned. The evidence showed great discrepancies in statement. We fail to see that blame attaches to Dr. Pullin—an opinion which coincides with that of the jury, who did not attribute any blame to the medical man.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 25TH, 1882.

MEDICAL ENDOWMENTS AT OXFORD.

THE recent appointment of Mr. Moseley as Linacre Professor of Physiology and Anatomy at Oxford, the vacancy in the office of Lichfield Clinical Professor of Medicine, and the announced intention to create a new special professorship of human physiology in the University, are elements in the restoration of the medical faculty at Oxford for which we have earnestly pleaded, and in favour of which the medical profession has pronounced itself, when appealed to, with unmistakable vigour. Such a work of restoration must, it is to be feared, be necessarily slow; and probably, but for the brilliant example to which we have been able to point in the progressive development of the medical faculty at Cambridge, neither argument nor protest would easily have availed to produce an immediate impression, even in the imperfect degree in which we may fondly believe that they have prevailed. Among the more hopeful signs has been the progress made at the Radcliffe Infirmary in developing clinical teaching. We have before us a paper headed "Radcliffe Infirmary, Hilary Term, 1882". It sets forth the days and hours of attendance for students. It announces for two days of the week an important clinic, with the physician of the week; and also a corresponding arrangement of out-patient clinic, with the surgeon of the week. On two days, surgical operations are set down; a practical course of "Minor Surgery" is given by Mr. Symonds; special instruction is given on "Methods of Medical Diagnosis" on Friday afternoons, by Dr. Darbishire; and on two days of the week Dr. Darbishire gives an out-patient clinic. In addition to the above, the attendance of students, if it is not, will be required at all *post mortem* examinations, due notice of which will be given. The vacant clinical professorship has not, we believe, been filled up; but it is interesting to see clinical teaching once more reinstated in Oxford from which, while the Lichfield Professor (who was also a Regius Professor of Medicine) had his way, it was wholly abolished, and clinical students were actually warned off. The obvious and immediate need at Oxford is some systematic organisation of the existing resources of the University, in such a manner as shall make those resources available in the form and at the times prescribed by the General Medical Council for the purpose of medical education. When this elementary piece of organisation has been obtained, it will still be necessary to add certain professional chairs and demonstrations in order to complete the curriculum for the first two years of study. Oxford may then once more begin to resume its place amongst universities in which medical teaching is something more than a distant promise, and cease to hold the comparatively painful position of being almost the only university in the kingdom from which the teaching of medicine is excluded.

It is well, therefore, to recall to mind the fact that the medical education of Oxford, as it now stands, what has been said in regard to it in the *British Medical Journal*.

1. The Regius Professorship of Medicine, as at present constituted, is worth almost no money. The income is: (1) from the Queen's Lectures, £100; (2) from the Medical Association, £100; and (3) from the Aldrich Professorship of Medicine, £100. (4) from the Linacre

tion fees, £70 to £100. 11. Lord Lichfield's Clinical Professorship, which is not united with the Regius Professorship, is worth £200 a year. No instruction has been given from either of these chairs for some time, a circumstance from which the University, at the present moment, is suffering great disadvantage. 111. The Linacre Professorship of Physiology and Anatomy has absorbed the old foundations for the encouragement of human anatomy, namely, the Tomlinsonian Prælectorship, and the Aldrichian Professorship. It is worth £800 a year, the sum which Merton College pays in place of the original endowment entrusted to it by Thomas Linacre, founder of the College of Physicians, and once a lecturer on medicine in Oxford. The Linacre Professor is engaged in teaching Comparative Anatomy to candidates for the B.A. degree. 1V. A separate Demonstratorship of Anatomy, worth £200 a year, also still exists, and was intended by the Commissioners of 1852 to provide for the teaching of Human Anatomy, as designed by Tomlins and Aldrich. The gentleman who holds this post is Curator of the Museum of Comparative Anatomy, and does not teach Human Anatomy. V. The beautiful old Physic Garden, founded by Earl Danby in 1622, is another heirloom of the medical faculty of Oxford. The chair of Botany was endowed by Dr. Sherard, and the College of Physicians of London elect the professor. By special provision, the clergy were excluded from this professorship, and preference was to be given to a medical graduate. The chair is now worth, with later additions, about £400 a year. VI. Lastly, a very important trust fund is administered by the governing body of Christ Church, a great part of which was left by Dr. Matthew Lee, in 1755, to provide for anatomical teaching in relation to medicine exclusively. Dr. Lee's expression of his intentions is very clear and precise. He assigns, in his will, £100 a year as the salary of a reader in anatomy: £50 for expenses of two bodies and dissection; £30 to a reader in mathematics and physics; £50 a year to the Dean and Chapter for management; and the remainder to scholars from Westminster School. The trust is now worth £3,400 annually. It is spoken of in the return made by Christ Church to the Commissioners of 1874 as "Dr. Lee's Benefaction for Senior Students in Natural Science". This is not quite accurate: firstly, because Dr. Lee designed the major portion of his benefaction for students in anatomy as bearing on medicine, and not for natural science generally; and, secondly, because Christ Church uses nearly half of Dr. Lee's trust-money to pay classical scholars from Westminster School; whilst the remainder is used to support a most efficient chemical laboratory, and to pay, in part, the salaries of the accomplished chemist, zoologist, and physicist, who are styled "Lee's Readers". No part of Dr. Lee's bequest is now assigned to medical studies, though it should be stated that the present application of Dr. Lee's fund has obtained Parliamentary sanction.

The following was a correct statement of students in, and expenditure on, medicine and natural science in the University of Oxford at that time (1878). Average annual number of medical graduates, 3; ditto of persons taking the B.A. degree through the Natural Science School, 24. Fees to examiners in medicine and natural science, annually, £100; salaries and fees to professors and to their assistants, and annual expenditure on buildings, apparatus, etc., £6,500; salaries to College lecturers in natural science, and annual expenditure on laboratories, £10,860.

The petition to the University of Oxford was signed in 1878 by a number of professors and teachers of medicine and the allied sciences, physicians, chemists, and biologists in the University of Oxford, or graduates of Oxford, who submitted to the Oxford Commissioners a statement respecting the relation between the University and the medical profession. The petitioners set forth that they could not but see that the present state of the University was such as to prevent any real progress in the profession, and that the small number of the Oxford graduates who entered the medical profession were mostly the result of chance in the University of Oxford, and not of any special provision for the education of the profession in Oxford. They were of opinion that a

more intimate connection of the University with the medical profession would be of advantage in many ways: to the University itself, as giving it wider interests and stronger claims on national sympathy; to the profession, as raising its standard of general culture; to the progress of medical science generally; and also to the progress of those sciences which were usually regarded as ancillary to medicine, more particularly of biology. On all these grounds, they regarded the question as one of national importance. They believed that other European universities, with scarcely an exception, recognised the preparation of young men for the medical profession and the advancement of medical science as among the most important of their academical functions; and they expressed their regret at the present imperfect condition of the medical faculty at Oxford, and thought it highly desirable that this imperfection should be remedied, unless it should be found to depend upon unavoidable causes. This petition was signed by a great number of eminent persons, the names of whom we append in a note.*

In a letter written at the time by Mr. Ernest Hart, on the subject of the capacity of the Radcliffe Infirmary for clinical teaching, and which was put in evidence before the Commissioners, he pointed out that, in looking through the reports of the Radcliffe Infirmary for 1875 and 1876, there was an excellent list of general cases for clinical instruction; the medical cases were remarkably good as a clinical field, including, in one year, thirty-five cases of enteric fever; and a good supply of diseases of the nervous system and digestive system, with a department of skin cases and aural cases, obviously capable of considerable development. The surgical in-patients also afforded a large field of instruction. The surgical service did not include any large number of accidents, but a very good and instructive series of general surgical cases; and there could not be the least doubt that such a field as this would afford an excellent basis of clinical instruction. Of course, if the hospital became a clinical school, and if, as would certainly be the case before long, satisfactory arrangements were made at Oxford, and high class clinical and operative teaching were instituted, a more important series of cases would be attracted to the hospital. In the London hospitals, as well as all the German hospitals, for example, irrespectively of accidents, the character of the cases admitted was very largely determined by the brilliancy of their reputation. University College and King's College Hospitals, when officered by Liston and Fergusson, had probably a larger number of important operations than any of the great hospitals, although the number of surgical beds in each did not exceed fifty. Stokes and Graves each taught from thirty beds, he had been told, at the Meath Hospital; Skoda wrote his great book from twenty-five beds; Collis, of Dublin, never had more than from thirty to forty beds; and Volkmann, at Halle, had revolutionised the surgical practice of Germany in a small hospital situated in a town a little larger than Oxford. The Sir James Simpson of the Continent was Baron Scanzoni, whose clinical teaching had been seated at the little town of Würzburg, with fewer inhabitants than Oxford. Mr. Lister, Dr. Robert McDonnell, Professor Billroth, Dr. Bristowe, who wrote open letters which were published at the same time, each treated the objection that good clinical teaching could not be carried on at the Radcliffe Infirmary, with about two hundred beds, as "puerile," to use

the words of Dr. McDonnell. Dr. Wilks urged especially that the University of Oxford should regard it as one of its functions to afford a thorough training in medicine; that the opportunities of its doing so existed; and that it was in the interest of the profession that as many young men as possible should pass through the University portals.

The new Linacre Professor of Anatomy and Physiology is, we believe, sincerely anxious to organise and develop the preliminary medical instruction of the University of Oxford, and to assist in so arranging the curriculum as to make clinical teaching available for the earlier years of medical studentship under the conditions and in the order of study prescribed by the General Medical Council for subsequent graduation; he finds, however, many difficulties in the way, both in the examination regulations of the University, and in the time-honoured perversion of medical endowments.

MEDICAL ADMINISTRATION IN INDIA.

ONE of the most pressing, and at the same time important, questions of the day in medical politics is that of the provision to be made for the medical requirements of our Indian empire. This question does not concern merely the administrative and professional arrangements for satisfying the wants, large as they are, of the army in India, European and native; but includes also the direction and management of a vast number of civil medical establishments. The civil establishments under the Indian Government comprehend those for the medical superintendence and charge of the gaols, dispensaries, civil stations, and of the police, of India; the professorships and minor appointments, with the educational arrangements of the great medical colleges in the several presidencies; and, lastly, the sanitary and public vaccination departments—in short, all the departments for the regulation of those matters which in this country are embraced in the several Public Health Acts, and administered under the directions and supervision of the Local Government Board. The organisation in India for the execution of these numerous and important civil medical duties has been hitherto quite peculiar, in no way having any analogy with the system in force in England. All the civil duties above mentioned, and all the civil appointments connected with them, have been placed in the hands of the medical officers of the Indian Army. The Indian Government has not engaged in its service a staff for civil medical purposes; and as there is not in the country any body of European general practitioners, the Government has necessarily had to go to the army medical staff for carrying on the civil, medical, and sanitary work of the empire. The medical officers transferred from the military medical service for these purposes to the civil governors, have ceased to be in any way under military control, or to have military duties to perform, though they have been liable to be removed from their civil employment, and sent back to their military positions, if the civil governing authorities might so determine. But even while holding their civil appointments, the Indian army medical officers have always clung to their connection with the military service; and very naturally, too, since on their grade and position in the army ranks has depended their rate of pension on retiring from active service. Thus, an Indian army medical officer may have been acting in civil medical employment for nearly the whole of his career in India, yet may retire with a title indicative of a certain military rank, and a pension regulated by the terms belonging to the rank attained. Moreover, in many instances, the Indian medical officers have been employed on duties altogether foreign to their medical calling. They have held appointments as political agents, opium agents, conservators of forests, postmasters, mint and assay masters, directors of telegraphs, and other equally non-medical charges. Under the rule of the East India Company, instances of the kind were very numerous; and no wonder, since the superior scientific attainments of the medical officers were most valuable to the Company in opening up the mineral, botanical, and other resources of the country. Since the transfer of India to the Crown, the examples of medical officers being employed in such capacities have been less frequent, but appointments of the kind have been, and still are, occasionally met with. On the other hand, the

* Joseph Lister, F.R.S.; W. R. Sanders, M.D.; J. S. Bristowe, M.D., F.R.C.P.; W. H. Broadbent, M.D., F.R.C.P.; F. H. Sieveking, M.D., F.R.C.P.; O. Sturges, M.D., F.R.C.P.; F. de Havilland Hall, M.D., M.R.C.P.; T. Lauder Brunton, M.D., D.S.C., F.R.S., F.R.C.P.; Henry Power, M.B., F.R.C.S.; David Ferrier, M.D., F.R.S.; Richard Davy, M.D., F.R.C.S.; Robert McDonnell, M.D., F.R.S.; Samuel Wilks, M.D., F.R.S.; G. T. Fincham, M.D., F.R.C.P.; Reginald Southey, M.D., F.R.C.P.; A. B. Shepherd, M.D., F.R.C.P.; H. B. Donkin, M.B.; C. T. Williams, M.D., F.R.C.P.; Heywood Smith, M.A., M.D.; Robert Bridges, M.B.; J. W. Browne, M.B., M.A.; E. H. Lendon, M.B., M.A.; J. F. Payne, M.B., F.R.C.P.; E. Long Fox, M.D., F.R.C.P.; J. H. Bridges, M.D., F.R.C.P.; W. H. Corfield, M.D., M.A.; Thos. Whipple, M.B., F.R.C.P.; Edward I. Sparks, M.B., M.A.; G. F. Blandford, M.D.; James Bryce, D.C.L.; T. E. Holland, D.C.L.; M. A. Lawson, M.A.; G. C. Brodric, M.A.; W. Esson, M.A., F.R.S.; C. J. Faulkner, H. F. Tozer, M.A.; H. F. Pelham, M.A.; Ingram Bywater, M.A.; C. W. Boase, M.A.; W. W. Jackson, M.A.; H. N. Moseley, M.A., F.R.S.; P. F. Willert, B.A.; R. W. Raper, E. Ray Lankester, M.A., F.R.S.; T. J. Puckle, B.A.; Edward Jond, M.A.; C. F. Yule, M.A.; W. Boyd Dawkins, M.A., Oxon., F.R.S.; J. R. Thursfield, M.A.; Frederic Harrison, M.A.; Henry Thornton Wharton, M.A.; J. C. Galton, M.A., Oxon., M.R.C.S.; Evan H. Hare, M.A., Oxon., M.R.C.S.; F. Dawtrey Drewett, B.A., Ch. Ch.; T. H. Green, M.A.; John Nichol, M.A.; A. H. Sayce, M.A.; Charles Sankey, M.A.

surgeons of the British Army Medical Department, whether serving in India or elsewhere, are throughout their career in the public service constantly employed in military medical practice. They are never employed in other than medical duties, and these duties are almost without exception directly connected with the military service. The difference between the two medical departments has thus been very marked; while the Indian Medical Department has partaken largely of a civil character, the British has been restricted to a sphere which is purely military. With such a divergency between them, it may be readily understood how it has happened that the efforts which have been repeatedly and strenuously made to amalgamate the medical branches of the British and Indian services, in the same way as has been done with other portions of the British and Indian armies—with the Engineers and Artillery, for example—have signally failed. With regard to the Engineers and Artillery, and the European regiments of the Indian service, the difficulties in the way of amalgamating them with the corresponding arms of the British service were comparatively slight, inasmuch as the exercises and duties in which they were constantly occupied were alike in both. We still see proposals put forth for the assimilation of the British and Indian medical services; but where there exists such dissimilarity, all such schemes will certainly prove abortive. The impediments to assimilation which have been already named are potent enough, but there are still others which militate against success in any undertaking of the kind. By the terms of the Queen's proclamation on the transfer of India to the Crown, every native, irrespective of caste or creed, had conferred on him a right to enter the lists for all Indian appointments which are open to public competition. Many natives of India have competed for appointments, and some have been successful and are still holding appointments, in the Indian Army Medical Service. But, as one of the preliminary qualifications for obtaining a commission in the British Army Medical Department, every candidate has to sign a declaration upon honour that his parents are of unmixed European blood. It is obviously impracticable to reconcile such discrepancies as these, or to assimilate or amalgamate the two medical departments, so long as the regulations by which they are governed contain provisions at such complete variance with each other.

There is only one possible solution of the difficulties which result from the constitution of the Indian Medical Service, and the complex duties in which its officers are engaged; and this solution is one which has been advocated by various able administrators in both services. The first step must be a complete separation between the civil and military medical services of India. This has been partially effected by the appointment of sanitary commissioners and medical officers to advise the civil governors and chief commissioners on sanitary and medical subjects; but, to be effective, the separation must be as entire as it is in England and in every State of Europe. The medical and sanitary requirements of the teeming populations of India are vast in amount, of a most intricate nature, and demand distinct administrative and executive establishments. The diffusion of knowledge on sanitary subjects by the suitable education of natives selected for the purpose, the instruction of native medical practitioners, the preservation of the public health under all the difficulties inseparable from an Indian climate, are concerns of the deepest import to the local government of the country. A distinct organisation for regulating and carrying on these serious concerns is surely as necessary in India as it can be in any country of Europe. India itself, as a country, is fast losing many of the special features which distinguished it in former days from the leading countries of Europe. The rapid communication between Europe and India, through the constant succession of steam-vessels, and the Suez Canal, has brought India into closer proximity with the continent of Europe; while the spread of education and commerce, and the extension of the flourishing network of railways and telegraph lines, are still further helping to break up the differences which formerly existed between the conditions of Indian and European life and habits. These, and many other circumstances which might be

mentioned, are all tending to render the system of sanitary organisation and administration which has been found suitable in Europe equally applicable in its general features to the wants of India.

Whenever a separate medical organisation for the civil medical duties of the various provinces of India becomes an accomplished fact, all real difficulties in the way of the Indian Military Medical Department coalescing with the British Army Medical Department will have disappeared. In time of war, the native army joins with the European troops, and without any distinction between them—all equally act under the orders of the officer in chief command. No good reason can be advanced for not placing the medical concerns of the whole of the military forces of India under the same administrative medical officers, and thus getting rid entirely of the double administration, which has been such a source of friction and unnecessary cost. The details of the administration and the arrangements for the performance of the duties of native hospitals must continue to differ in certain respects from those of European hospitals, as they do at present; many matters will have to be considered and regulated, so that the interests of the present incumbents of appointments in the Indian Army Medical Service may not be interfered with; but, if once the entire separation of the civil and military medical services of India, and the junction of the latter with the general army medical services, be decreed, there will not be wanting well informed and competent men to whom the task may be safely committed of framing the necessary regulations for all such matters. After all, the Indian empire is now part of the British empire; and the armies by which the British rule is maintained, and the safety and order of the territory preserved, though divided into native and European, are as much British forces as those in any other part of the British dominions. They are equally under the supreme rule and direction of the British Government. If this applies to the military forces of the country as a whole, it should equally apply to all the parts, the medical included, of which these forces are composed. Unity of system, and unity of control and direction, are as essential for the smooth working and efficiency of the medical body, as of any other corps or department of an army.

GALVANISM AND HYPNOTISM.

M. CHARCOT has made a series of interesting communications to the Biological Society of Paris, concerning the phenomena resulting from the application of a galvanic current to the cranium during the lethargic period of hypnotism observed in hysterical patients. During the period of hypnotic sleep of hysterical patients, which M. Charcot calls "provoked hypnotic lethargy," there exists a state of neurotic superexcitability, characterised by an aptitude of the nerves and muscles to act under the influence of a mechanical stimulus. M. Charcot's most recent experiments show that this superexcitability resides, not only in the muscles and nerves, but in the motor regions of the cerebral centre. Thus the galvanic current acting on one side of the cranium produces sudden muscular starts in the face and limbs of the opposite side; while the same current does not give rise to any contraction when the patient is awake. An hysterical patient, thrown into a state of lethargy by the usual means, falls into a state of neuromuscular superexcitability. If one of the poles (the positive) be placed on the frontal protuberance, or two centimetres above the pinna of the ear, and the other pole being placed on the median line of the sternum, when the current is interrupted, a violent start is observed on the opposite side to that on which the pole is applied. The commencing of the hypnosis drawn outward, the arm and leg are suddenly raised upwards. These movements take place in a single region, or in all three at once, on whatever side of the cranium the current is applied. As the movements of the face might be attributed to the direct influence of the current on the facial muscles, the experiment was repeated in the following manner. The poles were both placed on the same side of the cranium; one a little above the pinna of the ear, or four or five centimetres behind and above the mastoid process; the other on the nose, three centimetres from the median line, at the

extremity of a vertical line passing by the meatus auditorius externus; this region corresponds to the upper part of the cerebral motor region. The results were similar to those yielded by the preceding experiment.

Negative results attend these experiments repeated when the patient is awake. It may be presumed that, during the hypnotic lethargy, there is a special excitability of certain regions of the brain. How the current passes through the bones of the cranium, is a question which M. Charcot does not attempt to solve at present. The important fact is that the motor cerebral regions, during hysterical lethargy, are sensible to the influence of a galvanic current.

At a more recent meeting, M. Charcot communicated fresh details and modified conclusions, which he had previously suggested rather than arrived at. M. Charcot insists on the impossibility of adopting for the moment other than temporary conclusions.

Up to the present time, M. Charcot has studied ten cases of hysterical affections; these he divides into three groups. The first group consists of four patients. Galvanising the half of the cranium, as previously described, when these patients were in a state of lethargy, accompanied by neuro-muscular excitability, always provoked localised movements on the opposite side of the body—face, arm, and leg. These movements were less sudden than they generally are when the current is interrupted. The same experiment repeated when the patients were awake gave negative results. Wishing to determine whether the galvanic stimulus is transmitted through the integuments, the cranial bones, and the dura mater, finally reaching the brain, M. Charcot repeated, with some modifications, Professor Erb's experiment, which proved the affirmative. Two metallic rods being placed in communication with the cerebral matter, and a telephone, a slight crackling noise is heard when the galvanic current is interrupted. If the electrodes be applied to the shoulder, the telephone is silent when the current is interrupted. In these researches, the galvanoscopic frog's foot gives the same results. M. Charcot considered that these experiments support the opinion that currents of a certain intensity can reach the brain; but he would not adopt any conclusion, and left the question open to discussion by his colleagues.

M. Charcot repeated his experiments on four other patients, constituting the second group. In this group of patients, the same patients did not always yield the same result when an identical experiment was repeated. Invariably, however, the movements of the limbs and face occurred when the current applied to one side of the cranium was interrupted, and with a marked predominance on the same side of the body. Three of this group, when awake, had sudden movements when under galvanic cerebral excitation; the remaining patient presented these symptoms only when hypnotised.

In the third group, two patients remained perfectly quiet during the cerebral galvanisation. One of these was exempt from neuromuscular excitability, and another presented it to a limited extent.

M. Charcot communicates these details without drawing any conclusion. He offers them to the criticism of his colleagues; suggesting only that the excitability of the dura mater may perhaps give some clue to a solution. His suggestion is based on the results of the well known experiments of Marshall Hall, Brown-Séquard, Bochefontaine, and Duret.

MEDICAL FEES FROM SCHOOL BOARDS.

SINCE compulsory public elementary education was established in England and Wales in 1870, an enormous number of children are instructed in the schools provided for this purpose, and a very important proportion of them fail to attend from illness. If, therefore, the authorities of School Boards require medical certificates of this sickness before they will allow it to be pleaded as an excuse for non-attendance at school, this action would not only engage a great deal of additional services by medical men, but the annual amount of the fees to which they would be entitled would be a large sum in excess of that which they now obtain.

We have no doubt, if the members of our profession had to entirely depend upon the parents and guardians of the sick children for the payment of these fees, not only would many of them become bad debts, as a great number of the persons who were responsible to pay them could not afford to do so, but much annoyance, risk, and loss of time would be occasioned in obtaining the fees from several others who could afford to pay them; while it is probable that a large amount of such would be lost. None of these grievances, however, would be likely to be felt if the medical certificates in question were legally ordered and paid for by the School Boards.

At Southwark Police Court, on the 18th instant, Mr. Bridge was occupied for a long time in hearing a case which was argued on both sides, as to whether the School Board was liable to pay the fee for a medical certificate respecting the illness of a boy who attended school under the provisions of the before mentioned Elementary Education Act, when the certificate was required by an officer of the Board. On behalf of the medical man under whose care the child had been, it was maintained that, if the officers of the Board were not satisfied with his statement, and required a medical certificate, they were bound to pay for the same. Documentary evidence was also produced to show that a communication had been made by him to the Education Department respecting such payments, and their consent to them. The assistant to the medical man told the School Board officer that the boy was not fit to go to school, when the latter asked the assistant for a certificate to submit to the Committee; and he said that his master declined to give it, unless he was paid for such by the School Board. The officer had, according to his own admission, no authority to pay for medical certificates in cases of this kind. The magistrate, we believe, rightly stated that he was of opinion that, when a medical certificate was demanded by this officer after the doctor had stated that the child, from illness, was unable to attend school, the School Board was bound to pay for it; and he consequently made an order for the Board to pay £1 5s. for costs, and discharged the case against the child's father.

We may add that we have reason to think that, if the Education Department had not consented to the payment for such certificates, the officer might have been held to be liable to pay for them; as there is a decision in the case of *Watling v. Walters*, tried before Mr. Justice Park at the Hereford Autumn Assizes in 1823, and which does not appear to have been overruled, that, if a deputy-overseer instruct a surgeon to attend a poor man professionally, he is liable to pay the surgeon's fee for so doing.

THE National Council of Zürich has decided on making vaccination compulsory.

HERR WICKERSHEIMER, the inventor of the fluid for preserving anatomical and pathological preparations, is reported to have discovered means of preserving bread, meat, and beer, for a long time.

A NEW street, in the neighbourhood of the General Hospital in Vienna, is to bear the name of "Skoda Street" (*Shodagasse*), in honour of the celebrated physician and clinical professor.

THE Municipal Council of Villefranche, in the department of the Rhine, has voted the erection of a statue to the illustrious physiologist Claude Bernard. It is to be placed in the square which already bears his name.

A SUMMONS issued against a grocer at Birkenhead for selling coffee which Mr. Vacher, public analyst, pronounced to contain a large percentage of chicory, has been dismissed with costs against the corporation; one of them, an official at Somerset House, having certified that the coffee was pure and unadulterated.

AN epidemic of scarlet fever is feared at Oldham, where, we understand, there is no accommodation for such cases in the hospital at the disposal of the sanitary authority. The cases have already increased from fourteen to twenty-one.

DR. WILLIAM MURRELL, Lecturer of the Westminster Hospital School, has been appointed the additional Examiner in Materia Medica in the University of Edinburgh, in place of Dr. Lauder Brunton, who has resigned.

AMONGST the Parliamentary Bills which have been read a first time are, a Bill by Mr. Peter Taylor "to repeal the compulsory clauses of the Vaccination Acts", to be read a second time on Wednesday, June 21st; and a Bill for the Total Abolition of Vivisection, to be read a second time on Wednesday, June 28th.

DURING the fortnight ended the 4th of February last, the mortality recorded for the parish of Newington was, with one exception, the highest ever reported—viz., 160 deaths. Exactly two years ago, it reached 213; the cause both now and then being the prevalence of foggy weather and an excess of whooping-cough, the latter causing 26 deaths. No fewer than 35 deaths happened in the infirmary, 10 being parishioners.

DR. BECKER, assistant-surgeon to the hospital at Gortitz, was assaulted on the 2nd of this month by a male attendant, who had been discharged the previous day for transgression of duty. The man, who was armed with a dagger and pistol, waylaid Dr. Becker in the street, and wounded him on the thigh. He was at once arrested. The wound is reported to have been not dangerous, though likely to cause disability for several weeks.

PROFESSOR FLOWER, LL.D., F.R.S., will commence his course of nine lectures on the Anatomy, Physiology, and Zoology of the Edentata, in the Theatre of the Royal College of Surgeons, on Monday next. The following is his programme. General Characters of the Order. Family *Bradypodidae*: the Sloths. *Megatherium* and other great extinct Ground Sloths of America. Family *Myrmecophagidae*: the true Anteaters. Family *Dasypodidae*: the Armadillos. *Capybara* and other extinct Armadillo-like animals. Family *Manidae*: the Pangolins or Scaly Anteaters. Family *Orycteropodidae*: the African Anteaters or Aard-varks. The extinct Edentata of the Old World. Classification of Edentata and relation to other groups.

THE LATE CAPTAIN SELBY.

WE have received the special telegram to-day (Thursday) from Constantinople, which gives the particulars of the injuries and progress of the gallant seaman. Dr. Særell reports that the chief injury consisted in a laceration over the vertex, fracturing the bones of the skull severely, and greatly depressing the fragments. The larger fragment of the left parietal bone was four inches long by three broad; a smaller fragment was four inches long by two broad, and was removed by operation. A hemorrhage occurred within the cranium, and secondary hemorrhage followed, the blood reaching the left ventricle. The patient became paralysed of the right arm occurred, with convulsions, commencing on the eighth day. In such a case, trepanning would have been of no use; but the wound was closed, and the severe nature of the injuries inflicted on the brain and the membranes, frustrated all efforts to save the patient.

THE NAPPER TESTIMONIAL.

A committee has just been addressed by the honorary secretary of the Napper Testimonial Fund to the medical officers of cottage hospitals and others interested in their management and progress, together with a list of those who have already contributed towards the fund. All who have watched the progress of the fund, and its progress, has latterly rapid and encouraging, and it is hoped that the success of the testimonial

which it is proposed to offer to Mr. Napper, as the originator, and in the best sense of the word the founder, of the cottage hospital system. The list of subscriptions already received contains names that are representative of every branch of the profession; and in a cause in which not only medical men, but peers, members of Parliament, clergymen, and members of other professions, have already interested themselves, there should be an earnest effort by everyone in any way connected with cottage hospitals to take a share. It would be a graceful recognition of the debt which the system as a whole owes to Mr. Napper if the officials connected with each hospital were to join their subscriptions, and send them to the fund as the contributions of particular cottage hospitals, instead of individuals. There must be now in actual working in the United Kingdom at least two hundred and fifty or three hundred such hospitals. If the officials of each of these were to contribute amongst them only £5, a handsome sum would be raised towards the giving of a testimonial worthy of him who has done so much for the good cause. We commend the fund very sincerely and earnestly to the profession at large.

THE NOTIFICATION OF INFECTIOUS DISEASES.

THIS subject has recently been under discussion in two of the Branches of the Association. At a special meeting of the Lancashire and Cheshire Branch, held on February 8th, it was resolved, after discussion:

"That, in the opinion of the meeting, the compulsory notification of infectious diseases is of great public and national importance. In carrying out this object, the meeting believes that the responsibility of notifying disease should rest with the householders, and that the medical attendant should possess the voluntary power of notifying cases of infectious disease."

A discussion on the subject was also introduced by Mr. Nelson Hardy at a meeting of the South London District of the Metropolitan Counties Branch, held on the 17th inst., when it was resolved:

"That it be suggested to the Chairman of the Parliamentary Bills Committee as desirable, that the opinion of the profession in the Metropolitan Branch be ascertained in a similar manner to that adopted by the Dublin Colleges, as to the proposals brought forward by the Dublin Branch of the Association, with regard to the notification of infectious disease."

A report of the proceedings of the two meetings will appear next week.

HOSPITALS FOR INFECTIOUS DISEASES.

THE Local Government Board have recently been petitioned to them as to the desirability of establishing joint infectious hospitals for several adjoining districts, on the ground of saving long and sometimes fatal journeys to distant hospitals, and also of having a more efficient use of several existing hospitals. The Board, in reply, thinks that hospital accommodation can be more efficiently and more economically provided for several adjacent districts of moderate extent, by one hospital serving for all the districts, than by the authority of each district providing a separate hospital.

UNIVERSITY OF CAMBRIDGE.

A CORRESPONDENCE has lately been going on between the Executive Committee of the General Medical Council and the Local Examiners of the University of Cambridge; the Committee being of opinion that the candidate should institute an examination in the month of September, for the convenience of those who are medical students who have completed the preliminary examination required by the Council. This has become the more desirable, inasmuch as the College of Physicians has now relinquished its preliminary examination, which has hitherto been held in September. The Syndicate were at first inclined to make the examination, but have at length decided to propose to the Senate of the University that the preliminary examination in September, is a matter of which no doubt, the name will be given. The same examination will be held by another who intend to enter the University in October, so as to give opportunity in such subjects as will excuse them from the preliminary examination of the University. The advantage of this is that it will be a more and

natural science is obvious, as pointed out by the teachers of those sciences in a memorial to the Syndicate, inasmuch as the students who succeed in doing this will be able, immediately on commencing their residence in the University in October, to commence their attendance on the lectures of the professors at the beginning of the several courses, instead of being obliged, as is now usually the case, to wait till after the "Previous Examination" in December, or till a still later period. The proposal of the Syndicate has thus far been favourably received in the University, and a grace for the confirmation of it will soon be presented to the Senate.

THE CONVICT WESTBY.

IMMEDIATELY after the publication of our remarks on the case of the convict Westby, a special inquiry into his mental condition was ordered by the Home Secretary. That inquiry was entrusted to Dr. Orange, Medical Superintendent of the State Criminal Asylum at Broadmoor, and Dr. Gover, Inspector of Prisons; and these gentlemen had a long interview with the convict in the prison at Nottingham. Their report was, of course, a private document for the information and guidance of Sir William Harcourt; but there can be little doubt about its purport, as its presentation was at one followed by a respite. Westby will probably be removed to Broadmoor, as soon as the necessary arrangements have been made. This result is both satisfactory and unsatisfactory. It is satisfactory, because it prevents the execution of an unfortunate lunatic; and it is unsatisfactory, because it reflects discreditably on the working of our judicial system in criminal cases in which the defence of insanity is set up. Ample and conclusive evidence of insanity was adduced at the trial of Westby; and it is difficult to understand why this evidence was disregarded, and sentence of death passed on a youth whose only crime is that he is labouring under hopeless disease of the brain, which has embittered his existence for some years past, and cast a deep shadow on all his remaining days. His condemnation must be pronounced a deplorable incident in contemporary judicial history; but such deplorable incidents will recur from time to time until our judges have the benefit of some scientific training, or are aided by medical assessors in cases in which pathological questions are involved.

UNITED HOSPITALS RIFLE ASSOCIATION.

THE annual general meeting of the above association took place at King's College Hospital on Tuesday, February 14th. The secretary, having read his report, was able to congratulate the association on its growth, five hospitals having now joined it. The treasurer, in his report stated that the finances of the association were in a very satisfactory state, considering that a challenge cup of the value of fifty guineas had been purchased, and that a prize meeting for members had taken place. The proceedings terminated with a cordial vote of thanks to the President, General Sir R. Wilbraham, K.C.B.

EPIDEMICS AND THE MILK-SUPPLY.

THE revelations made from time to time by medical officers of health, when their attention is turned to this subject, describe so much ignorance and neglect, and such fatal sources of disease, that it is not surprising that "milk-epidemics" are so numerous, but rather that they should not be more often recorded. Dr. Goldie has been investigating the probability of the spread of a certain epidemic which has just been visiting Leeds through the medium of the milk-supply. He has come to the conclusion that the way in which some of the milk-supplies are stored in dirty houses, where all the usual operations of a whole household are being carried out, with, in many cases, gallons of milk standing in open vessels, is simply a ready method of spreading disease of such a character as typhoid or other infectious disease. Dr. Goldie strongly recommends that the Health Committee of the city should make by-laws to prevent the sale of milk for public use by any person who has no better accommodation for keeping milk than a single living-room. He states that he lately exam-

ined some milk in such a so-called milk-shop; the surface of the milk being simply blackened with the accumulation of dust which, to use Dr. Goldie's graphic expression, had been licked up by the milk. There was no history of disease in the house where the delectable specimen of "pure milk" was found; but the notion of a fluid which is, as it were, typical of health-giving and dainty qualities as an article of food, being in such a condition, is in itself as repulsive as it is dangerous to the health of the community, more especially to the juvenile portion of it.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

At a meeting of the Association, held on Wednesday, the 15th inst., the following list of office-bearers were duly elected. *President:* *Samuel Cartwright. *Vice-Presidents:* J. A. Baker, *Thomas Edgell, Francis Brodie Imlach, S. J. A. Salter, F.R.S., John Smith, M.D., F.R.S.(Ed.). *Treasurer:* S. Hamilton Cartwright. *Honorary Secretary:* J. Hamilton Craigie. *Council:* Edward Bartlett, *T. W. W. Fay (Liverpool), F. Fox, *Peter Orphoot, M.D.(Edinburgh), W. G. Ranger, Augustus Winterbottom. An asterisk is prefixed to the names of those who did not hold a similar office in the preceding year.

THE HUNTERIAN SOCIETY.

At the annual general meeting of this Society, which took place in the London Institution on Wednesday, the 8th instant, the following officers were elected for the ensuing year. *President:* J. Hughlings Jackson, M.D., F.R.S. *Vice-Presidents:* J. E. Adams, Esq.; F. Gordon Brown, Esq.; Waren Tay, Esq.; M. Brownfield, Esq. *Librarian:* P. L. Burchell, M.B. *Orator:* George Roper, M.D. *Honorary Secretaries:* R. Clement Lucas, B.S.; G. E. Herman, M.B. *Council:* J. E. Bowkett, Esq.; C. Davidson, Esq.; W. J. Dickson, M.D.; E. Dukes, Esq.; Alex. Grant, M.A., M.D.; E. G. Gilbert, Esq.; W. T. King, Esq.; Stephen Mackenzie, M.D.; H. Port, M.D.; W. Rivington, M.S.; G. J. B. Stevens, Esq.; R. M. Talbot, Esq.

ZOOLOGICAL PATHOLOGY AT THE PATHOLOGICAL SOCIETY.

HUMAN anatomy, as a science, has gained indefinite benefit from the labours of comparative anatomists. In a truly scientific spirit, the Pathological Society has recently, as our readers are aware, given fresh encouragement to what must be termed comparative or zoological pathology. As the principle of pathology is wholly scientific, it is rather singular that the diseases of animals have been so little studied by pathologists. We say singular intentionally, and for this reason: that, in working at the allied science of histology, preparations illustrating the simple tissues of the human body, and even sections of the viscera, are constantly demonstrated to students in our best medical schools, the specimens being taken without any scruple from corresponding tissues and organs in dogs, cats, guinea-pigs, "and such small deer". This is done because it is more convenient to make use of the lower animals for such a purpose, as histological structures should be prepared when quite fresh, and animals can be slain to order. Still, error has arisen from attempting to glean a minute knowledge of some of the human viscera from the same organs in other mammalia. In the case of zoological pathology, we have to expect what is of still purer satisfaction to us than the avoidance of error, namely, extension of knowledge. Until such knowledge is gained, it cannot be applied to the elucidation of disease in man, a fact that must ever check the pathologist from smiling at the exhibition of a diseased plover, or a specimen of skin-affection in a pig. As to specimens actually exhibited at the Society during this session, we may draw attention to Dr. Creighton's examples of bovine tuberculosis in a ruminant allied to the genus *Bos*. A description of these specimens will be found in our report of a meeting of the Pathological Society at page 14 of this volume of the JOURNAL. The upper surface of the diaphragm was covered with tubercle of the bovine type; the lower bore patches of tubercle of the form which affects our own species. This suggests interesting questions about the relation of variety in disease to differences of genera,

all the diseases mentioned in their local Act. The success of the scheme depends largely upon the attitude of the profession; and their cordial co-operation with the health authorities, in their endeavours to stamp out the threatened epidemic, will be of inestimable importance.

HOSPITAL SATURDAY.

ACCORDING to the opinion of Mr. H. Burdett, based on actual experience, and many years' study of the subject, Hospital Saturday has practically proved a failure everywhere. In London, after several years' labour, begging for alms in the public streets, the institution of numerous benefit performances, and other means which the working men justly regard as illegitimate, the sum subscribed by the whole of the working men in London for upwards of one hundred hospitals and other institutions amounted to a less sum than the workmen on the Clyde have frequently subscribed for one of the hospitals at Glasgow. The proposal to establish a Convalescent Institution, which should be founded and supported by the working classes in the metropolis, he admits to be worthy of commendation. He hopes that it will result in the abandonment of the Hospital Saturday movement, in favour of a working men's Provident Convalescent Home. Such a result would relieve the London hospitals from much anxiety, and would get rid of a movement which does the hospitals far more harm than good, and which has never proved, and is never likely to prove, a substantial financial success.

LONDON HOUSES.

THE report of the engineer of the London Sanitary Protection Association shows that out of the whole number of houses inspected during the year (numbering 192), in 6 per cent. the drains were entirely stopped up, and all the sewage soaked into the ground under the basement of the house, there being no connection whatever with the sewer: that in about one-third the soil-pipes were leaky, allowing sewer-gas to escape through the leaks into the house; that in about one-third the overflow pipes from the cisterns discharged into a soil-pipe or drain. No water, as a general rule, goes down these overflow pipes from one year's end to another, but sewer-gas comes up them from the drains, and contaminates the water in the cisterns. The reports also show that more than half the houses inspected had waste-pipes from baths or sinks connected directly with soil-pipes or drains, generally, it is true, through syphon-traps; but, if any of the appliances should be disused for a time, and the water in the trap dry up, these waste-pipes would provide a direct channel for the entrance of sewer-gas into the house. These are not vague statements, depending upon the memory of the engineer, but are the result of an elaborate analysis of the reports prepared by order of the Council.

THE GENEVA CONVENTION.

THE United States of America have hitherto alone, out of all the civilised countries of the world, abstained from officially joining in the international treaty for the neutralisation of the wounded and of the hospital equipment necessary for their protection and care in time of war, commonly known as the Geneva Convention. It has never been fully understood why the Government at Washington declined to accede to this convention. At the time of the diplomatic conferences at Geneva, in August 1864, which led to the Convention, the United States were represented by the American minister at Berne, Mr. Fogg, and by Mr. C. Bowles, the agent in Europe for the American Sanitary Commission; and these representatives took part in the discussions on the treaty. But, although the American Government accredited them officially to the Congress, it refused to confer on them power to sign the protocol. Various efforts have been since made to induce the United States' Government to accede to the Convention, but without success. Lately, however, there has been a change in ideas on the subject. This change was indicated in a passage of the speech of President Arthur, at the opening of the present session of Congress. The President remarked, in the course of his message, as follows: "The Senate, in its last session, made a demand for the text of the

Convention of Geneva for aid to wounded in time of war. I hope that this fact is a proof of the interest which the Senate takes in the question, and that the adhesion of the United States to this humane and praiseworthy treaty will be its result." This change in views seems to be due almost entirely to the indefatigable exertions of a lady, Miss Barton—the Miss Nightingale of the United States during the great Civil War. Ever since that prolonged struggle, and more especially since the Franco-German War, in which she also acted as a hospital nurse, Miss Barton has pressed the question of her country joining the convention, both by publications and by personal appeals. The late President Garfield and Mr. Secretary Blaine were led by her efforts to give attention to the subject, and they finally became warm advocates for the United States joining in the treaty. President Arthur has adopted the same views on the subject as his predecessor; and it is now understood that the official adhesion of the United States' Government to the Convention will shortly become an accomplished fact.

PANPHULA.

TOWARDS the close of 1879, a disease known to the natives as *fan-phula*, and characterised by anæmia and more or less marked fever, swelling of the extremities, and great prostration, prevailed to a considerable extent in Calcutta, and especially in some of the suburban villages. Dr. McLeod, the health-officer of the city, states that the disease was first observed in 1877. It disappeared with the cold and hot seasons of 1878, but broke out again in the eastern and southern suburbs over a more extended area with the close of the rainy season of that year. Again subsiding, it reappeared in November and December of 1879. The malady did not attract much attention until the close of the year, when it was carefully investigated with a view to ascertain whether it was identical with the beri-beri of Madras and Ceylon, to which disease it appears to bear a strong resemblance, though some observers, acquainted with both diseases, maintain that they are quite distinct. The prevailing opinion seems to have been that the diseases are identical, and Dr. McLeod is inclined to favour this view; but the point has not yet been definitely settled. Efforts were made to trace the disease to some local cause, and to connect it with some personal peculiarity in the sufferer, and his surroundings, but without success. Although the disease was more prevalent among the poorer classes, it was by no means confined to these, for all classes of the community were prone to attack. From the statistical data collected regarding its extent and fatality, it appears that the town death-rate equalled 20 per cent. of cases, and that of the suburbs about 40 per cent. The figures are not, however, entitled to more reliance than to indicate that the mortality is considerable in relation to cases, though slight in relation to population.

IMPORTANT CHANGES IN THE FRENCH NAVAL MEDICAL SERVICE.

A VERY important change has recently occurred in the position and functions of the medical officers in the hospitals of the naval service in France. By a presidential decree, dated Paris, January 25th, 1882, it is ordered that, in future, in all naval hospital establishments, the direction and police control is to be vested in the medical department. These functions are to be exercised by the director of the medical service, or, in his absence, by the officer of the corps holding the highest grade. The second article of the decree, which in its nature resembles a royal warrant in this country, declares that the chief of the medical service has under his orders all the medical officers, dispensers, hospital sisters, orderlies, guards, gardeners, and all the subordinates concerned in maintaining the cleanliness and sanitary condition of the hospital and its vicinity. The third article lays down the functions of the hospital commissary. These functions are limited to the charge of the hospital furniture, to the registration of the admissions and discharges of patients, and to keeping accounts of all expenses and disbursements. It will be understood how great this change is when it is mentioned that, up to the date of this decree, the commissariat officers (*les commissaires des hôpitaux*) have had command and direc-

tion in the naval hospitals, and that the medical officers have been entirely subordinate to them. The medical officers had no other function than that of visiting the sick, and suggesting for the consideration of the commissariat department any matters they might think advisable in respect to hygienic interests. The medical officers could not give an order to a hospital nurse, to a servant working in the garden, or even to the custodians of the scientific collections. The decree relating to the above mentioned changes in the French naval hospital service, which has been recently signed by President Grévy, has been brought about by an official report from the Minister of Marine to the President of the Republic, showing the difficulties to which the previous system had led, and its ill results, both as regarded the sick and the administrative economy. The decree really revolutionises the position of the medical officers in the naval hospitals.

HYPNOTIC EXPERIMENTS.

THE Hypnotic Commission appointed by the Paris Académie des Sciences to inquire into the experiments made by M. Dumontpallier on hysterical women, will not pursue any investigations on the subject. M. Vulpian, one of the members, asks to be excused. M. Beilard, another member, hesitates. M. Milne-Edwards, the President, read to the Academy a paper characterising hypnotic experiments as dangerous to a condition of health already weakened by disease. Professor Harting of Utrecht has communicated to M. Milne-Edwards the physiological results observed in rabbits, fowls, guinea-pigs, pigeons, and frogs, which he had hypnotised. Six fowls which he had frequently subjected to this influence are all dead with paralysis. M. Milne-Edwards intends to make a series of analogous experiments on the animals in the Jardin des Plantes. He is of opinion that experiments of this nature, capable of producing serious lesions of the nervous centres, ought not to be made on the human subject without the greatest caution.

ILLEGITIMACY IN SALFORD.

OF the total births registered in Salford during the year 1880, 332, or 4.7 per cent. were illegitimate. The proportion of illegitimate births has considerably increased in Salford during the past four years. It was equal to 3.9 and 3.8 per cent. in the years 1877 and 1878 respectively, whilst it rose to 4.2 in the year 1879 and 4.7 in the year 1880. In addition to the above, sixty births of illegitimate children occurred in the workhouse. It would be interesting to learn to what causes this increase of illegitimacy is to be ascribed; and Dr. Tatham might well devote some special attention to the subject in his next annual report.

AIR IN METEOROLOGY.

It is somewhat singular, considering how much our comfort and good health depend on varying conditions of the atmosphere, that it is only in comparatively recent years that any systematic attempt has been made to determine the causes of these variations. Public attention has, however, been awakened of late; and the societies cultivating this branch of knowledge have greatly increased their number of members. The numerous articles and diagrams published in the daily papers also indicate the same. As regards new stations, many have been established in places which entail much labour and self-denial on the part of those occupying them. We may instance the one equipped by Mr. Wilson of the *British Naval*, where observations were taken every day up to a late period of last year, and will be soon commenced again under the auspices of the Scottish Meteorological Society. Several new stations are also about to be started in the interior of Africa; and the Meteorological Society (English) has, within a few years, organised almost a dozen stations, furnished with complete, and therefore expensive, instruments, and published the observations in its journal. A new station, especially by the liberality of a few members, about to be started at Fort St. Vrain, where meteorological as well as astronomical observations will doubtless be taken. The cost of the observatory will be about £1000. It is not sufficient, however, that the observations be made, but they must be recorded in a diary, and the

should, when published, remain unused in the pages of a journal; they should be grouped and discussed in such a manner as to lead to some practical results. Perhaps the time has scarcely arrived, but it will arrive soon, when an effort should be made to look behind the observations, and endeavour to ascertain something new concerning the laws which govern atmospheric phenomena, so as to assist, amongst other things, in placing forecasts on a more satisfactory basis.

SCOTLAND.

WE believe that Dr. D. J. Hamilton, Pathologist to the Royal Infirmary, Edinburgh, is a candidate for the Sir Erasmus Wilson's Chair of Pathological Anatomy in the University of Aberdeen.

SCIENCE DEGREES IN ABERDEEN UNIVERSITY.

THE Senatus of this University has resolved to institute a degree of Bachelor of Science in certain departments, including physical, mathematical, natural, and mental science. The scheme which has been drawn up has still to receive the sanction of the University Court and the Privy Council.

NEW BURSARY FOR ABERDEEN UNIVERSITY.

SOON after the death of Dr. A. F. Greig, Fyvie, Aberdeenshire, in 1880, a committee was formed for the purpose of commemorating his personal and professional worth by some permanent memorial. The committee, in conjunction with a committee of Dr. Greig's medical friends, has succeeded in raising by subscriptions a sum of £300, whereby to found a bursary of about £12 annual value, for students of medicine at the University of Aberdeen (his Alma Mater); besides providing a sum sufficient to erect a small memorial in Fyvie, which may bear an enduring tribute to the esteem in which he was held by his neighbours and patients during his long and arduous practice of forty-two years. The foundation of the bursary has been gratefully accepted by the Senatus of the University on conditions which provide that the bursary be known as the "Dr. Greig, Fyvie, Bursary", and be tenable for three years; that it shall be competed for by students commencing the second winter session of their medical studies, the subjects of competition being fixed from time to time by the Medical Faculty, and announced beforehand in the University Calendar. It is also stipulated that, in cases of equality, a preference shall be given to natives of the district in which Dr. Greig practised his profession. The first competition is to take place at the beginning of next winter's session.

COMBE LECTURES IN ABERDEEN.

THE heart was the subject of Dr. Stirling's lecture on Saturday evening, when the large hall was completely filled. The lecturer gave an account of the heart from the point of view of the physiologist, and made its mechanism obvious by means of very large models, and by numerous experiments. A large number of experiments were shown to illustrate the action of the various valves of the heart. In discussing the relation of the heart to the nervous system, experiments on a frog's heart were shown to illustrate how a heart may beat when taken out of the body, and how such a heart may be influenced by a variety of conditions, such as heat, etc., the results being made visible by placing very large, but carefully balanced, levers upon the heart, so as to amplify the excursion, and render the movement of the lever visible to the whole audience. A special feature of the lecture was the projection of an image of a heart still beating on to a screen, by means of a powerful lamp, which was so arranged as to give an image of the heart about nine feet in diameter, so that the audience could easily observe the fluttering of the auricle and heart. The lecture was brought to a close with a description of the action of the vagus nerve on the heart, and a reference being made to such conditions as "heart failure", the "heart", "cramp", which sometimes causes death whilst a person is awake, and in dreams. It was also suggested that patients might be treated in accordance with the scientific principles of

physiology and surgery, such instruction as is given by the St. John's Ambulance Society being what is required. Shakespeare's plays, especially *Macbeth* and *Julius Caesar*, were laid under contribution to enforce some of the remarks regarding the relation of the heart to the nervous system.

EDINBURGH UNIVERSITY.

SOME time ago, the University Court of Edinburgh University reported in favour of an alteration of Ordinance No. 8, Edinburgh No. 3, for making it compulsory on graduates in medicine to take the degree of Master of Surgery as well as that of Bachelor of Medicine in the future. At a meeting of the Court held on Monday, an order of Her Majesty in Council, dated December 19th, approving of the Court's report, was received. There was also received an order from Her Majesty in Council of the same date, approving of the report of the University Court in favour of Professor Sir Wyville Thomson's retiring from the chair of Natural History in the University on a retiring allowance. At the same meeting, the Court appointed various additional examiners for degrees in medicine and surgery, in place of those whose appointments have expired. To the examinership in Clinical Medicine, Dr. Byrom Bramwell, F.R.C.P.E., Edinburgh, was appointed; to that in Pathology, Dr. Sidney Coupland, F.R.C.P., London, was appointed; to that in Surgery, Dr. J. D. Gillespie, F.R.C.S.E., Edinburgh, was appointed; to that in Materia Medica, Dr. William Murrell, M.R.C.P., London, was appointed; and to that in Physiology, Dr. Richard Caton, M.R.C.P., Liverpool, was appointed. The appointments are each for one year, but are renewable annually for five years. The examiners in the other subjects had their appointments renewed.

HADDINGTON LUNATIC ASYLUM.

As the Commissioner in Lunacy, Dr. Arthur Mitchell, has reported that, at his visit, the number of inmates, 101, is over the number that can be accommodated in an asylum in which there is no resident medical officer, it has been decided to endeavour to reduce the number of inmates rather than incur the additional expense of having a resident; and, as there are some private patients not connected with the district, it is expected that their removal will attain the desired object.

THE SANITARY CONDITION OF RUTHERGLEN.

THERE has just been made public a report, by Mr. McLeod, sanitary inspector in Glasgow, as to the sanitary condition of Rutherglen. It is evident from this report that serious sanitary defects exist in the burgh, and the health authorities should not delay in carrying out the improvements advised. These consist in attention to the sewage system, the removal of dilapidated tenements, the erection of a public slaughter-house, and the building of a hospital with at least ten beds.

THE ALLEGED IRREGULARITY AT GREENOCK INFIRMARY.

THE unfortunate occurrence which recently took place at the above institution, and to which reference was made in the JOURNAL of February 11th, has found its way into the courts of law. The relatives of the deceased patient sought to obtain from the authorities permission to have the common grave in the cemetery opened for the exhumation and identification of the body. This request the judge very properly declined to grant, after hearing medical evidence on the subject, and after visiting the cemetery and inspecting the common grave. He pointed out that the very natural desire of the relatives of the deceased, to have the body exhumed from the spot where it had been accidentally buried, could not weigh against the very grave objections which existed against such a course. To say nothing of the risk to the public health, and public decency, which the necessary exhumation of so many bodies would involve, the procedure would tend to inflict on the feelings of the relatives of other persons buried there an injury precisely similar to that from which the petitioners were suffering. On these grounds, while he had no doubt the deceased was buried in the common burying ground, as alleged, he could not grant the petition. This decision must recommend itself to all as most reasonable.

GLASGOW ROYAL INFIRMARY.

At the above institution, on the 14th instant, there was a very pleasing ceremony took place in connection with the nursing department of the hospital. An address was presented to Mr. W. McEwen, one of the directors, by the nurses of the infirmary, as a mark of their appreciation of his services in their behalf. Of late years, great changes and improvements have been made in the nursing of the hospital; and, though these have always been carried out, as ought always to be the case, with the sanction and co-operation of the medical staff, yet it is very generally felt that Mr. McEwen has been mainly instrumental in seeing the changes carried out. It must be very gratifying to Mr. McEwen to feel that his labours are appreciated, and not least by those in whose behalf he has worked.

IRELAND.

DR. HUGH MORELAND died on last Sunday, at his residence, Corporation Street, Belfast, aged 63. Deceased commenced practice in Kirkcubbin, but afterwards removed to Belfast, where he has been located for the past thirty-five years. Dr. Moreland was a graduate in medicine of the University of Glasgow, and was generally esteemed and respected.

THE ROYAL UNIVERSITY OF IRELAND.

At a meeting of the Senate of the University held on the 16th instant, it was decided that an election of Fellows be held on Tuesday, April 18th next, and that applications should be sent in to the secretaries by Tuesday, March 14th next. It was resolved that in the selection of Fellows of the University, regard should be had to the qualifications of the candidates in the following subjects:—(a) classics; (b) English language, literature, general modern history, Irish history and antiquities; (c) modern languages; (d) mental and moral philosophy, political economy, and political philosophy; (e) mathematics; (f) natural philosophy; (g) chemistry; (h) natural sciences, medicine, surgery, and physiology. The Senate fixed that the examinations for Scholarships in classics, modern languages, and mathematics should begin on Tuesday, May 9th, and that the general pass medical examinations should commence on Tuesday, June 20th.

CORK WORKHOUSE.

DR. BRODIE, Local Government Board Inspector, in a recent report, states that there is no overcrowding in the workhouse, with the exception of the female lunatic wards, which continue full. Although twenty-five patients have been transferred to the District Lunatic Asylum within the past eight months, there were, on the last day of his inspection, ninety-nine harmless lunatics, idiots, or epileptics, in this department. To this may be added eleven assistants, which makes it necessary to lay beds on the floor. Additional accommodation will be required, Dr. Brodie believes; and a recommendation to that effect has been referred to a committee of the guardians.

CORK FEVER HOSPITAL.

A DEPUTATION from the trustees and others interested in this hospital waited on the Cork Board of Guardians last week for the purpose of obtaining from that body a capitation grant for the support and treatment in the hospital of such patients as are received there on the recommendation of dispensary physicians and relieving officers. The Corporation make considerable grants half-yearly towards its support; but they were of opinion that the guardians should help, as the majority of the patients were sent upon the tickets of the officers of the board; and that they (the Corporation) should not be required to contribute in so large an amount out of the city rates—a sum that ought partly to be levied out of the poor-rates. It was argued that the guardians supported a fever hospital of their own; but, on the other hand, it was urged that a large number of patients had a great objection to the union hospital, and preferred being treated in the Cork Fever Hos-

direction in consequence of their stomachs being often out of order, but he believed that these remedies were more in the nature of charms than of actual medicines. The next one was a remedy used for headache, which they called *Fisava*, i.e., "the disperser", being under the idea that their ailment was due to a sort of fog in the brain. But this, too, was more of a charm than a medicine. Its botanical name had not been ascertained. The next class of remedies consisted of those for rheumatism and periostitis: these also were used more in the way of charms than from any belief in their practical utility. Certain seeds, which he shewed, were called *Vato-lilaka* seeds by the natives. They scraped the inside of a seed and mixed it with water, and drank the mixture in order to expel the placenta. He had had no opportunity of testing whether it was efficacious. At the same time, it was used as an emetic. Possibly its emetic effect might have a reflex action on the uterus, and so make it serviceable. He had on his list two or three drugs, including tobacco, Malagasy aloes, and *Tanghinia venenifera*, which might be serviceable in medicine. As far as his knowledge went, the aloes were serviceable, and they had taken the place of English aloes in the Queen's Hospital, the London Missionary Society's Hospital, and the Norwegian Hospital. The Malagasy aloes could be bought cheaply in the market. He believed that there were two species. The *Tangena* beans were the ordeal beans in Madagascar, the possession of which had lately been made illegal by the Government. Not long ago there was a considerable disturbance made in the central province, where the capital was situated, because a man from the coast dared to bring up a quantity of these beans. There was an epidemic of malarial fever raging at the time and decimating the people, and this man persuaded a stupid woman in one of the villages to give an infusion of the beans to a person whom he regarded as a witch, and suspected of causing the epidemic. That person and several others died in consequence, and when the news of this reached the Queen, she ordered the whole village, containing over five hundred adults, to be brought up, and they were put upon their trial in order to ascertain how many persons had been involved in the breach of the law. They were kept for three months between two high walls, and without any other shelter. At the trial, the only person found guilty was the woman who had administered the infusion of beans at the instigation of the man who brought them into the village. Owing to the mismanagement of the judges, it required three months before it could be ascertained that there were no fewer than thirty persons involved in the matter. As the result of the trial, the giving of the *Tangena* beans in any shape, except medicinally under the orders of a doctor, was declared to be a question of life and death. The village was fined heavily, to the extent of £6,000 or £7,000, and even a female under his (Dr. Parker's) care, who was in the hospital at the time these events happened, and could not possibly have had anything to do with the affair, had to pay her share of the fine, and she sold her ancestral land in order to enable her to do so. This showed how severe the Malagasy Government was against the use of the *Tangena* beans; and the severity was not without reason. Mr. Holmes had made an inquiry about the efficacy of *Famamo* in its stupefying action upon fish. All he knew of its efficacy was upon the authority of his own students, and they had seen it used; but it was not now necessary to use an intoxicant for catching fish, for the people had become more expert in making and using their nets. It would be advisable to try the effect of this plant upon some fish contained in a globe of water, in order to ascertain whether in the leaves, or in the bark, or in any other part of the plant, there resided active principles which might be serviceable in medicine. Then there was a plant which, in its action and taste, was somewhat similar to aconite. He, however, believed that it did not belong to the same natural order. It was the *Raingi-raingy* root. There was also a species of gum-resin, the *Ramy*. This was not used as a medicine by the Malagasy, but they used it for rubbing the strings of their native harps. He believed that the substance might be useful in medicine. The *Landimo* (or *Antholeista Madagascariensis*) was used as a tonic, but he could not speak from personal knowledge with regard to its antimalarial properties. In the Queen's Hospital, however, it was used instead of quinine as a tonic. As to the globular fruit, the *Voadivaka* (*Brethia spinosa*), he should very much like to know whether it contained strychnia, or some similar principle; because there was a suspicion that it might be useful in replacing nuxvomica, which had not yet been found in Madagascar. This fruit, when ripe, was very agreeable for eating in the hot region along the coast. The pulp was sucked, and the seeds were rejected; but it was not advisable to eat more than two or three of these fruits in the course of about as many hours. Among the specimens there were about ten kinds of beans. The remaining seeds had been brought for the purpose of being planted, in order that it might be ascertained from what plants they came, as most of them were used as articles of diet, and some might possibly be useful in medicine. Some of them were simply used

as charms. Among the specimens were also some fresh-water shrimps from the interior of the island; these were used as an article of diet.

MEDICAL REFORM.

THE Royal Commission on the Medical Acts Amendment Bill have, it is reported, found considerable difficulty in arriving at the conclusions of the evidence laid before them; and the result of all their investigations has, it is to be feared, failed to convince those who entertained preliminary opinions of a decided character before entering the Commission, and has not been much more successful in respect to those members of the Commission who may be presumed to have entered upon the inquiry with open minds. On neither of the two great questions at issue—viz., the question of conjoint boards, with a minimum standard of examination for practice; and the question of the constitution of the Medical Council—does there appear to be any general agreement in the Commission. If we were to venture to predict concerning a document which is not yet in a perfect state of existence, it would be that the report will decide by a narrow majority in favour of a conjoint board, and of an enlarged form of representation of the profession in the General Medical Council; but that there will probably be a strong minority report against the conjoint board in respect to Scotland.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 12th, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, June 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881.

FRANCIS FOWKE, *General Secretary*.

COMMITTEE ON THE STUDY OF AURAL SURGERY.

THE next meeting of the above Committee will be held at 3, George Street, Hanover Square, London, on Wednesday next, March 1st, at 4 P.M., when the draft-report drawn up by the subcommittee will be considered. Any member who has not received a copy of the subcommittee's report is requested to apply to the Honorary Secretary, Cresswell Baber, Esq., M.B., 4, Preston Street, Brighton.

BRANCH MEETINGS TO BE HELD.

SOUTH OF IRELAND BRANCH.—The usual quarterly meeting of this Branch will be held in the Royal Cork Institution, on Saturday, February 25th, at 4 P.M. Members wishing to read papers, make communications, or exhibit pathological specimens, are requested to communicate immediately with the Honorary Secretary. The quarterly dinner will be held the same evening, at Lloyd's Hotel, at seven o'clock.—T. GELSTON ATKINS, B.A., M.D., Honorary Secretary, Cork.—February 13th, 1882.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above districts will be held at Brighton on March 29th, 1882. Dr. Ewart of Brighton will preside. Members desirous of making communications to the meeting are requested to give notice thereof to the Honorary Secretary, West Sussex District, 5, The Steyne, Worthing.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will take place at the Cottage Hospital, Ashford, on Thursday, March 2nd, at 3 P.M.; W. H. Coke, Esq., in the chair. The chairman kindly invites members to luncheon at his residence, "Whitfield House," from 1 to 2.30 P.M. The dinner will take place at the Saracen's Head, at 5 P.M. The following communications have been promised. 1. Mr. Whitehead Reid: A Colotomy Case. 2. Dr. Eastes: On Intussusception. 3. Mr. Treves: Six Cases of Amputation of the Thigh treated Antiseptically. 4. Dr. Tyson: On the Difficulty of Diagnosing between a Syphilitic and an Epitheliomatous Ulceration.—T. WHITEHEAD REID, Honorary District Secretary, 34, St. George's Place, Canterbury.—Feb. 23rd, 1882.

SOUTH-EASTERN BRANCH: EAST AND WEST SURREY DISTRICTS.—A conjoint meeting of the above Districts will be held at the Red Lion Hotel, Dorking, on Thursday, March 9th, at 3 P.M.; C. W. Chaldecott, Esq., of Dorking, in the chair. The following communications have already been promised. Dr. James F. Goodhart: Notes of Cases of Lunacy from Lead-Poisoning. Mr. Malcolm Morris: Ringworm. Mr. Thomas Hoppercroft: Case of Complete Inversion of Uterus after Parturition. Dinner will be served at 6 P.M. precisely; charge, seven shillings (exclusive of wine). Members desiring to read communications will oblige by informing the Honorary Secretaries as soon as possible.—A. ARTHUR NAPPER, Cranleigh, Surrey, Honorary Secretary of the West Surrey District; J. HERBERT STOWERS, M.D., 23, Finsbury Circus, E.C., Honorary Secretary of the East Surrey District.

CORRESPONDENCE.

CHLOROFORM OR ETHER.

SIR,—The recent deaths during the administration of chloroform should remind all of us who are in the habit of administering anaesthetics of the grave responsibility incurred in the procedure, because as yet we know of no safe anaesthetic; and this fact cannot be denied. Comparatively recently, great efforts have been made to bring ether into more general use as an anaesthetic, it having become the fashion to consider it safer. Can it be said that ether has been proved to be so safe as its advocates would have us believe? In the *BRITISH MEDICAL JOURNAL* of September 3rd, 1881, we were told "three deaths have recently occurred which are attributed directly or indirectly to the effects of ether given as an anaesthetic". Had chloroform been used, I imagine, no doubt would have been expressed as to the direct or indirect cause of death; but when a fatality occurs from ether, every species of ingenuity appears to be devised to ascribe the death to causes other than the anaesthetic.

The first of these deaths occurred at the Cambridge Hospital. The patient, a woman aged 50, was given ether for the removal of a tumour of the lower jaw. After the cessation of its administration, we are told, the breathing became embarrassed; the patient did not rally, and died in a short time. Death was, however, attributed to asphyxia, not ether.

The second death occurred at Guy's Hospital; the patient a man aged 43. The heart was examined, and, I have no doubt, every precaution taken. Ether was given in order that an abscess might be incised. Before he was thoroughly under the influence of the ether, the respiration suddenly ceased; and an immediate examination of the heart showed that its action had also been arrested. A *post mortem* examination was made; but we were told "that until a microscopical examination of the organs had been made, it would be difficult to fully account for the death".

The third death occurred at the London Hospital; the patient a young healthy lad aged 14. In this case, ether—which its advocates say seldom produces sickness—caused the boy to vomit, and death was produced by asphyxia.

A fourth death was reported in the *BRITISH MEDICAL JOURNAL* for August 20th, 1881, as having occurred at the Seamen's Hospital. The patient was a negro, aged 45, anaesthetised in order to reduce a hernia. The administration was kept up for about ten minutes whilst the hernia was being reduced, during which time the apparatus was replenished with ether once only. About two minutes after the inhaler had been removed, both pulse and respiration suddenly ceased; and notwithstanding prompt and active attempts to restore animation, there was no return of vitality.

My own experience of ether is very unsatisfactory; for though I have frequently administered it with success, yet I have met with patients who could not take it owing to the intense bronchial irritation it produced. I have found that, in elderly people, it often produces faintness, vomiting, and sometimes leaving intense headache or a tendency to prolonged stupor. In two of my cases, it nearly proved fatal. One, a fine healthy young man, was placed under its influence for excision of the eye; his condition on the completion of the operation gave rise to the greatest anxiety. His face suddenly became pale, his respiration slow and shallow, and his pulse extremely feeble and irregular; and notwithstanding prompt and active measures to restore him, he remained for quite half an hour in a most dangerous state. The other, a woman aged 45, placed under its influence for excision of the wrist. The operation was somewhat prolonged; and before its completion, and some minutes after the inhaler had been withdrawn, precisely the same train of symptoms manifested themselves; but in her case, it was fully an hour before I could consider her out of danger.

Now, with facts such as these, how can ether be regarded as a safe anaesthetic? That a certain percentage of deaths will continue to occur from whatever anaesthetic is used, there can be little doubt. If any substitute for chloroform is to be found, it must be one as the Glasgow Committee recently reported, which may with safety be given in exceedingly full doses. Can this be said of ether? This Committee told us that the danger of death from stoppage of the respiratory functions must be borne in mind in every case in which anaesthetics are given; that ether produces the same changes in the lungs as chloroform, the only difference being in the rapidity of its occurrence; that the danger with ether approaches from the pulmonary rather than the cardiac side; and on this ground its superior safety is augured, for by establishing artificial respiration, we are told, we have the means of warding off death. This is very pretty in theory; but how is the fact

to be overcome that, in the *JOURNALS* to which I have referred, two deaths from ether are recorded, where, without the slightest warning, the heart and respiration suddenly ceased, all efforts at resuscitation proving useless? A *post mortem* examination was made in each case, but what was found? Not even the old story of fatty degeneration of heart, but only pathological conditions which, had their existence been diagnosed, should not, in my opinion, have contraindicated the exhibition of chloroform.

After ten years' experience in the administration of chloroform, I am of opinion that, if carefully and properly administered, it is as safe an anaesthetic as we possess. I have given it to men, women, and children of all ages, from an infant five weeks old to persons over eighty years of age. I have never met with any who could not take it, nor do I recognise any disease that should contraindicate its exhibition to a patient in a condition to undergo a surgical operation. Chloroform is, however, far too potent an agent to be intrusted to those who are ignorant of its power, because, if given in too concentrated a form, will, as the Glasgow Committee has demonstrated, produce most alarming symptoms, and even death. I hope the day will come when instruction in anaesthetics will be made compulsory at the various medical schools. Students will then be made practically acquainted with the necessary details of anaesthetising patients, and deaths from anaesthetics consequently more rare.

In conclusion, I think it will be generally assumed, from a perusal of the above facts, that whilst the relative merits of chloroform and ether are still *sub judice*, it would be better to suspend our judgment for a time, instead of hastily characterising the use of chloroform "as criminal, and justifying the stern interference of the law", so prominently quoted by your correspondent Dr. Ormsby in your *JOURNAL* of February 18th.—I am, sir, yours, etc.,

ELPHINSTONE HOLLIS, M.D. (Edin.), C.M., Resident Surgeon,
February 20th, 1882. East Suffolk Hospital.

SIR,—Dr. Ormsby, in his letter on this subject, speaks strongly in favour of ether, and quotes figures to prove his opinion; but, as they are only one-sided, can be of no use. He says: "When we learn that only one death from ether occurred in 23,204 administrations, it is quite reasonable for those interested in the subject to urge and recommend its employment." Dr. Jacob of Leeds, in his letter on "Deaths from Anaesthetics", would also seem to be in favour of ether. He states that, in the British isles, nine deaths from chloroform, four from ether, one from a mixture of ether and chloroform, and one from ethidene, occurred from January 1881 to February 1882. To arrive at any just conclusion from these figures, we would require to know the number of times that chloroform, ether, ether and chloroform, and ethidene have been used in the British isles during the past year. As this is a most important subject to all practical surgeons, I would suggest that a record, for this year, of all cases in which anaesthetics are used, be kept by all members of the British Medical Association; and that, in cases of death, most careful *post mortem* examinations be made.—Yours truly,
C. MASON SCOTT, F.R.C.S. Eng.
Rockingham, Kingstown, February 20th, 1882.

WHICH IS THE SAFEST ANÆSTHETIC?

SIR,—In the *JOURNAL* of the 18th instant, Dr. Ormsby writes as if this question were settled, and that ether was the only justifiable anaesthetic to use. He says: "It is probable a time will come when operators will not be allowed merely to explain a death from chloroform 'as an unfortunate thing', and a piece of bad luck;" and then goes on to say that chloroform should be seldom, if ever, used.

In the same issue, there is also a letter from Dr. Ernest Jacob of Leeds, with a list of the deaths recorded in the *JOURNAL* for 1881 from anaesthetics, from which I find they were as follows: From chloroform, 9; from ether, 4; from chloroform and ether (mixed), 1; from ethidene, 1; total, 15. To make these statistics of any value, we should also have the proportion in which each anaesthetic has been administered. For instance: if (as is probable) chloroform has been given twice as often as ether, the death-rate is very nearly equal. But I did not write merely to call your attention to this; but to ask you (on behalf of a large number of the profession, who are very anxious to have the matter thoroughly gone into and decided, if possible) to use your influence with the Committee of Council of the British Medical Association, that they may appoint a subcommittee to inquire into the matter, by getting statistics of the anaesthetics used for some time back in all the hospitals in England, with the mortality of each, etc. Such a report, giving the dangers of each anaesthetic, with the cases in which (if any) any one would be preferable to others, would be of the greatest value to the profession at large. That something of this sort is needed, I think

emoluments, even though his period of service may have been comparatively short. The Board take this opportunity to state that they have observed with regret that in some unions the guardians have refused to grant superannuation allowances to old and deserving officers whose services have fully entitled them to consideration in this respect; and this course has not only afforded just cause for complaint, but has also induced officers who have become inefficient by reason of age and infirmity to struggle on in their situations while physically unable to discharge their duties with activity and with advantage to the public service.

The Local Government Board have put the case very mildly on behalf of old and infirm officers. I shall now give a few instances of hardship which fully bear out their statement.

1. Sixty-six years of age. Over thirty years' service. Certificates signed by four leading Dublin physicians that he is suffering from valvular disease of the heart, and that his discharging his dispensary duties is dangerous to his life. Yet he dare not resign.

2. Seventy-two years of age. Over forty years' service. Dare not resign.

3. An old man. Over twenty years' service; got paraplegia. With great difficulty, the guardians were induced to give him £20 a year. He died after a few months.

4. Seventy years of age. Forty years' service. Subject to cystitis. When absolutely unable to perform his duties, the guardians oblige him to pay one-third of the salary of his substitute. He has no prospect of a pension.

5. Eighty-eight years of age. Dare not resign, as his son is Boycotted by the Land League, and the vice-chairman of his board is a "suspect" recently released from gaol.

6. An old man. Twenty-five years' service. Resigned through age and infirmity, and fully expected a pension, as the clerk of the union had been superannuated a short time before with pension; but none was given, and he would have had to go into the workhouse, if he had not died about four months after his resignation.

7. Old man. Forty-five years' service. Suffering from chronic rheumatic gout. The guardians refused him any pension, or even to pay a substitute, and for the last five years of his life he was dependent on his son, who held a neighbouring dispensary, doing his duty, so as to allow him to retain the salary; but for this, he would have been left destitute.

8. An old man. Rheumatic and gouty. Would gladly resign, but dare not.

9. Seventy-nine years of age. Fifty years' service in mountainous district. Has had fever four times; broken leg once; twenty-two falls from horses. Has varicose ulcers, hernia, winter-cough, impaired sight and hearing. Guardians positively refuse any retiring allowance.

10. Broken health. Over twenty-three years' service. Must soon resign, but has very little prospect of pension.

11. Old man. Forty years' service. His guardians unanimously passed a vote of high approbation of his long and excellent service, and gave him *no pension*.

12 and 13. Advanced in life. Thirty-eight years' service; but have no prospect of pensions, as their politics and religion are not those of the majority.

14. Aged seventy. Long service. Often suffers from bronchitis. No prospect of pension.

15. Advanced in life. Twenty-five years' service. Often ill; but no prospect of pension.

16. Advanced in life. Thirty years' service. Received £52 retiring allowance, or considerably less than half the salary.

These are a few specimens of the cases in which we rest our claim to Government putting our superannuation on an equitable footing. The Local Government Board, in the circular already quoted, says: "That, in giving their consent to superannuation allowances proposed to be granted to union officers, they will be governed, as far as circumstances may permit, by the rules applicable to the superannuation of civil servants of the Crown under the Superannuation Act of 1859." All we ask is, that what the Local Government Board recognise as equitable principle of superannuation shall be made the invariable law. The only possible objection which can be brought against this proposal is, that local taxes ought to be distributed by local authorities. But this principle, good in itself, is constantly limited and controlled by both the Local Government Board and Parliament. The former have, from time to time, fixed by sealed order higher amounts of salaries than guardians were willing to give; and the latter has imposed a rate of one farthing in the pound of valuation on all Irish unions for the expense of working the Contagious Diseases (Animals) Act. The whole amount of salaries paid to the Poor-law medical officers in Ireland is only three halfpence in the pound on the valuation, half of

which is repaid by the Crown; so that, if even ten per cent. of the medical officers were superannuated at two-thirds of their salary, the charge would only be one-tenth of a penny in the pound, if distributed equally over all the unions in Ireland. It seems hard if we are refused a boon which will cost so little, and yet will save so much anxiety and suffering.—I am, etc., A DISPENSARY DOCTOR.

P.S.—Since the above was written, the Chief Secretary for Ireland has promised that the Irish Government will bring in a Bill placing in the hands of the Local Government Board the discretionary power in reference to superannuation, at present vested in the boards of guardians; the retiring allowances to be paid out of a fund raised by a small general rate all over Ireland. The scale of the Civil Service to be adopted in reference to age, etc. This is a move in the right direction; but we must exert ourselves vigorously to have the measure improved, so that medical officers who have devoted the best years of their lives to the service shall be entitled to receive superannuation allowances upon retirement after long periods of service—say fifteen or twenty years—even though they may not have reached sixty years of age, or be incapable of doing any more work. Again, under the present permissive system, a medical officer, after any period of service, no matter how short, may be granted the maximum pension if permanently disabled. The Government Bill would give him but one-sixtieth of salary and emoluments for each year served, *plus ten*. There is, therefore, room for improvement here also.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

MID-WARWICKSHIRE.—Dr. Wilson, the energetic health-officer of this important combination, presents, as usual, an excellent report; indeed, the Local Government Board include in their last volume one of Dr. Wilson's reports as a model of construction. In the Mid-Warwickshire district, which covers an area of no less than 455 square miles, and which contains a population of about 96,604 souls, there were, in 1880, a total of 2,771 births and 1,759 deaths, equal to ratios of 28.6 and 18.5 per 1,000 respectively. The number of deaths attributed to the seven principal zymotics, including diarrhoea, amounted to 203, representing a total zymotic death-rate of 2.1 per 1,000; but, inasmuch as 22 of these deaths occurred amongst persons not belonging to the district, the actual zymotic rate would be more accurately represented by 1.8 per 1,000, being 1.5 below the average zymotic death-rate of England and Wales. Of these 203 deaths, 107, or more than half, were due to diarrhoea, and the great majority of them occurred amongst infants under one year of age. The excessive mortality from infantile mortality during the third quarter of the year was, Dr. Wilson thinks, consequent upon the high temperature which prevailed during August and the first week of September. The increase in the fatality of infantile diarrhoea accounts for the increase in the general infantile death-rate, which amounted to 124 per 1,000 deaths, compared with 102 per 1,000 in 1879. The total deaths attributed to scarlatina amounted to 41; but seven of these, which occurred in the infectious hospital at Warwick, belonged to Leamington, which is not in the combination. In some districts the prevalence of this diseased led Dr. Wilson to cause the elementary schools to be closed; but, although this procedure was of some use in checking the spread of the fever, the absence of any prompt information of fresh cases must be held responsible, to a considerable extent, for its prevalence. Diphtheria was fatal in five cases, mostly traceable to impure water, and not to be connected with any special outbreak. There was, however, a serious outbreak of sore-throat at Rugby, which was found to be due to a contaminated milk supply. Whooping-cough caused thirteen deaths, and eleven were caused by fever (chiefly typhoid). Alluding to the low mortality from fever, Dr. Wilson remarks that, "considering that cases of typhoid fever were common enough in both towns (Warwick and Rugby) a few years ago, the recent immunity from this disease is a gratifying testimony to the steady sanitary improvement which has taken place in both localities, and especially in respect to drainage, water-supply, and scavenging." One hundred and thirty deaths were registered from phthisis, and 293 from bronchitis, pneumonia, and pleurisy; while heart-disease terminated fatally in 111 cases. Numerous improvements have been made in the various districts of the combination, in providing good water, improving drainage-works, and by increased flushing and ventilation of sewers. Results consequent upon these improvements may take some considerable time to declare themselves, but already the total death-rate has been slightly lowered, the zymotic death-rate has become lowered, filth-diseases have become much rarer, and the pauper, sick-rate has been considerably lessened—results which are in themselves just cause for congratulation.

TAUNTON (URBAN AND RURAL).—In the compass of a brief, but excellent report, Dr. Alford contrives to give a great deal of information

cirrhosis of liver, and 1 to puerperal mania. Notwithstanding that the number of patients suffering from the graver forms of cerebral disease is considerable, and that many of this class of cases are the most violent and difficult to manage, it is satisfactory to find from the report that, at the time of the commissioner's visit, the patients were found almost universally tranquil and orderly in behaviour, although the discipline was not enforced by the use of locks and other expedients. This combined maintenance of order and absence of restriction is largely due to the complete way in which the industrial system of the asylum is organised, and the energy with which it is kept in action. At the same time, the report shows that the specially medical treatment of disease is duly provided for, while the evidence of the efficiency and success of the general management were never more distinctly manifested than during the recent inspection. Such a report must be specially encouraging to the officials of the asylum.

GEORGE DUPLEX, L.R.C.P., F.D.

WE deeply regret to hear of the death of Dr. Duplex of Torrington Square. Dr. Duplex belonged to the class of practitioners who live an honoured life in general practice, well known in society, distinguished by superior culture and intelligence, and holding a position of trust, respect, and esteem, due to their personal character and to the honourable manner in which they practise their profession. Dr. Duplex had filled the office of Surgeon to Millbank Prison, and had acted as staff-surgeon in the Greek and Spanish service before settling down into general practice in London. He had reached the advanced age of seventy-eight; but none the less his death comes as a real grief to the many friends who in the course of his long life had learned to regard him with admiration for his intelligence and culture, and with affection for his amiable qualities, his sterling capacity for friendship, and his uniformly trustworthy and upright judgments.

GEORGE SAMUEL JENKS, M.D., F.R.C.P., BATH,
Vice-President of the British Medical Association.

DR. JENKS died at his residence, 18, Circus, Bath, on February 7th, in his ninety-third year. By his death, the medical profession has lost one of the oldest of its members, and the country one of its fast-disappearing Waterloo veterans. Dr. Jenks served as assistant-surgeon in the 18th Hussars (Prince of Wales's regiment) throughout the Peninsular war, and at the battles of Toulouse and Waterloo. At the conclusion of the treaty which followed the surrender of Napoleon, he commenced practice in Rome, but afterwards settled at Brighton, where he long enjoyed an extensive practice as a physician. Twenty-two years ago, he retired to Bath.

Dr. Jenks was President of the British Medical Association in 1857, on the occasion of the annual meeting being held at Brighton; and had long been the oldest Vice-President.

A LADY doctor in Russia, Mme. Dmitriewa of Borissoglebsk, in the government of Tamboff, has lately died of diphtheria contracted during attendance on patients.

THE CENSUS OF IRELAND: COUNTY KILDARE.—IN 1881, the population of this county was 75,504, being a decrease of 9.3 per cent. as compared with the return for 1871. There has been a great increase in pauperism; for example, in 1871, the number of persons in receipt under the Poor-law was 1,892 (525 indoor, and 1,067 outdoor); while, in 1881, the number was 2,733 (1,072 indoor, and 1,661 outdoor); the proportion being as 1 in 44 to 1 in 20. The death-rate for the ten years was 18.0 per 1,000 of the population.

AN annual inquiry has been held, by the Local Government Board, into the arrangements which have given rise to the scandal at the Shanghai Workhouse. It had been stated that a coffin, on being opened at the workhouse, was found to contain the remains of an old man instead of that of a young man, whose body had been sent to the Medical School by request for dissection. The Local Government Board, in their report, state that the unfortunate occurrence is to be held responsible for the master of the workhouse to exercise a proper supervision over the removal of the bodies to the medical school, and to the very considerable practice which has prevailed of entrusting these arrangements to poor inmates, without the supervision of the master or any responsible officer. The master of the workhouse is also blamed for not complying with the regulations of the government, requiring him to keep a record of the applications for bodies made by the licensed teachers of anatomy, and to obtain and file before the coroner a certificate of the proper interment of each body sent to the school.

Sir, —Will you kindly state in your next what is the custom of Poor-law surgeons, who attend the workhouse, with regard to master, matron, governess, &c. : Is he considered to attend them gratis, or how? also in confinements?—I am, &c.

[illegible][illegible]

PERTH CITY AND COUNTY INFIRMARY.

In 1887, the year 1888, a fewer number of cases were treated in Perth Infirmary than during the preceding year; the respective numbers being, in 1887, 1,184, and, in 1888, 1,262. At the annual meeting of the Association, held last week, the report submitted showed that, unfortunately, the mortality was greater than the income.

LONGMOOR HOSPITAL FOR INCURABLES.

THE number of patients received in the Longmore Hospital for Insanity, Dundee, has been increased in proportion as the direct and indirect admissions have increased. At the end of last year, there were 36 inmates, 30 being in ordinary wards, 3 in special wards, and 3 in preference wards. During the year, 133 applications were received; of these, 122 were admitted. Of the 122, in such an institution, the mortality must be small; and females and 8 females had died. It is very satisfactory to note that the admissions have increased considerably, and that there has been no increase in the form of insanity.

WOODHILL ASYLUM.

The annual report on the above asylum by the Commissioners in Lunacy for 1876-77 is of a very satisfactory nature. There are at present in the asylum 142 patients; and, during the past year, there have been 16 deaths, of which 5 were due to general paralysis, 2 to epilepsy, 5 to phthisis pulmonalis, 2 to other chest-affections, 1 to

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 16th, 1882.

Groom, William, North Brink, Wisbeach.
Hewkley, Frank, 33, Philips Road, Dalston, E.
Modi, Hormasji Restourji, Bombay.
Sinclair, John, Kingsclere, near Newbury.
Treadwell, Oliver F. N., 22, Lorn Road, Brixton.
Trevor, Edward Tull, Queen's Gardens, Hyde Park.
Walker, Francis John, Spilsby, Lincolnshire.

The following gentlemen also on the same day passed their Primary Professional Examination.

Ryan, Thomas, Dublin Hospital.
Banerjee, Mahendra Nath, King's College, and Calcutta.
Griffin, John Hubert, St. Bartholomew's Hospital.
Martin, Henry Joseph W., University College Hospital.
Willecks, Arthur D., University College Hospital.
Parsons, William Charles, London Hospital.

MEDICAL VACANCIES.

The following vacancies are announced :—

ABERYSTWTH INFIRMARY AND CARDIGANSHIRE GENERAL HOSPITAL.—House-Surgeon. Salary, £175 per annum. Applications to Evan Evans, Solicitor, Aberystwith, by 28th inst.

ANDERSON'S COLLEGE DISPENSARY.—Physician. Applications to David Wilson, Honorary Secretary, 42, Bath Street, Glasgow.

BELMULLET UNION.—Medical Officer for Bangor Dispensary District. Salary, £100 per annum, with £10 yearly as Medical Officer of Health, registration, and vaccination fees. Election on the 3rd proximo.

BELMULLET UNION.—Medical Officer for Workhouse at a salary of £50 per annum, together with £5 per annum as Superintendent Medical Officer of Health. Election on the 9th proximo.

BUSHEY HYDROTHERAPEUTIC SANATORIUM.—Physician. Applications to J. McDonald, Esq., the Hall, Bushey, Herts.

CARNARVONSHIRE AND ANGLESEY INFIRMARY.—House-Surgeon. Salary, £100 per annum. Applications by March 7th.

CASTLEBAR UNION.—Medical Officer for Castlebar Dispensary District. (North Division No 2). Salary, £110 per annum, with £15 yearly as Medical Officer of Health, registration, and vaccination fees. Election on the 25th inst.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Assistant Honorary Surgeon. Applications by March 4th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C. Assistant Surgeon. Applications by the 8th March.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Administrator of Anesthetics. Applications by March 13th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by March 13th.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Member for Surgical Staff. Applications by the 29th March.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by the 29th March.

GENERAL INFIRMARY, NORTHAMPTON.—Assistant House-Surgeon. Salary, £80 per annum. Applications by the 13th March.

MONTROSE ROYAL LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £120 per annum. Applications to Dr. Howden.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—House-Surgeon. Salary £50 per annum. Applications by February 24th.

PAISLEY INFIRMARY.—House-Surgeon. Salary, £80 per annum. Applications to Francis Martin, County Buildings, Paisley, by the 4th March.

ROTHERHAM HOSPITAL.—Resident House-Surgeon. Salary, £100 per annum. Applications by February 28th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—House-Physician. Salary, £80 per annum, in lieu of Board. Applications by the 9th March.

ST. GERMAN'S UNION RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary, £100 per annum. Applications, marked "Appointment Medical Officer of Health", by March 9th.

TIVERTON INFIRMARY.—House-Surgeon and Dispenser. Applications to E. F. C. Clarke, Honorary Secretary, Tidcombe Villas, Tiverton, Devon.

TRINITY COLLEGE, GLENALMOND, N.B.—Medical Man. Salary, £120 per annum. Applications to the Rev. the Warden.

WESTERN GENERAL DISPENSARY.—Marylebone Road.—Honorary Physician. Applications by March 6th.

WEST LONDON HOSPITAL, Hammersmith, W.—Assistant Physician. Applications by 1st March.

WESTERN OPHTHALMIC HOSPITAL, 155, Marylebone Road.—Surgeon. Applications by the 28th February.

MEDICAL APPOINTMENTS.

BARTON, J., M.D., appointed Medical Officer to the South City Dispensary, Dublin.

BRYDEN, R. J., M.R.C.S.Eng., L.S.A.Lond., appointed House-Surgeon to the Gravesend Infirmary, *vice* R. A. Birdwood, M.B., M.R.C.S.Eng., resigned.

BUTLER-SMITH, Albert C., M.R.C.S.Eng., appointed Surgeon to the Farringdon General Dispensary and Lying-in Charity.

DUCKWORTH, R. H., A.B., M.B., appointed Medical Officer to Rathdowney Dispensary District and Workhouse.

HAYES, M., L.R.C.S.I., appointed Assistant Medical Officer and Dispenser to the Bradford Friendly Societies' Medical Aid Association, *vice* J. McCutcheon, L.F.P.S., resigned.

HUTCHINSON, S. J., L.D.S., M.R.C.S.Eng., appointed Dental Surgeon to the Dental Hospital of London, Leicester Square, *vice* A. Coleman, L.D.S., F.R.C.S.Eng., resigned.

HUTTON, H. R., M.B., appointed Physician to the General Hospital and Dispensary for Sick Children, Pendlebury.

JESSOP, W. H., F.R.C.S., appointed Assistant-Surgeon to the Central London Ophthalmic Hospital, *vice* W. Lang, F.R.C.S., resigned.

KINANE, M. K., L.K.Q.C.P.I., appointed Medical Officer for Templemore Dispensary District to the Thurles Union, *vice* E. P. Meagher, L.K.Q.C.P.I.

MACLEOD, M. D., M.B., appointed Medical Superintendent of the East Riding Asylum at Beverley.

MITCHELL, Adam, B.A., L.K.Q.C.P., appointed Medical Officer to Borris-in-Ossory Dispensary District.

MORRIS, W. C., M.B., appointed Medical Officer to the Chester-le-Street District and Workhouse, *vice* R. Linton, deceased.

MOULLIN, C. W. Mansell, M.D.Oxon., F.R.C.S.Eng., appointed Lecturer on Comparative Anatomy at the London Hospital Medical College.

NICOLL, T. V., L.R.C.S., appointed Honorary Medical Officer to the British Asylum for Deaf and Dumb Females at Clapton, *vice* A. Boswell, M.B., resigned.

NORMAN, Conolly, M.K.Q.C.P.I., appointed Medical Superintendent of Castlebar Lunatic Asylum.

ROY, William, M.D. Edin., appointed Surgeon to the North Cambridgeshire Cottage Hospital, Wisbech, *vice* D. C. Nicholl, L.R.C.P. Edin. and M.R.C.S.Eng., deceased.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

FLEMING.—At 155, Bath Street, Glasgow, on the 20th inst., the wife of William James Fleming, M.D., of a son.

HEWLETT.—On February 1st, the wife of John C. Hewlett, Esq., of Elmhurst, Beckenham, Kent, and Charlotte Street, London, E.C., of a son.

RICHARDSON.—February 11th, at Lynstead, Torquay, the wife of J. B. Richardson, M.B., of a daughter.

MARRIAGES.

BEEVOR—LEADAM.—On the 7th, at the Parish Church, St. Marylebone, by the Rector, the Rev. C. J. Phipps Eyre, Charles Edward Beavor, M.D. Lond., M.R.C.P., eldest son of the late Charles Beavor, F.R.C.S., of 129, Harley Street, to Blanche Adine, third daughter of the late Thomas Robinson Leadam, M.D., of Stratfield House, Mortimer, Berks.

DUNBAR—SAUNDERS.—On the 21st inst., at St. Paul's Church, Bayswater, by the Revd. W. Morrison, D.D., James John Macwhirter Dunbar, M.D. London Univ., eldest son of Surgeon-General J. A. Dunbar, M.D., Indian Army (retired), to Mary, daughter of George Saunders, Esq., M.D., C.B.

TOLL—MORTLOCK.—On the 29th December, 1881, at St. Peter's Cathedral, Adelaide, S.A., by the Rev. Dr. Dewdy, D.D., John Tressilian Toll, M.R.C.S.E., L.R.C.S. L.M. Edin., of Port Adelaide, South Australia, to Florence Margaret, youngest daughter of W. R. Mortlock, Esq., M.P., Avenel Medindie, S.A.

WYLLIE—STEPHENSON.—On January 9th, at Blundellsands, Liverpool, by the Rev. C. de B. Winslow, Henry Wyllie, L.R.C.P. Ed., L.R.C.S. Ed., of Mersey Road, Blundellsands, to Emma, daughter of W. Stanley Stephenson, Esq., of Nicholas Road, Blundellsands.

PRESENTATION.—The students of Mercer's Hospital have presented the late resident medical officer, Mr. C. Burke Gaffney, with a handsome clock, on his retirement from office.

DR. JUNOD, who was well known in medical circles in London some years ago as the inventor of a boot by which a species of dry cupping was performed, has lately died in Paris.

THE seventy-sixth annual meeting of the Medical Society of the State of New York was held in Albany on February 7th, 8th, and 9th, under the presidency of Dr. Abraham H. Jacobi.

A Bill to provide for the Sanitary Inspection and Regulations of Schools in Ohio has been introduced into the Legislature of that State.

UNIVERSITY OF ATHENS.—According to the report of the late rector, Professor Aretieus, there were in this university during the academical year 1879-1880 2,030 students, of whom 728 belonged to the faculty of Medicine.

ST. THOMAS'S HOSPITAL.—The following appointments have been made:—*House-Physicians*: A. B. Carpenter, L.R.C.P., M.R.C.S.; S. W. Sutton, M.B., L.R.C.P., M.R.C.S. *House-Surgeons*: M. P. M. Collier, F.R.C.S., M.B., M.S.; C. F. White, M.R.C.S., L.S.A. *Resident-Accoucheur*: T. D. Acland, M.B., L.R.C.P., M.R.C.S. *Assistant House-Physicians*: Senior, F. W. Marlow, M.R.C.S., L.S.A.; Junior, R. Heelis, M.R.C.S., L.S.A. *Assistant House-Surgeon*: C. W. Haig Brown, M.R.C.S., L.S.A.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PHYSICIAN HEALING DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE BRITISH MEDICAL BENEVOLENT FUND.

THE Treasurer of the British Medical Benevolent Fund desires to acknowledge, with sincere thanks, the following donations: Dr. Habershon, £10 10s.; Dr. Siordet (Mentone), £5; Dr. D. Chalmers (Malton, formerly Everton), £5.

JOHNSONIAN PRIZE.—The result is not yet known. There were five essays sent in.

LECTURES ON PUERPERAL FEVER.

SIR,—Will you kindly allow me to express my regret that all the copies of the lectures on Puerperal Fever have been distributed, in answer to numerous applications for them.—Yours truly,

R. J. LEE.

6, Savile Row, W., February 23rd, 1882.

PITYRIASIS.—Would any member kindly give their most successful treatment for chronic pityriasis capitis? My patient is a gentleman aged 24, who has resisted the ordinary methods of treatment for six months past.

UNQUALIFIED PRACTITIONERS AND UNCERTIFIED DEATHS.

SIR,—I beg to draw attention to the lax way in which death-registration is carried on in this locality. The number of uncertified deaths equals, if not exceeds, the certified, and unqualified practitioners are as numerous as qualified, having got practices through acting as unqualified assistants. One would fancy the Government or some local representative body would be chary of the lives of the inhabitants, and make it compulsory that a person with some qualification should at least see the sick persons once, so as to testify as to the cause of death. As the law is now administered, a coroner's duty is confined to cases of violent death.—I am, sir, yours truly,

GERALD H. FITZGERALD, M.D., Medical Officer,

Ponteland, Northumberland, February 13th, 1882. Ponteland.

A MEMBER.—1. The best underclothing for your patient is Benger's normal wool-clothing, to be had of Messrs. Newberger and Co., 53, Wood Street, E.C. 2. New milk can be had in Paris, sent out in sealed bottles from the Ferme d'Arcy. We do not know anything of the supply in other continental cities.

PEMPHIGUS.

SIR,—I have seen many instances of pemphigus, both specific and non-specific, local and general, and it is my experience, as I believe of most medical practitioners, that the non specific cases are invariably benefited by judicious administration of arsenic. At the same time, a cause must generally be sought for, and it is mostly present, either as an internal or external irritant, and, if possible, must be got rid of: be the trouble uterine, worms in the bowels, scabies on the surface, or syphilis in the constitution; and my observations invariably show there is a cause for acute pemphigus in all instances. I remember a case in which a man was attacked with acute local pemphigus in the hands and feet (back and front), from taking Donovan's solution in repeated doses, this acting as an internal irritant. On stopping the medicine, the pemphigus ceased. Another case, in which a woman was affected with scabies over her whole body, broke out afterwards with a severe attack of acute general pemphigus, with blebs as large as grapes. When the scabies was relieved, the pemphigus vanished. I think, therefore, we should rely not so much on the value of one special drug, such as arsenic, but rather seek out the cause and remove that.—I am, your obedient servant,

JAMES STARTIN, Surgeon and Lecturer St. John's Hospital for Diseases of the Skin.

SIR,—I should feel obliged to any of your readers who would inform me whether they make any charge for examining, and giving certificates to, candidates for clubs. I should also be much obliged for your own opinion on the point.—I am, etc.,

A MEMBER.

THE ISLE OF MAN.

SIR,—1. What prospects are there in the Isle of Man for a "physician" and general practitioner possessed of moderate private means? Are there any appointments there with salary? and, if so, how obtainable? 2. What is the cost of living there, as compared with a small country town in either Great Britain or Ireland? 3. Is the climate suitable for an individual with a delicate chest and constantly suffering from bronchitic asthma? Any other information on the subject will be most gratefully received. Is the licence of the Irish College of Physicians, or that of Edinburgh, held in the most general estimation? and, for one about to practise out of Ireland, which of the licences is it most advisable to have?—Your obedient servant,

A MEMBER BRIT. MED. ASSOCIATION.

NERVE-STRETCHING IN TRAUMATIC TETANUS.

SIR,—I have delayed noticing Messrs. Wheeler and Clark's annotations regarding the above mode of treatment in traumatic tetanus, thinking others would do so. Had either of those gentlemen referred to me, at Section 1229:4, they would have seen that Mr. Callender read a paper upon the subject, and referred to a case by M. Verneuil that had perfectly recovered after stretching of the median nerve (*Lancet*, April, 1876, p. 596). The following successful and unsuccessful cases have been recorded since that date. BRITISH MEDICAL JOURNAL, vol. i, 1879, pp. 490, 923, and Mr. Wheeler's case, vol. ii, 1881, p. 984; *Lancet*, March, 1878, p. 311, October, 1879, pp. 892, 963; the *Medical Times and Gazette*, vol. i, 1879, p. 618, vol. i, 1880, p. 202, vol. ii, 1880, p. 216.—Yours obediently, MEDICAL DIGEST.

DOES THE PRESENT SYSTEM OF MEDICAL EDUCATION FULFIL ITS REQUIREMENTS?

SIR,—In the JOURNAL of February 15th is a note referring to a lecture by Dr. Edis at the Middlesex Hospital on this question. I desire to record a recent experience I have had in reference to this point. In December last I invited fifteen medical men to the infirmary of which I am the house-surgeon, my object being to promote social fellowship, and at the same time to favour mutual improvement by the observation of and subsequent discussion upon, certain interesting cases which I happened to have in the wards. Among my cases were two illustrating the retinal changes in Bright's disease; one of pigmented retinitis, and one showing optical changes in progressing pernicious anaemia. Of my guests, only three were able to handle and use the ophthalmoscope sufficiently to observe the objects I wished to demonstrate. Of the others, no fewer than nine candidly admitted they never had seen an optic disc, nor were they aware of the ophthalmoscopic appearance of a normal eye. The others knew something about ophthalmoscopy. These facts point to a screw loose somewhere in our great medical schools. Some of these gentlemen were in practice, and three were resident officials in neighbouring infirmaries. Can it be that the profession, as turned out from the centres of medical education, is not instructed in keeping with the times? Judging by this, I fear it is so, and some great change should be made in our system of medical education.—Yours faithfully,

LONDINENSIS.

INQUIRENS asks from what book or books he can obtain the most satisfactory information on the following points regarding the mercantile marine: 1. Regulations regarding appointments; 2. General routine of duties; 3. Treatment of sea-sickness; 4. Addresses of some of the leading lines.

THE DEAD AMONG THE LIVING.

SIR,—Writers who have treated on the nuisances and dangers to the public health induced by dead bodies concur that the dead should be buried in places remote from centres of population, in soils calculated to allow of the passage of gases and fluids in every direction, and at such a depth, that there can be no contamination of the surrounding atmosphere. The neglect of these observances is sure to bring disease and death in its train. The poisonous volatile organic matter diffused in large volumes in the neighbourhoods of our London burial-grounds is even painfully perceptible to the senses; and not only so, but it exercises a more or less serious influence on health, frequently producing typhoid and diseases of a kindred type, but more frequently disagreeable ailments, such as troubles of the digestive organs, and intestinal fluxes, arising from the inhalation of putrefying animal matter, and its reception into the circulation, which affections sometimes prove fatal. Dr. Roger C. Tracey, the eminent sanitary official of New York, in his essay on *Public Nuisances*, referring to the proper treatment of the dead, observes: "Singularity enough, whilst the utilisation of the remains of animals in such a manner as to render them innocuous has been for some time an accomplished fact, the proper disposal of human dead is still an open question."

Although Dr. Tracey is an advocate of cremation, because of its prompt and complete destruction of the body, nevertheless, he accepts Mr. Seymour Haden's principle of earth-to-earth burial most favourably. Of course, from the time of Aristotle, the antiseptic qualities of fresh earth in hastening, or rather in arresting, decomposition, has been no secret to men of science. The proposition to bury the dead in perishable coffins, Dr. Tracey regards as "a very sensible one". Nay, he goes further, and asserts that "there seems to be no valid objection to the plan unless it be a sentimental one". This sentiment, which causes the public to allow the departed to be preserved in varied stages of putridity for an indefinite number of years, cannot be too strongly opposed. Such a disposition, amounting to actual desecration of "poor mortality", Mr. Haden pertinently characterises as "an un-reasoning sentiment"; one, moreover, which he considered should be stigmatised, without extravagance or impropriety, as an offence not alone against the dead, but against society. When will the public mind see mural matters in the same light?—I am, etc.,

SANTITAS.

SIR,—Can you, or any of your readers, kindly give me the names of any reputable lunatic asylums—for preference, in the neighbourhood of London—where I can place a young man, who has been a lunatic for many years, for a less sum than 20s. a week? He has been, and is, an inmate of an asylum at a higher rate; but, by the death of his father, the sum procurable for his maintenance will not allow a higher weekly amount than that I have mentioned. Any information on this point will be thankfully received by, yours very truly,

Bridgwater, February 7th, 1882.

W. L. WINTERBOTHAM, M.B.

LIFE ASSURANCE COMPANIES AND PAYMENTS FOR CERTIFICATES.

SIR,—Allow me to call attention to the following. Some time ago, I attended a woman whose life was insured; she died. Her husband, on applying for the ordinary death-certificate, said that the insurance secretary asked him to obtain from me a certificate of the cause of death for the use of his company. I told him the insurance company must apply to me direct, and declined to give the certificate to him. I heard nothing more of the matter for some months, when I happened to meet the husband of the deceased, who informed me that the insurance secretary applied to the registrar of deaths of the district, who supplied him with a copy of my certificate for 1s. or 2s. 6d. The injustice of the case is evident.—I am, sir, yours truly,

A MEMBER.

SIR,—In last Saturday's JOURNAL are two letters, complaining of the action of the London Life Association with regard to medical fees. Being convinced that this society is the best adapted to the needs of a medical man, or any professional man, I have taken two policies in it. I therefore now defend its conduct with regard to medical examinations. Mr. Docker's letter explains the reason why the Association has not to advertise or employ agents; but he does not state this, nor the important fact that only about two and a half per cent. of the gross income is expended in management; whereas some companies spend twenty-five or thirty per cent. in this way. Nor does he state that a person insuring in the London Life Association may reasonably expect, after paying seven annual premiums, to have a reduction of sixty per cent. in the amount payable yearly, and a further reduction seven years later.

These are the good points. On the other hand, the fact that the insurer must present himself at a time appointed before the medical officer and Board of Directors, or submit to a fine of £5 or £10; and the very sad fact that the insurer must pay his medical man a guinea, instead of leaving the insurance company to pay half the sum, as several of them do.

I think that the fact itself, that an insurance society can afford to take such an independent position, might suggest to a thoughtful mind that such a society must be a substantial one.—Believe me to be, sir, yours truly,

Castle Cary, Somerset, January 31st, 1882.

C. P. COOMBS, M.D. Lond.

ERRATUM.—On page 233, second column, line 2, for "Hastings" read "Michael."

A LECTURE ON THE VARIOUS FORMS OF RENAL TUBE-CASTS AND THEIR DIAGNOSTIC SIGNIFICANCE.

By GEORGE JOHNSON, M.D., F.R.S.,

Professor of Clinical Medicine; Senior Physician to King's College Hospital; etc.

GENTLEMEN,—The microscopic examination of the urine secreted during the different stages of the various forms of renal degeneration, which are usually included under the generic term "Bright's disease", affords evidence which, rightly interpreted, is of great value as to the morbid changes which are in progress within the kidney. This evidence is of a peculiarly interesting character, and is based upon the following facts: 1. That the glandular structure of the kidney is tubular; 2. That, while some structural changes are interstitial and intertubular, the most constant and important of the morbid processes are intratubular; 3. That portions of the various morbid products, after being moulded within the tubes, become loosened, and then, being detached and carried on by the secreted current of liquid, appear in the urine in the form of cylindrical casts of the tubes. 4. These tube-casts vary much in size and form, and in the materials of which they are composed; and they throw much light upon the condition of the tubes from which they have escaped.

Before proceeding to describe and interpret the various forms of tube-casts, let me give you one or two hints as to the best mode of finding and preserving them. If the casts be very numerous, they may be found at once by placing a drop of the urine under a power of 200 or 250 diameters; but, as a rule, it is desirable to put about four ounces of the urine into a conical glass, and allow it to stand for from twelve to twenty-four hours. At the end of that time, a sediment has usually formed; it may be only a slight or scanty cloud, or a more or less copious and dense deposit. If no sediment be visible, few or no tube-casts will be found even after the most careful and prolonged examination. A few drops of the sediment, taken up with a pipette, are then placed in a shallow cell made by cementing a thin ring of glass or metal on a glass slide; or a cell may be made of a ring of cement, such as Hollis's glue or Brunswick black. The cellful of liquid being covered by thin glass, and the excess of liquid removed by a cloth or blotting-paper, is now ready for examination. The examination is much facilitated by the use of the shallow cell. When the sediment is scanty, it is a waste of time to be searching for tube-casts in a fraction of a drop of the urine which alone can be retained between two flat pieces of glass.

And here let me say that the various forms of tube-casts may, with a little care, be preserved for an indefinite time. Some of the specimens which I shall presently show you were mounted more than a quarter of a century ago. I shall direct your attention especially to some specimens from which were made drawings to illustrate a paper of mine on the Forms and Stages of Bright's Disease, which was published in the forty-second volume of the *Medico-Chirurgical Transactions*. At page 161 of that volume you will see microscopic drawings of the various forms of tube-casts which were found at different stages of a prolonged case of Bright's disease. The specimens were mounted at different periods of the year 1856; and, if you compare them with the woodcuts, you will see that to this day they retain their characteristic appearance. These specimens of tube-casts, like most of those that I possess, have been preserved in pyroxylic spirit—one part of spirit to nine of water. The mixture of spirit and water becomes milky; but, after standing for some days, with an occasional shaking, it may be cleared by filtering through paper. I have lately been using a saturated solution of salicylic acid for the same purpose; and, so far as I can judge from a comparatively brief experience, it appears to answer well. It preserves the casts with little or no change of appearance.

In order to understand the significance of tube-casts, you have to bear in mind the structure of the kidney, with which I must assume that you are quite familiar. To suppose the contrary would be an insult to men studying in the school where, forty years ago, Bowman first demonstrated the structure of the Malpighian bodies. The basis of all tube-casts is an albumino-fibrous material derived from the blood, which, when it exists alone, forms a transparent structureless so-called "hyaline cast". "Hyaline casts" may be "small" or "large"; the

latter being about twice the diameter of the former, and having a more sharply defined outline. (Fig. 1.) What is the explanation of this

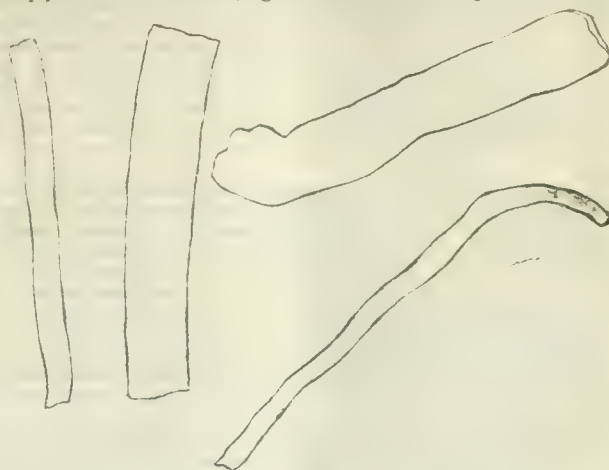


Fig. 1.—Large and Small Hyaline Casts $\times 200$.

difference of diameter? Not, as is sometimes carelessly asserted, the difference in the size of the tubes in which they have been moulded. The vast majority of the casts, both large and small, have been formed within the convoluted secreting tubes of the cortex, which are remarkable for their uniform size. The different diameter of the casts is explained by the fact that the small casts have been moulded within the lumen—the clear central canal—of convoluted tubes which retain their lining of glandular epithelium; while, on the other hand, the "large hyaline cast" has been formed within the basement-membrane of a tube the epithelial lining of which has been destroyed and displaced by the hyaline material of the cast. The large casts, therefore, point to a greater structural change within the tubes than is indicated by the small casts.

In some of the specimens which I have placed under the microscope, you may see a granular cylinder, composed of more or less altered epithelium, enclosed in a casing of the hyaline material, which, apparently having passed through the basement-membrane, has displaced and surrounded the epithelial lining of the tube. (Fig. 2.)



Fig. 2.—Granular Cast: enclosed within a Hyaline Cast $\times 200$.

Another interesting fact is, that many of the hyaline casts retain more or less of the convoluted form, which proves that, although in their exit from the kidney they have passed through the straight collecting tubes of the medullary cones, they were moulded in the tortuous secreting tubes of the cortex. (Fig. 3.)



Fig. 3.—Convoluted Hyaline Cast $\times 200$.

No doubt many of the long convoluted casts which, in sections of the cortex, may be seen filling the uriniferous tubes, become broken into short fragments during their passage through the straight tubes of the cones; and an indication of this process is often afforded by a fissure extending more or less deeply from the concave side of a curved

It is at any rate quite certain that the great majority of tube-casts which appear in the urine have been moulded within the convoluted tubes of the cortex. The casts which evidently have this origin are: 1. The oily casts, the fatty infiltration being as a rule confined to the glandular epithelium of the convoluted tubes; 2. The small white-cell casts, containing the leucocytes, which can have no other source than that of migration through the walls of the Malpighian capillaries; 3. Blood-casts, the result of hæmorrhage from the Malpighian capillaries into the commencement of the convoluted tubes; 4. Those large hyaline casts which after their escape with the urine, retain the convoluted form, clearly indicating their source in the tortuous tubes of the cortex. 5. The epithelial casts, which contain numerous cells, having all the characters of the glandular epithelium of the convoluted tubes. These unquestionable facts are clearly inconsistent with the theoretical assumption that no casts from the cortical portion of the kidney can escape, and appear in the urine.

I trust that I have succeeded in convincing you that the structure of the various forms of tube-cast which appear in the urine is both interesting and of high practical value. And now I must remind you that, in order to obtain trustworthy data from a microscopical examination of the urine, your observations of the phenomena must be exact, and your interpretation cautious and rational. You must accurately discriminate between one form of tube-cast and another, and you must avoid the not very unusual error of mistaking for tube-casts appearances somewhat resembling them, which are due to the presence of foreign bodies in the urine. I have here a specimen which was given to me by an enthusiastic but inexperienced microscopist, to illustrate his supposed discovery of brightly and variously coloured tube-casts, some being red, others yellow, and others again green. These supposed tube-casts, as you will see, are in reality coloured fibres of wool, no doubt having their source in floating dust from a carpet. An unpractised observer often mistakes a fibre of cotton or a hair for a tube-cast.

I was once invited to confirm the diagnosis of cancer of the kidney which had been very confidently inferred by two experienced practitioners from the microscopical appearances in the urine. On looking at the specimen which had been prepared for my inspection, I found that the supposed cancerous products from the kidney were obviously grains of starch, which, on inquiry, were traced to their source in the application of violet powder to the external genitals of a female patient. The patient's recovery afforded the crowning proof of the absence of cancer.

A very moderate amount of care and study will enable you to avoid such gross errors of observation and interpretation as those to which I have referred.

In conclusion, let me impress upon you the importance of avoiding the not uncommon error of basing your diagnosis, your prognosis, or your indications for treatment, too exclusively upon one kind of evidence. After all that I have said and written upon this subject, I shall not be suspected of attaching too little importance to the information to be derived from a careful microscopical and chemical examination of the urine. The importance of this inquiry, in all cases of renal disease, can scarcely be overestimated. On the other hand, information of the highest practical value, with regard to the form and the stage, and the gravity of the renal disease, is to be derived from various other sources—such as, for example, the presence or absence of dropsy; the colour and expression of the face; the state of the vision and the ophthalmoscopic appearances of the fundus of the eye; the odour of the breath; the presence of such nervous phenomena as headache, giddiness, twitching or painful cramp of certain muscles; the condition of the skin, which, in the advanced stages of the various forms of Bright's disease, is almost invariably dry and harsh, and with difficulty forced into a state of active secretion; and last, but not least, the condition of the circulation, as indicated by the degree of arterial tension, and the impulse and sounds of the heart.

The practice of medicine, like the art of war, is, in a greater or less degree, a succession of mistakes—the best generals and practitioners being those who make the fewest mistakes; and the surest way to avoid error, whether in war or in medicine, or in any other art, is by a diligent endeavour to base every scientific or theoretical opinion, and every practical doctrine, upon the widest and most exact observation of all the facts which have relation to the subject in hand.

The unscientific absurdity and the practical evils of a narrow and exclusive specialism, can scarcely be better shown than by the study of the various forms of renal degeneration, whose influence upon the general system is so wide and far reaching, that, during their progress, almost every tissue and organ and function of the body may suffer more or less perversion and derangement; and so typical and characteristic are some of these secondary results of renal disease, that, in one case,

the ophthalmoscope; in another, the finger on the full and tense radial artery; and in another, the hand or the stethoscope over the strongly heaving hypertrophied heart, has alone sufficed for the diagnosis of advanced degeneration of the kidney.

SELECTIONS FROM CLINICAL LECTURES,

Delivered at the London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the Hospital; Consulting-Surgeon to Moorfields Ophthalmic Hospital; and Professor of Surgery and Pathology in the Royal College of Surgeons.

PAPILLARY GROWTHS IN THE LEG PRECEDING CANCER.

We had, some time ago, through the kindness of Dr. Stephen Mackenzie, several opportunities of seeing a man who has some very peculiar growths on the lower part of one leg. There are several patches of a papillary growth close together, and almost confluent, a quarter of an inch or more in height. On their surface, the papillary outgrowths are covered by a dirty scab; but if we detach or break this, you can easily separate the wart-like growths from each other, and put them apart in long rows, like standing corn. They do not readily bleed, and the skin from which they grow is somewhat thickened. The main patch is over the shin, in front of the lower third of the leg, and is nearly as large as the palm of the hand; but near it are several much smaller ones. The first stage of the condition is a thickened and rough papule, not unlike a spot of psoriasis, but with more evidence of growth. Our patient is a man of near 50, and he has had the condition for two or three years. It gives him no trouble. He has no enlarged glands.

I do not think that there can be much hesitation in considering that the disease is a variety of papilloma which, if not actually cancerous at present, is in a fair way to become so. At any time we might find the glands enlarged, or that the patch had begun to ulcerate. It is mainly in the absence of any ulceration that the picture of epithelioma is as yet incomplete. There is no telling how long or how short may be the period during which its appearance will be delayed. I have urged the man to at once submit to radical treatment, that is, to have the growths freely destroyed by chloride of zinc paste.

Dr. Mackenzie's patient shows an extreme condition of what, in lesser forms, I have often seen before. An old man, aged 74, came to us at the Hospital for Skin-Diseases, last week, who had exactly the same thing, but in smaller areas and with less elevation. They had been present two years, and, excepting that they itched excessively, gave him no trouble. In him, one of the patches was at the back of the leg; most of them, however, being in the usual position—over the shin. I will ask you to note, in connection with this fact, that the patches are almost always multiple—a chief one and several smaller near to it. Although I ask you to believe that this disease is really a close ally of cancer, yet I do not know that I can quote any complete case in which I have watched patches which began as I have described, and progressed to an undoubtedly cancerous termination. But I have seen several which were cancerous, in which there was good reason to believe that the beginning had been like them. It is only in the legs of aged people that we see such growths; and the liability to them seems to begin at the cancerous time of life. Often some local irritation, eczema, etc., precedes their formation. Not unfrequently, during periods of some years, the patches remain without warty or papillary outgrowth, simply hard rough patches, well circumscribed, and showing on the surface the little points or buds from which future growth is to take place. In this stage they resemble condylomata, excepting in their hardness and roughness. Often, however, they are not round, but in long streaks and very irregular. Probably they are, for the skin of the leg, what the rodent cancer is for the upper part of the face—the form of malignant action which it is most prone to take on. I have not often seen them on other parts of the body.

ON THE PECULIAR CONDITIONS ASSUMED BY MALIGNANT DISEASE OF THE SKIN IN DIFFERENT REGIONS.

You are aware that it is a doctrine upon which I often insist, that certain differences in the clinical characters of malignant disease of the skin are to be observed in relation with the different surface regions of the body. The upper part of the face grows rodent cancer; the lips, ears,

prepuce, and vulva, a form of common epithelial cancer, which rapidly spreads to the gland-disease; the scrotum, the soot-wart, which, after perhaps a long duration, becomes epithelial cancer of the common type; on the legs, as we have just seen, a hard dry papillary growth often producing cancerous action, and the latter is usually slow and for long, without much distress or mischief. I wish now to ask your attention to certain peculiarities of malignant ulceration of the skin of the abdomen. I have at present in my recollection four or five cases, in which cancer of the trunk showed the course of the trunk showed conditions of which I have never seen the exact parallel elsewhere. In all, the ulceration produced during many years, caused but little pain, and produced no offensive odour. In these features, you will say that it resembles rodent ulcers of the face; but the sores produced did not look exactly like rodent ulcers. The amount of induration in the borders and base was far greater, the destruction as a rule deeper, and, above all, at no part nor in any case was the well known sinuous roll of superficial induration simulated. It would appear that the subcutaneous cellular tissue is involved much more and more extensively than in rodent ulcer. There is little or no tendency to healing, which in the superficial form of rodent ulcer we so often observe. I believe, is the earliest stage of the disease like that of a rodent ulcer. Although, however, I insist on these minor differences, it is to be admitted that the disease is, after all, the same, modified only by the position of the trunk. This, indeed, is my assertion. I do not recollect to have ever seen the common type of epithelial cancer (wart-growing, and the like) on the skin of the chest or abdomen. I exempt the umbilicus from this remark, for here the ordinary type of cancer, which resembles rodent ulcer, as denoted by its curled, sensitive, and bleeding edges, may now and then occur on the middle of the trunk. I have never seen it on other parts of the trunk. The disease is almost invariably intractable, and, as far as I have observed, does not heal immediately after removal. I treated, twenty years ago, a woman aged 50, with a sore of this kind in the middle of her back. It was very large, and she was patient, and I think it was freely cut out by me, and three or four times most liberally destroyed with chloride of iron, but without the slightest benefit. As soon as the sore was removed, it began to heal. Almost at the same time, I had under care a gentleman who had an enormous malignant ulcer on the middle of his trunk, which had been gradually spreading for ten years or more, and which was hectic from discharge and bleeding, but had no offensive odour; more recently, I saw a gentleman from Birmingham, a friend of Mr. Williams, who had an ulcer a foot long, and so large that it might have been put into it at any part, and which yet did not prevent him from attending to his professional duties. It had been present for many years, and is supposed to have begun in a mole or wart. It was very deep, even years of age, and in fair proportion to its size, was very profuse, and there were frequent

be of synovia, or perhaps, most commonly, of a mixture of the two. If it occur immediately after the injury, then it is probably blood; and these cases are the most difficult to treat, for blood is more slow of absorption than synovia. The treatment is, however, the same for both, and consists in the vigorous use of cold. The ice-bag sedulously applied, or a spirit lotion so freely used, that evaporation is constantly going on, are the best measures. You must not be content, unless the skin over the whole part of the knee be kept quite cold. It is of great importance that absorption should be rapid and complete. If you can get rid of the swelling in a week or ten days, you will have a good chance of bony union, or of union so close that it is equivalent to bony. I believe that we get bony union in nearly half our cases. Our measures are, then, ice for a week or ten days; then oblique strips of plaster, which fix the fragments, and catch in notches in the splint. We avoid all complicated forms of apparatus; and hold, respecting Malgaigne's hooks and some similar contrivances, that they are barbarous and dangerous. The limb is, of course, always extended, from first to last, on a long and broad back splint, with a thick cushion and side notches. The limb is kept a little elevated—not with any design of relaxing muscle, but because the knee-joint permits slight overextension, which is attained by elevating the leg. By this means, the lower fragment passes a little higher up than it would otherwise do. When, at the end of ten days, you have brought the fragments together, cover the whole joint with bandages, and never touch the bone again until six weeks are accomplished. If you leave it uncovered, some zealous and inquiring dresser is almost sure to examine the bone to see if it is uniting, and by such examination, he prevents the progress of union. You must leave it in faith, and even at the end of the six weeks must still be very careful, and on no account make lateral movements. The union is still weak, and will easily break down. Be content if you find the fragments close. At the end of six weeks or two months, we usually allow the patient to get up, but he is always provided with a patellar apparatus before doing so. Note that the object of this apparatus is to hold the fragments together, which it could not do, but to prevent flexion of the knee, which would drag away the lower fragment. It also serves a secondary purpose, of giving lateral support to the joint. If an apparatus be not at hand, a gum-and-chalk or plaster-of-Paris case will serve the purpose quite as well. I usually advise our patients to wear the apparatus for six months: and then, if the knee feel strong, to throw it aside. Although we aim at bony union, and I have seen many in whom it, yet I am by no means an enthusiast as to its necessity. It curiously happens, that the old men, who, at the time of the accident, were unable to walk, not unfrequently walk better than those in whom it has taken place. This I have proved by examination of many patients, a long interval after the accident; and it is a very strong reason for declining to resort to any mode of treatment involving risk. A curious and interesting fact, which I often ask your attention, is, that the quadriceps muscle usually undergoes, during the six weeks' rest, very decided atrophy, sometimes attended by a certain degree of contraction. I have seen many in which the bone is closely united, much limits the movement of the joint. I well recollect one man, whom we treated with plaster, and in whose bone ossific union occurred. Two years after the accident, he had the same limb as before. His motion, on the second occasion, was not so successful as I had been: and when, a year later, I saw him, he was entirely lame. On the first, I found considerable motion, and he was enabled only by ligaments. Ten years ago, he was enabled to walk, and the quadriceps had enabled him to walk much more easily, for, during the interval between the two accidents, his knee had become much weaker.

[illegible]

been duly explained it was agreed that the operation should be done. I cut through the neck of the femur with Adams's saw, encountering some little delay on account of the hardness of the bone, and possibly from having got too close to the shaft, that is, not sufficiently across the neck. The operation was done under Lister's precautions. When the section of the bone was complete, I divided the tendon of the adductor longus, and those of the sartorius and tensor vaginae femoris. We were able at once to put the limb in much better position; and, subsequently, when the wound was healed, this was still further improved. No inflammation occurred about the wound, and he made an uninterrupted recovery. We did not succeed in preventing union of the bone at the site of section, and you now see the ultimate condition obtained. The man has since been able to walk erect; and he has now, for six years, been engaged in his former occupation with greatly increased comfort.

One drawback I must mention; and it is, indeed, on account of this



These woodcuts are copied from photographs to show the condition before and after operation.

that we now have him again under care. He had, two years ago, an acute abscess in his buttock. This was four years after the operation, and not apparently in any direct connection with it. The abscess did not lead to bare bone, and, after it was opened, sound healing occurred; but he now, two years later, comes to us again, complaining of pain in the same position, and fearing that another abscess is imminent. I may state that I have under observation, in private, a very similar case, in which one hip has been ankylosed for many years. The patient is in robust health, and yet occasionally—that is, once in three or four years—deep-seated abscesses occur, after the evacuation of which sound healing again takes place. I do not know of any cause for these abscesses, excepting that they occur in the proximity of bone which has formerly been diseased. In both cases, the abscesses develop with much pain and constitutional disturbance; but the rapidity and perfectness of the healing is remarkable. I do not think that, in the case before us, we ought to blame the operation for the liability to abscess.

It might have happened, as the other case shows, if nothing whatever had been done. On the whole, the man considers himself a great gainer by it.

CLINICAL LECTURE

ON A

CASE OF TUBERCLE OF THE IRIS AND CILIARY BODY.

By J. R. WOLFE, M.D., F.R.C.S. Ed.,

Lecturer on Ophthalmic Medicine and Surgery in Anderson's College, Senior Surgeon Glasgow Ophthalmic Institution.

GENTLEMEN,—I wish to direct your attention to the case of tubercle of the iris and ciliary body, on which we operated some time ago. The case is interesting, not only to ophthalmologists, on account of its rare occurrence—this being the only one on record in this country—but also in this respect, that it may throw some light on a much debated question in pathology and clinical medicine. You are aware that, whenever the subject of tubercle and tuberculosis comes to be discussed in medical societies, difference of opinion at once becomes manifest. Indeed, it seems that we have not yet arrived at a common definition of tubercle. What is considered as tubercle by one school of pathologists, is not admitted to be such by others. This was shown even so lately as at the last meeting of the International Congress in London, in a discussion in which Virchow had taken part (see *BRITISH MEDICAL JOURNAL*, October 1st, 1881). So long as the doctrine of Laënnec was generally adopted, we used to regard tubercle as either small, grey, semitransparent, hard bodies, deposited as a mere infiltration into the tissue. These bodies might then become yellow, opaque, and soft, and a caseous substance formed in their interior. When isolated, they were called milary tubercles; and, when of caseous consistence, they were designated yellow or crude tubercles.

Virchow, the founder of modern pathology, defines tubercle as a neoplasm, which takes its origin from the connective tissue in the form of nodules, consisting of closely packed cells. The life of the neoplasm is of short duration, for very soon its elements begin to degenerate, the degeneration always commencing in the middle of the nodules, and in most cases giving rise to caseous consistence. Besides the local malignity, this neoplasm possesses a pronounced tendency to diffuse itself over the whole organism, and this brings it into the category of malignant growths. (*Die Krankhaften Geschwülste*, 1865.)

Langhans then demonstrated that the nodules invariably possess giant-cells of a peculiar organic formation. And Virchow, in the discussion already referred to, told us that these giant-cells are of a finely granular structure, to which they owed their peculiar appearance. They developed by a regular gradation from simple cells, and are thus shown to be organic formations. He regards them as a special form of cell-formation.

This precise histological determination of tubercle enabled Köster to point out its existence in the granulations of the fungous joints; and Schüppel discovered it in scrofulous lymphatic glands, and Friedländer has shown that it is also found in scrofulous abscesses and in caries. Our knowledge has thus become more precise as to the nature of tubercle, and its domain also greatly enlarged.

Villemin made the discovery that tubercles can be inoculated upon animals, especially upon rabbits (*Etude sur la Tuberculose*, 1868). This discovery has been confirmed by the experiments of Cohnheim, who inoculated tuberculous matter into the anterior chamber of rabbits. The inoculated matter gradually absorbed; but, in about four weeks after inoculation, grey nodules made their appearance upon the iris, and multiplied until thirty or forty could be counted. The iris became tumified, and then purulent infiltration set in. Baumgarten has more recently carried this experiment still further. He injected blood taken from a freshly killed tubercular-inoculated animal into the aqueous chamber of rabbits; and he invariably found that, in three or four weeks, there was an eruption of tubercle, first in the lower segment of the iris, where the blood had lodged.

Rokitansky, from personal observation of 14,000 cases, has given us a list of the tissues which are subject to tubercular eruptions, viz., the lungs, intestinal canal, lymphatic glands, larynx, brain, spleen, liver, etc. The ocular tissues find no place in the list, for the eye was con-

sidered to enjoy immunity from tubercular affections. Although Jäger had called attention to its occurrence in the form of miliary tubercle which he found in the dead body; and Manz, von Gräfe, and Leber, had also discovered it during life in the interior of the eye, this attracted little attention. For when the whole organism is impregnated with the disease, its existence in the eye is regarded as of secondary importance.

The first case of miliary tubercle of the iris on record is that published by Gradenigo in 1869 (*Annales d'Oculistique*, 1870, and 1871). The second is that of Perls. In these two cases there was general tuberculosis—lung-affection. The third was reported by Saltini in 1875, in a girl 16 years of age; the affection was confined to the iris, and there was no symptom of constitutional taint. In 1877, Weiss published an observation of the case of a working man aged 51, in which the tubercles first broke out in the lower part of the eye, and months later, a tumour was found to have developed in the lower jaw on the same side, and, on its removal, was seen to consist of caseous tubercle.

A most interesting case was brought up for discussion by M. Auger at a meeting of the Société de Chirurgie de Paris, July 9th, 1879. It had been observed by M. Parinaud. A child of 12 years of age, of phthisical parents, had already suffered from discharge from the ear. Then the cornea was affected, and a small tubercle became visible upon the iris, which involved the whole eye. This case is particularly interesting, as the discussion which has taken place with regard to its pathology and treatment shows how little the subject of local tubercle is still understood. The sixth case is that by Samelsohn, December 1878; and the last on record is that reported by Rütter, June 1880, from Hirschberg's *clinique* (Knapp and Hirschberg's *Journal*, 1881).

The case which I am about to bring before your notice is that of Louis L., eight years of age, with fair hair and blue irides, and of healthy complexion, had always enjoyed good health, and had no cough or glandular affection. He is the tenth of a family of eleven, of whom five are living. Five of them died at the age of 5, 4, 3, 1 year, 10 weeks, and another was still-born. The causes of death were teething, *scrophulous dysenteria*, *pyæmia*, and *phthisis*.

The patient received a stroke on the left eye in March 1881, when the eye became swollen. The swelling gradually subsided, and, by the end of April, a white swelling became visible in the anterior chamber, at the upper margin of the iris. He was brought to the Dispensary in the beginning of May, when the eye appeared quite healthy; but a small tumour, the size of half a pea, could be seen at the upper segment of the iris. It took its apparent origin from the margin of the cornea with the sclerotic, and was attached to the anterior surface of the iris. The tumour was of a yellowish-white colour, and consisted of two lobes, with very fine vessels permeating its surface. The pupil was dilatible, with the exception of the upper border. There was no change of colour of the iris, vision was normal, and tension normal. In short, with the exception of the tumour, which was limited to the upper segment, there was no abnormality in the eye.

The patient was kept under observation for a whole month, and we found the tumour increasing, though very slowly, enlarging. Our diagnosis was, therefore, in favour of the iris, which is probably attached to the ciliary body. We were inclined, at first, to attempt the removal of the tumour with a pair of forceps; but, at the same time, we warned the parents that the tumour was probably more deeply seated, and that the operation would be attended with some risk. I made an incision under the conjunctiva, at the outer canthus, and introduced a small probe, and found it to be attached to the ciliary body, and the ciliary body itself. The wound healed tolerably well, but the part became tumefied; and, after a few days, there were seen small knots or growths upon the surface of the iris, which also became enlarged over the whole of the iris, and the whole of the eye became inflamed, and the patient was brought back to the Dispensary. I have previously mentioned, and sent to the Dispensary, a small piece of the iris, which was found to be attached to the ciliary body, and was found to be the same as the one which was removed from the eye.

The patient was kept under observation for a whole month, and we found the tumour increasing, though very slowly, enlarging. Our diagnosis was, therefore, in favour of the iris, which is probably attached to the ciliary body. We were inclined, at first, to attempt the removal of the tumour with a pair of forceps; but, at the same time, we warned the parents that the tumour was probably more deeply seated, and that the operation would be attended with some risk. I made an incision under the conjunctiva, at the outer canthus, and introduced a small probe, and found it to be attached to the ciliary body, and the ciliary body itself. The wound healed tolerably well, but the part became tumefied; and, after a few days, there were seen small knots or growths upon the surface of the iris, which also became enlarged over the whole of the iris, and the whole of the eye became inflamed, and the patient was brought back to the Dispensary. I have previously mentioned, and sent to the Dispensary, a small piece of the iris, which was found to be attached to the ciliary body, and was found to be the same as the one which was removed from the eye.

coloured, while other round bodies lodged in the interior remain pale. These latter are true tubercles, and show, in their centre, giant-cells, with many nuclei. No caseous matter is anywhere to be seen. The thickening passes into the choroid only to a limited extent, and the deep structures of the eye are normal.



Fig. 1.—conj. Conjunctiva. c. Cornea. Scl. Sclerotic. a. ch. Anterior chamber. c. cil. Corpus ciliare. c. tub. Conglomerated tubercles.

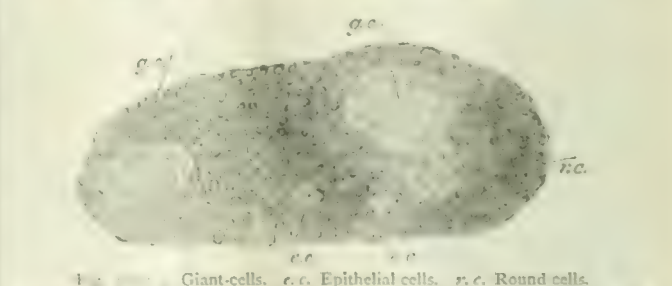


Fig. 2.—Giant-cells. e. e. Epithelial cells. r. c. Round cells.

Fig. 1 represents the condition of the different parts: Fig. 2 the ciliary body, with a magnifying power of 200. We therefore took this to be a case of true tubercle of the iris and ciliary body, limited to these structures, without manifestation of disease in any part of the organism, although it is true that it was brought on by an injury in a constitution predisposed to that affection, as shown in the family history. But the most remarkable feature of the case is that, on November 29th, the patient returned with ulceration of both feet. Large sores, with running fibrous and caseous discharge, were situated at the front part of the legs. There is an ulceration at the margin of both tibiae. This had broken out about the beginning of September.

We have thus established that tubercle, in its highest development, consists of small nodules containing giant-cells, without any caseous matter; and that the eruption may be limited to one spot, and that may be in any of the vascular tissues; and, further, that it is inoculable, although, in this case, the inoculation took place only in a different segment of the iris, and not in a different animal.

CHURCHMAN'S ADDRESS. In a remarkable address delivered at the St. Vincent Hospital, in Paris, M. Auguste Noyon, the well known alienist physician, presented that the following changes should be made in the LAW OF 1838. 1. Every individual who, having committed no crime or offence, shall be found to be insane, can only leave the public or private asylum (on condition of a medical certificate) and find his way to the world with safety. In all cases, he will be detained in the public or private asylum for a time at least equal to the period of detention to which he was subjected. 2. Every individual already committed once or more times to a lunatic establishment, in case of relapse, he removed into the same establishment on the simple certificate of a physician, and not by the order of the Government of the Hospital.

ABSTRACT OF LECTURES

ON THE

MORPHOLOGY OF THE MAMMALIAN SKULL.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,

Hunterian Professor of Anatomy in the College.

LECTURE II.—ON THE DEVELOPMENT OF THE ENDOSKELETON, AND A COMPARISON OF ITS CRANIAL AND SPINAL REGIONS.

AT the time when the mesoblast is becoming distinct, a ridge of cells is separated off from the hypoblast along the middle line, directly beneath the neural axis as a distinct rod—the notochord. Its extent is the same as that of the hypoblast. At first, it is composed of more or less flattened cells, each of which soon acquires one or more vacuoles, by the enlargement of which the notochord becomes a delicate structure full of cavities separated by very thin septa. The nuclei and protoplasm of the cells accumulate at the periphery, giving rise to a *cuticular sheath*. Outside this, a membrane—the *membrana elastica externa*—is formed; and between the two a cartilaginous sheath is often developed, which may be persistent, and indeed, in some forms represents, together with the notochord, the whole of the spinal column.

The part of each mesoblastic somite to the inner side of the developing muscular fibres becomes converted into embryonic cartilage; but the segmentation of this tract on each side of the notochord is at first coincident with that of the muscle-plates. As this tract of tissue, out of which the vertebral arches will be made, becomes more solid, it loses its primary segmentation, and becomes segmented alternately with the muscular segments. The consequence of this is, that the developing longitudinal muscles have now both origin and insertion along the middle of the secondary intercalary segments. The embryo is thus able to perform a certain amount of vermicular movement.

These segments pass into hyaline cartilage; and cartilaginous neural and hæmal processes are developed respectively above and below them. These give rise to the neural and hæmal arches of the adult. Either the hæmal arches themselves or else small processes at their proximal ends give rise to the transverse processes, which may grow out to form the ribs, or have the ribs attached to them. The latter pass over the permanent body-cavity, and form the skeleton of the external body-wall or somatopleure.

As the cartilaginous bases of these upper and lower tracts develop more and more, they press in upon the enclosed notochord, which in this way becomes very thin or altogether aborted, sometimes vertebrally, and sometimes intervertebrally, according to the type of creature. In the lower forms, such as the suctorial fishes, *Ceratodus*, etc., the notochord does not become constricted, but remains in a primitive condition throughout life.

In many of the Selachians, the number of neural arches is greater than that of the centra; and the cartilage which forms the arches of the anterior part of the spinal column is not subdivided into separate vertebrae, and is at first continuous with the base of the skull, the occipito-atlantal articulation taking place later. These are evidently low generalised conditions. In the sturgeon, there is no joint between the skull and spine even in the adult.

The costal arches are but feebly developed in the Ichthyopsida; in no case is there a perfect thoracic hoop. In the Amphibia, however, there is a plate of cartilage which may become slightly ossified, and possibly corresponds to the sternum of higher forms.

Amongst the Sauropsida, all the costal cartilages are unfinished below in the snakes and tortoises, there being neither sternum nor sternal ribs; and in the lizards the ribs are very imperfectly separated from the sternal plate. This shows a low condition. In lizards and all the higher forms where the sternal ribs and sternum are well developed, these ventral parts are formed from a continuous cartilaginous plate on each side, in which the ribs terminate. The fusion of these two plates in the middle line, and the segmentation of the ribs from the sternum, and of the sternum into a series of segments, all take place afterwards; and these changes are very variable in degree.

In the formation of bony vertebrae, the ossification is mostly centri-

petal, beginning in the perichondrium and working inwards. In this the cartilaginous sheath of the notochord takes some part, and the other cartilages have their own osseous centres. There is usually much less ossification in the sternum and sternal ribs than in the vertebral ribs.

The limbs and their girdles are developed externally to the costal arches, and will therefore be treated with the superficial part of the skeleton.

Until about a century ago, the skull was studied quite separately from the spinal column and trunk generally, apparently without any suspicion of its being the continuation of the axis and arches of the body. This new conception we owe to Goethe. The assumptions based on this truly philosophical discovery soon, however, misled the anatomists of the next epoch, as they had no embryological knowledge by which to check their discoveries.

The notochord passes along under the hind-brain, and in some degree into the fold of the mid-brain; as a rule, however, only reaching as far as the edge of the postclinoid wall, behind the pituitary body. It becomes bent ventral-wards terminally; and in the turtle, at any rate, the cartilaginous sheath is developed considerably further forwards and downwards than the apex of the notochord.

From the manner in which the head of the embryo is bent upon itself, the postero-inferior part of the fore-brain may be said to be the termination of the neural axis; from this part the infundibulum buds out. This region of the skull sends up on each side a continuous cartilaginous lamina, which is comparable to the separated neural arches of the body, but it is considerably aborted by the intrusions of the auditory capsules. Nevertheless, all things considered, the post-pituitary part of the skull differs but little in essentials from the contiguous parts of the spine. The main difference is its want of segmentation, but this, as already mentioned, may be seen in the forepart of the spine of some cartilaginous fishes. In low types, the skull chondriae lies long before the spine.

The rest of the skull in front of the postclinoid wall must be considered as so much superadded to the proper axial growth of the vertebrate skeleton. The basal plates, or *trabecula cranii*, extend forwards in front of the apex of the notochord around and beyond the pituitary space, and, by growing upwards, form cartilaginous laminae similar to those in the hind-skull. As the latter parts grow over the brain, forming a roof behind, so these give rise to the anterior part of the tegmen cranii. The azygous cartilage surrounding the notochord which terminates behind the pituitary body, has a representative—the *inter-trabecula*—in front of that body, which grows forwards, and has much to do with finishing the skull in front.

The visceral arches—the foremost pair of which gives rise to both upper and lower jaw of the proper endoskeleton—are all developed in the region which corresponds to the splanchnopleure of the body, the clefts between them having no counterpart in the postcephalic region.

The cartilage on each side of the cranial notochord is in relation with all the cranial nerves except the first and second, and there may be as many as ten or more pairs of such nerves (considering the vagus as several)—homologous with spinal nerves—in relation with this part of the skull. The ossification of this cartilage forms the core of the basi-occipital bone, which was considered by the transcendentalists as the fourth or hindmost of the cranial vertebrae; but it will now be seen to correspond, not to one, but to a whole chain of undivided vertebrae.

The visceral arches, as they are formed in the splanchnopleure, cannot correspond with ribs, which are somatopleuric in origin. Moreover, the skull differs very largely from the spine in the fact that, in the latter, the notochord—a hypoblastic structure—is continued to the very end, while in the head it stops short behind the pituitary involution.

ACCORDING to the statistics collected by M. Legoyt, suicide steadily increases in France. The last decennial period shows an increase of 17 per 1,000.

PRESENTATION TO MR. ST. GEORGE ASHE.—The students of the City of Dublin Hospital have presented a testimonial to Mr. Ashe, the late house-surgeon, on the completion of his term of office. The presentation consisted of a complete case of surgical instruments.

SANITARY INSTITUTE OF GREAT BRITAIN.—At the ordinary meeting, to be held at 9, Conduit Street, Wednesday, March 8th, at 7.45 P.M., the prize of £200 for an essay on the "Range of Hereditary Tendencies, in Health and Disease," will be presented by the Rev. E. Wyatt Edgell, B.A.; and a paper on the subject will be read by Mr. George Gaskoin, the author of the prize essay. The paper will be followed by a discussion. Tickets for the admission of visitors may be had on application to the Secretary.

pected, at that time, to enlarge the external wound to search for intestinal lesions?

Bandens practised enterorrhaphy in two cases of shot-wounds of the intestine during the Algerian war, and one of them was completely successful. Pirogoff advocated the suture in the Caucasus, but had no time to put it in practice. Lohmeyer, in the Danish war, boldly advocated enterorrhaphy, but had not performed the operation. Legouest proclaimed similar doctrines in the Crimean war. And in our own country, since the experience of our civil war has proved how utterly futile our efforts were in this direction, many leading surgeons have given free utterance to sentiments that presage an inevitable revolution in the treatment of shot and other wounds of the abdominal cavity.

The latest expression of opinion on this subject comes from Surgeon-General Longmore, who says: "As to gun-shot wounds of the abdomen, I have little doubt that it will be found, whenever another great war gives the opportunity, that the revolution which has taken place in abdominal surgery in civil practice, especially with the additional advantages of the antiseptic mode of treatment, will equally show itself in military practice in penetrating gun-shot wounds of the same bodily region. In any such war as occurred in France in 1870-71, where in numerous instances there were opportunities of speedily treating the wounded in regular hospitals or permanent buildings in towns or villages, I feel assured that lives will be occasionally saved after complicated penetrating abdominal wounds, including cases of wounds of intestines, of lodgement of projectiles in the peritoneal cavity, and of hæmorrhage from mesenteric or other vessels, which hitherto have been left to die unaided by operative proceedings." (Letter to Sir William Mac Cormac, January 15th, 1882.)

Otis says of shot-wounds of the small intestines: "I have shown that in wounds of the small intestines of any magnitude, the pathological evidence of recoveries achieved by the unaided effort of nature, even through the establishment of a preternatural anus, is limited to a very few instances, of which none are absolutely unequivocal. Therefore, in wounds of this viscus, unattended by protrusion, when there is danger of extravasation, the external wound should be enlarged, and the wound in the intestine closed by suture."

Dr. J. S. Billings says, in a letter to Otis: "In regard to penetrating wounds of the abdomen, where there is reason to suspect intestinal injury, it appears to me to be proper to enlarge the opening, if necessary to ascertain the nature and amount of injury, to remove foreign bodies and extravasated matter, to employ sutures or ligatures where needed, and to cut these short and return the injured viscera. Especial care should be taken to prevent even the smallest particle of faecal matter from escaping into the peritoneal cavity, and to remove such as may escape. Ordinary faecal matter contains immense numbers of microzymes, or minute organisms known as bacteria, monads, micrococci, etc., which, if not the direct cause of putrefaction, as seems probable, are at all events closely connected with that process."

Professor Hunter McGuire expresses himself thus: "Penetrating wounds of the belly are nearly all fatal, and we must look for some other means of saving life than we now have. If the shock, thermometer, etc., indicate wound of the bowel, cut down and sew it up. You say this is desperate. I answer, the cases justify it. We must do something more than give opium and use ice-poultices."

Dr. H. S. Hewitt says: "It is next to an impossibility, when a soldier is wounded in the abdomen, with lesion of the intestines, that their contents should not escape into the peritoneal cavity. I think it admits of question, whether greater effort should not be made to seek out the wound, to close it by silver wire, and to endeavour to obtain primary union, while peritonitis and constitutional disturbance are treated on general principles."

Professor N. S. Lincoln declares that, "in punctured and incised wounds, when there is adequately strong presumptive evidence of intestinal lesion, though there may be no protrusion, it is the surgeon's duty to enlarge the parietal wound to seek for the wounded intestine, and to close the orifice, if it exceeds three lines, by suture. That, in shot-wounds of the intestine, unattended by protrusion, unless the perforation may be in the iliac region, with a reasonable likelihood of implicating the part of the large intestine uncovered by peritoneum, and thereby avoiding the risk of intraperitoneal extravasation, it is the safest course to enlarge the track of the ball, and to close the intestinal wound by suture."

[These letters from Drs. Billings, McGuire, Hewitt, and Lincoln, were written to Otis ten or twelve years ago, and are to be found in the *Medical and Surgical History of the Civil War*.]

Professor Samuel D. Gross, the highest surgical authority in our country, says, in the last edition of his *System of Surgery* (1872, vol. iii, p. 667): "It is still a mooted question as to what should be done when the wounded bowel does not protrude at the opening in the wall of the

abdomen. When we reflect on the fact, that in all lesions of this kind the great danger is from faecal effusion, and that such effusion is almost inevitable, even when the opening of the intestine is of very small extent, the duty of the surgeon, I think, plainly is to *enlarge the abdominal orifice, to seek for the wounded tube, and to sew up the cut in the usual manner*." Our great master in surgery, Professor Gross, here in a few words lays down the rule which should invariably guide our action hereafter in all wounds of the alimentary canal however made.

Thus we see that there were mutterings of discontent amongst surgeons long before our great war, which, since the war, have become more out-spoken and positive in demands for reform in the treatment of intestinal wounds. Look at the history of military surgery from its earliest days to the present moment; and what has it ever done for lesions of the abdominal viscera? Absolutely nothing, if we except a few cases of punctured and incised knuckles of intestine, which, having protruded through the outer wound, were sutured and returned to the cavity of the abdomen. But if we profit by the teachings of ovariectomy and ovariologists, we shall soon wipe out this reproach. Heretofore, when a man was shot or stabbed in the abdomen, we laid him down, gave opium to arrest pain and peristalsis, and applied "simple dressings", waiting and hoping for it to result in a faecal fistula. And how rarely did nature gratify our wishes, except when the lower ends of the colon and rectum were wounded! But all this must be changed. In the treatment of perforating shot and other wounds of the abdomen, we should strictly observe the following rules.

1. The external wound or wounds should be enlarged as soon as possible, and sufficiently to ascertain the whole extent of the injuries inflicted.

2. These should be remedied by suturing wounded intestines and ligaturing bleeding vessels.

3. Diligent search should be made for extravasated matter, and the peritoneal cavity should be thoroughly cleared of all foreign substances, whether faecal or bloody, before closing the external opening.

4. The surgeon must judge whether the case requires drainage or not. Generally it will not, if these rules be strictly carried out. We must not forget that faecal effusion has taken place after intestinal wounds have been sutured, simply because the surgeon failed to find and suture all the lesions. And we must not forget that fatal results have followed enterorrhaphy when thoroughly done, simply because faecal effusion had taken place before the intestine was sutured, and had been left in the peritoneal cavity, producing death as speedily and as certainly as if the lesion had not been found and closed. Therefore, it is essential not only to find all lesions and remedy them, but to be sure that we leave the whole cavity of the peritoneum perfectly clean.

These principles are the foundation of success in all other operations involving the peritoneum, and they must be equally successful when applied to shot and other wounds of the intestinal canal.

Dr. N. S. Lincoln advises to enlarge the external wound and search for the injured bowel, and suture it, "unless the perforation may be in the iliac region", where it may possibly be followed by faecal fistula, and spontaneous cure. But it would be unwise to make exceptions of this sort. We should trust nothing to chance. For we must remember that, of eighty-nine shot-wounds of the large intestines, thirty, or 33 per cent., died; of one hundred and eighty-three of the bladder, ninety-six, or 52.5 per cent., died; and of one hundred and three of the rectum, forty-four, or 42.7 per cent., died. Now, if we should not interfere with pelvic and iliac wounds, the above figures prove conclusively that we would jeopardise from 33 to 52 per cent. of all lives with such wounds. I would therefore insist on leaving nothing to luck, but to explore and suture all intestinal and bladder wounds alike, under all circumstances.

There is a time for all things; and a fitness of time for all new departures from old customs. From preceding quotations, it is seen that there has been a latent, but growing, sentiment amongst surgeons for many years, that, sooner or later, a new system would be adopted in the treatment of intestinal wounds. But there has never been a time, till now, when such a course could be wholly justified; and now it can be done alone by showing the positive success that invariably attends all operations in peritoneal surgery. Besides this, there has never been a more opportune moment for pressing this question on the attention of the profession. For we have all suddenly become intensely interested in the subject of gun-shot wounds. The death of the beloved President Garfield by the assassin's bullet sent a thrill of horror through the whole country and throughout the civilised world, and excited such sympathy in every grade of life, as to make us all of one family and one feeling. Soon after the shooting, I was often called on in Paris for an opinion as to the probabilities of the President's recovery; and as he did not die in three days, I knew that the ball had not penetrated the peritoneal cavity, and I gave my friends assurances of his ultimate

I feeling that I have now done my duty, I seize this occasion to repeat what I said in Paris to the friend who sent the telegram to New York. I said: "If the President had recovered from shock, and if there was undoubted evidence that the ball had traversed the peritoneal cavity, his only safety was in opening the abdomen, clearing out the peritoneal cavity, tying bleeding vessels, suturing wounded intestines, and treating cases as we would after ovariotomy, using drainage or not, as circumstances required." This is what I said then; this is what I say now, and what I am able to defend on the broad principles already so well established in peritoneal surgery.

Finally, I have the deepest conviction that there is no more danger of a man's dying of a gun-shot or other wound of the peritoneal cavity, properly treated, than there is of a woman's dying of an ovariotomy properly performed. Ovarian tumours were invariably fatal till McBurney demonstrated the manner of cure, which has now reached such perfection that we cure from 90 to 97 per cent. of all cases. And by the application of the same principles that guide us in ovariotomy to the treatment of shot-wounds penetrating the abdominal cavity, there is every certainty of attaining the same success in these that we boast of in ovariotomy.

1. Walls of the peritoneal cavity, however made, have a common property, that is, in death by septicæmia.

2. They have a common termination, that is, in death by septicæmia.
3. This is the general law in death from ovariectomy.
4. It is the general law in death from gun-shot and other wounds of the peritoneal cavity.
5. Septicæmia in these cases is the result of the absorption of a pyogenic and other effusions found in the peritoneal cavity after wounds of the pelvic cavity.
6. Gun-shot wounds of the pelvic cavity recover, because of natural drainage by the track of the ball carrying off pyogenic effusions and blood clots.
7. Gun-shot wounds of the abdominal cavity die, because there is no natural drainage, and the pyogenic effusions and blood clots are absorbed, and the absorption of these effusions produces septicæmia.
8. It is possible that pelvic and other wounds of the pelvic cavity may be healed, and the pyogenic effusions and blood clots may be absorbed, and the absorption of these effusions produce septicæmia.
9. If the absorption of these effusions, there will hardly be any septicæmia.

SALE OF FARMING, IS. NITRATE OF POTASH
RECOVERED.

[illegible]

appearance of hæmatemesis.

On examination, I found his pulse 56, regular, full, and strong. His pupils were normal. His tongue was moist, with a white fur down the centre, and was tremulous. There were no excoriations about the lips or pharynx, or other signs of an irritant. As it was six and a half hours since taking the "salts", and he had vomited freely, I merely gave him an opiate to be taken every hour, and ordered hot applications to the epigastrium. At 5 P.M., he sent again for me, still complaining of the severe pain. The first two doses of the opiate had relieved the pain somewhat, but he had vomited after taking the third dose. The vomit had all the characters of hæmatemesis. He now told me that he thought it was "saltpetre" and not "salts" that he had taken. On inquiry, I learned that he had had calls to micturate every half-hour for the first three hours after taking the salts. I procured some "salts", and also some powdered "saltpetre", from the shopman, and the patient at once selected the saltpetre as what he had taken, as also did his daughter. The vomit also gave distinct evidence of the presence of a nitrate.

At 11 P. M., he had taken freely of his gruel, and had not been sick since the action of the emetic ceased. The pain was a trifle easier. His pulse was 88, regular, and full. He was slightly under the influence of the morphia.

At 9 A.M., on the 9th, the patient felt easier. The pain was not quite so severe nor so constant. He had slept about an hour during the night, and had passed about half a pint of urine. It was dark orange in colour, of specific gravity 1020, very acid in reaction, and did not contain albumen. At 3 P.M., the patient had had the free use of his bowels after taking a full dose of castor-oil, and felt much better. The stool was liquid, tarry in appearance, and very offensive. The pain in the stomach was less, and the patient had had three hours' sleep; and from this time made a gradual recovery.

and from this time made a gradual recovery.
R. HANSON WOITENHOLME, M.R.C.S. Eng., L.R.C.P. Ed.
Marlock, Somerset.

CASE OF DIFFUSED SUPERPIGMENTED MOLT OF
ABDOMEN, SIDE AND BACK.

L. C. was born on August 4th, 1880. Her parents are both strong, robust, and healthy looking people, with good family history. The father, at twenty-four years of age, is employed as a machanic in some large works. The mother, twenty-one years of age, had been married three years, and had one male child perfectly developed. When she was pregnant two months and a half with this, her second child, the mother stated that she was frightened by a large black dog, which lay on the road near a corn patch, and that, therefore, was a child of the mother's fear of dogs. The mother said that she has always been afraid of dogs, and that when the dog rose suddenly. There have been many reports of this kind. The mother said that she has always been afraid of dogs, and that when the dog rose suddenly. There have been many reports of this kind.

[illegible]

In August 1881, with the exception of a little stomacic and intestinal irritation at times, the child had enjoyed perfect health. Several more minute spots of pigment had appeared in different parts of the body, and some of the original ones had increased somewhat in size. The hypertrophy of the thigh had extended downwards three-fourths of an inch; but the abdomen, side and back, remained unaltered.

A case of this kind becomes one of surgical curiosity, rather than of surgical importance; and calls for but few remarks. I have been unable to find any case on record exactly similar to this; but specimens of less severity, and more limited in extent, have been reported. Such cases open out a wide field for discussion upon the important subject of "maternal impressions".

WILLIAM H. BULL, L.R.C.P.Lond., M.R.C.S.Eng.,
Surgeon to the Stony Stratford Hospital.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

CHILDREN'S HOSPITAL, BIRMINGHAM.

TWO CASES OF FOREIGN BODIES IN THE ŒSOPHAGUS.

[From notes by A. R. MARSTON, L.&L.M.K.Q.C.P.I., Assistant
Resident Medical Officer.]

CASE I. *Dyspnœa: Convulsions: Death: Necropsy.* (Under the care of Dr. Welch.)—John F., aged 3 years and 9 months, swallowed a halfpenny about Christmas time 1880. According to his mother's account, he screamed at the time, and struggled. Shortly afterwards, he complained of pain in the chest. For three days, he could not swallow anything, and was very sick, retching a great deal, and vomiting a little colourless liquid. After this, he again took food, but generally had pain immediately afterwards, which was soon followed by vomiting, the pain being then relieved.

He was first seen as an out-patient about the middle of June 1881, when the above-named symptoms were those chiefly complained of. Shortly after commencing attendance at the out-patient's department, his breathing became at times loud and rattling in character, without, however, much lividity or distress. In other respects, the child's condition improved, the pain and vomiting after food being much less severe.

On July 22nd, he was admitted into the hospital, and an Œsophageal bougie was introduced; it met with no obstruction, although it was passed the entire length of the Œsophagus.

On admission, he was breathing noisily, and had a harsh cough. He was fairly well nourished, and seemed to have no difficulty in taking food, the act not being followed by pain or vomiting. On examining the chest, there was found to be no dullness on percussion, but dry and moist râles were heard over the back. He continued in much the same condition until August 1st, at 2 A.M., when he became slightly convulsed, and his breathing much embarrassed; he struggled for breath, and seemed to be choking, expectorating with difficulty a little greenish mucus; his lips were livid, and there were some convulsive twitchings of the face. The paroxysm only lasted a few moments, after which the child became quiet, and fell asleep.

A severe attack of convulsions came on at eleven the same morning, affecting the right side of the face and the right arm, and continuing a quarter of an hour. Another attack commenced half an hour afterwards, this time affecting the opposite side, and continuing for two hours. Chloroform was then administered, and the convulsions ceased altogether.

The following day (August 2nd), there was a well marked purpuric-looking eruption, chiefly on the face and thighs. The child was unconscious, and very restless. His left arm was drawn up from time to time, flexed at the elbow and wrist, and quite stiff. He died at 2 P.M. The temperature shortly before death was 104°.

At the necropsy, the halfpenny was found to have lodged in the Œsophagus, the lower edge being immediately above the level of the bifurcation of the trachea. It was flattened up against the anterior wall of the Œsophagus, the inner surface of which was stained of a green colour, and worn into a sac-like depression at each side. The lower lobe of the right lung was congested and œdematous, and the lower half of the middle lobe collapsed. There was also collapse of the tongue-like portion of the upper lobe of the left lung. The brain was congested, and there was some deposit of lymph to the right of the

longitudinal fissure. There was no fluid in the lateral ventricles, but about half an ounce at the base of the brain. The eruption visible before death was seen as slightly raised livid spots after death.

CASE II. *Foreign Body withdrawn by Coin-catcher: Recovery.* (Under the care of Mr. Elkington.)—Thomas W., aged 5½, was admitted on August 4th. He had swallowed a whistle a fortnight before admission, the whistle being a disc about the size of a halfpenny, and raised in the middle. Immediately on swallowing it, the child became livid, and seemed on the point of choking. He was taken to a doctor, who pushed the whistle down with his finger. After this, the child was somewhat relieved, but from that time he complained of pain in swallowing, and at times breathed noisily; he also had pain at the upper part of the chest. After taking food, he retched a good deal, but did not vomit.

On admission, he was fairly well nourished, but his face was rather pale and thin. He had great difficulty in swallowing, and would only take a mouthful or two of milk at a time. His breathing was rather rattling in character, and he had a short hard cough. On examining the chest, percussion was found to be dull at both posterior bases, but this was more marked on the left side. There was some weakness of breath-sounds at both bases, and loud crackling râles were heard below the left axilla. There were some sonorous rhonchi over the upper part of the chest.

On August the 5th, chloroform was administered, and the whistle was withdrawn by means of a coin-catcher; this consisted of a piece of whalebone, to the end of which were affixed about six inches of flexible metal, connected at its extremity with a double metallic loop, by which the whistle was caught and withdrawn.

Immediately on recovering from the effects of the chloroform, the child took a draught of milk, swallowing easily and without pain. No further symptoms appeared, and the child's health and spirits rapidly improved. The physical signs about the chest also gradually disappeared, the dullness diminishing, and the breath-sounds becoming distinct and free from rhonchus.

WESTERN DISPENSARY, EDINBURGH.

CASES IN THE THROAT DEPARTMENT.

(Under the care of Dr. HUNTER MACKENZIE.)

CASE I. *Case of Strumous Pharyngitis, with Dysphagia, simulating Malignant Disease.*—A. P., domestic servant, aged 48, applied on April 2nd, 1881, complaining of a difficulty in swallowing, and a sensation as if solid food stuck about the lower level of the thyroid cartilage. The complaint came on suddenly about a week or ten days previously. The patient was of the strumous diathesis, but had hitherto enjoyed good health. She had a constant tendency to swallow, had been unable to take solid food from the commencement of her illness, and now presented a somewhat emaciated appearance. There never had been any respiratory impediment, and nasal regurgitation of food was absent. Externally, there was no swelling, pain, or tenderness. On the left side, there was slight chronic enlargement of one cervical gland. Internally, the pharynx was dry, with streaks of stringy mucus on its posterior wall, extending upwards to the posterior nares. The interior of the larynx seemed healthy and free from swelling. The case was diagnosed as one of perverted secretion of the naso-pharynx and pharynx, the result of chronic inflammation in a strumous subject, leading to an absence of proper lubrication of the upper portion of the alimentary canal, and consequently to dysphagia. The treatment adopted was thorough cleansing of the nose and pharynx by an alkaline spray two or three times daily, and the internal administration of a pill of iodoform and iron. On April 9th, the patient reported herself as having derived great benefit from the use of the spray, especially when applied through the nose; and as now being able to swallow solid food. In a few days, she discontinued the use of the spray, but renewed it about the end of May, on the occurrence of a slight relapse, with the same result as before. She was last heard of six months afterwards; there was then no renewal of the complaint.

CASE II. *Case of Laryngitis Sicca, with Aphonia, simulating Hysteria.*—J. C., domestic servant, aged 22, applied on May 9th, 1881. She complained of complete loss of voice. She had been subject to sore-throat for several years, but it had never been so severe as on this occasion. The patient was in good general health, but appeared to be somewhat hysterically inclined. Her pulse and temperature were normal. She had no pain, but the throat felt a little dry. On laryngoscopic examination, the interior of the larynx was seen to be more or less coated with dark grey stringy mucus, of a dry, tenacious nature. This was especially abundant on and about the vocal cords, and undoubtedly acted as the main cause of the aphonia. The interior of the larynx was thoroughly cleansed by means of the laryngeal spray;

the mucous membrane was then found to be somewhat swollen, and the vocal cords reddened, but not thickened. The patient was able to speak, though in a rough and broken manner. The application of the spray was repeated on several occasions, supplemented by inhalations of pine-oil night and morning; and complete recovery ensued.

REMARKS BY DR. MACKENZIE.—In Case 1, there were some points which, at first sight, made it have certain resemblances to malignant disease, such as the age and debilitated appearance of the patient, and the persistent obstruction to solid food. Malignant obstruction, though usually gradual in its onset, is occasionally of sudden occurrence, as in the case now under notice. Against this idea there militated the absence of glandular implication, and of nasal regurgitation of food. In malignant disease of the pharyngo-larynx, with impairment of the vocal cords, Dr. Mackenzie has recently had occasion to note that not only is dysphagia present, but concurrently there is occasional regurgitation of food into the nose. The patient in this case, however, by "careful" during the process of deglutition, the food passed easily and in a hurry, the regurgitation would frequently be observed. As Dr. Mackenzie has not before seen this case, and that now recorded, he is inclined to attribute the same to the same cause as in the other cases, though these cases from the malignant variety, which, in some points, they very closely imitate.

It is interesting to note the value of a laryngeal spray in all affections of the vocal apparatus, and the benefit which frequently ensues from its use. It was a first-class case, and the patient, though in a debilitated condition, remained in the hospital, and the treatment was continued for some time.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 23RD, 1882.

A. W. FLEMING, M.D., President, in the Chair.

Atomy: An Experimental Inquiry. By J. H. KELLY, M.A., M.B. The observations were made on twenty-

children, who were all under the age of five years, and regard was paid to the effect of the operation on the vocal cords. The method of operation was as follows:—The child was held in the arms of an assistant, and the larynx was exposed by the removal of the skin and the dissection of the muscles. The operation was performed by the use of a pair of scissors, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

selected by the air is the space beneath the deep cervical fascia. 5. Emphysema of the anterior mediastinum may or may not be associated with emphysema of the neck; but their causes are different, and the conditions of their production are opposite. 6. The conditions favouring the production of mediastinal emphysema are, division of the deep cervical fascia, obstruction to the air-passages, and inspiratory efforts. 7. The dangerous period during tracheotomy is the interval between the division of the deep cervical fascia and the efficient introduction of the tube. 8. The deep cervical fascia should on no account be raised from the trachea; the incision in it should not be longer than necessary in the direction of the sternum, and this should be particularly remembered during inspiratory efforts. 9. It will probably be found that the frequency of occurrence of emphysema of the anterior mediastinum depends much on the skill of the operator, especially in inserting the tube. 10. If artificial emphysema of the neck is necessary, the tissues should be kept in apposition with the trachea, and any manipulations performed steadily and without jerks. 11. Schultze's method (which is otherwise unsuitable for the above purpose) is especially prone to produce emphysema of the anterior mediastinum. 12. These observations illustrate the fact that, in the case of tracheotomy, the inspiratory force of the thorax should be remembered in all operations near the root of the neck, and in the case of all collections of air beneath the deep cervical fascia. In these cases, quiet respiration is essential for the safety of the patient; and ventilation which begins with a sudden inspiration, is dangerous. 13. The observations may serve to illustrate the production of emphysema of the neck, etc., during tracheotomy. It was observed that the patient who was operated on, had a very large collection of air beneath the deep cervical fascia, and that the air was forced into the neck through the wound. The patient was very much distressed, and the air was forced into the neck through the wound. The patient was very much distressed, and the air was forced into the neck through the wound.

The filling and fixing of the chest in the case of emphysema of the neck, was performed by the use of a pair of scissors, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed. The operation was performed on the right side, and the vocal cords were exposed.

pitched and stiff in quality; and was not audible with every cardiac beat. This sort was heard 20 times. The mechanism was probably endocardial friction. Its site would about correspond to the "white patch" which might be seen on the front of the right ventricle. The third kind of murmur, the least numerous, the most "capricious", was remarkable for its loudness, was very inconstant, *i.e.*, not heard with every cardiac beat, and was very transitory. Its area of audition was remarkably limited; it was most frequently heard over one or other base of the heart; it commonly went with an excited action of the heart associated with pyrexia or mental emotion. Besides pyrexia, excitement, and anæmia, this murmur was sometimes associated with *râles* in the chest and with a cough, but no sputa. The quality of the sound varied. In many cases it resembled the sound evolved when a piece of silk tightly stretched was scratched with the nail; or like the sound heard when pressure was made on the carotid in anæmic cases. Sometimes the sibilant *râle* was almost exactly imitated. The murmur was in all cases heard when the breathing was stopped. The mechanism of this murmur was discussed. The murmur was heard 16 times. The mode of generation of murmurs was regarded as very puzzling. All the murmurs of the second and third kinds, and the majority of the first kind, were temporary phenomena. Murmurs in the puerperal state were (for the most part) not indicative of the appearance of serious cardiac lesions. It came out as the result of observations: that the first cardiac sound was relatively loud over the right heart; that the pulmonary second sound was markedly accentuated; that the sensation communicated to the stethoscope was stronger than natural over the right heart. It was inferred that the right heart acted robustly during the puerperal state; and that the tension in the pulmonary artery was increased. Which of these factors preceded the other, or whether they appear simultaneously was not answered. Attention was directed in every case to the occurrence of rheumatism in any shape; also to the quality of the blood; to the urine, body-heat, age, civil state, number of pregnancies. As a broad statement, it could be said that such observations were of negative value in the question of the mechanism of the murmurs. The murmurs explained or were to be explained by the normal cardiac and circulatory conditions which were believed to exist during the puerperal state.—Dr. JOHN WILLIAMS had had many opportunities of witnessing Dr. Money's observations at the Lying-in Hospital. They were made with great care, and all doubtful cases were excluded. When the investigation was begun, no one supposed that murmurs would be found to such an extent as had been discovered. The explanation of their production was difficult. Some were very probably produced in the cavity of the right ventricle.—Dr. MATTHEWS DUNCAN said that Jacquemier had described cardiac murmurs as being frequent in puerperal women; and they had been investigated by Kayer, Larcher, and Fritsch; but little was known of them beyond the fact of their occurrence and their disappearance soon after delivery. Dr. Money's account of them was by far the best, so far as he knew. As regarded their practical value with respect to endocarditis in lying-in women, the presence of this disease was sufficiently indicated by other signs, independently of the murmur; and the murmurs described by Dr. Money did not distress the patients.—Dr. FINLAY asked whether the character of the murmurs was affected by change of position.—Dr. MATTHEWS DUNCAN said that the old authors considered that murmurs might be changed or produced by position.—Dr. REGINALD THOMPSON suggested that Dr. Money should supplement his paper by an examination of the pulse of pregnant women.—Dr. CHAMPNEYS had witnessed the care with which the observations had been conducted. He thought it possible that perhaps change of the shape of the thorax in pregnancy might affect the position of the contained organs; but he could not say whether this had any effect on the production of murmurs.—The PRESIDENT asked whether any murmur was found in the carotid artery. Probably a change in the condition of the blood was the cause of the murmurs.—Dr. MONEY thanked Dr. Duncan for calling his attention to earlier writers. He did not place much reliance on the murmur, which could be produced in the carotid artery by pressure with the stethoscope, unless it were very loud.

HARVEIAN SOCIETY.

FEBRUARY 2ND, 1882.

WILLIAM HICKMAN, M.B., President, in the chair.

Headache in Children.—Dr. DAY read a paper on this subject. He alluded to the two great factors of headache from a pathological point of view, *viz.*, cerebral anæmia and cerebral hyperæmia. Attention was directed to the fact that the amount of blood in the brain was influenced by the fulness of the ventricles, the subarachnoid spaces, and the lymphatic spaces or sheaths surrounding the cerebral blood-

vessels. Dr. DAY said that habitual headaches in children indicated an irritable and exhausted brain; and if intellectual exertion were carried too far in such cases, mischief was likely to ensue. It seemed extraordinary that educated men who had the care of young persons should not see this danger in the anæmia produced by overstudy, the irritability and excitability of manner, and the impossibility of concentration necessary to the accomplishment of any undertaking. If intellectual exertion were carried beyond a certain point, the brain became anæmic, fatigued, and the nutrition in the ganglion-cells of the cortex became impaired, diseased, or in some way altered from health. The author referred to neuralgic or one-sided headache, which he said was more common in children than was generally supposed; it was not unfrequent in those of the nervous temperament, whose nervous system was easily exhausted, and in those reduced by long and exhausting illness, bad food, and other causes. He had known headache in connection with chorea and dental caries. He next spoke of congestive, toxæmic, and organic headaches.—Dr. CHEADLE considered that foul air and gas were the chief causes of study headaches. He had noticed headache from this cause, especially in choristers. He referred to headaches in rickety children; this occurred just after the skull closed, was continuous, but gradually subsided.—Dr. STEPHEN MACKENZIE wished particularly to insist on the importance of careful examination of the eyes in cases of headache in children. Muscular asthenopia was a cause of headache which sometimes was mistaken for serious organic disease. He mentioned the case of a schoolboy brought to him under this supposition, but myopia was found and corrected, and the headache disappeared. The same thing occasionally occurred with hypermetropia. He next pointed out that ear-disease was sometimes the cause of headache, which was of importance as significant of commencing meningeal or cerebral inflammation. In all cases, therefore, of headache in children, it was very important to examine the ear and the eye, using the ophthalmoscope, which was of great value in detecting organic disease. He remarked that pain in the head—a valuable sign of tumour of the brain—was no certain indication of the localisation of the tumour, unless there was corresponding pain on percussion.—Mr. CRIPPS LAWRENCE asked if the urine was altered in these cases, especially as to its specific gravity.—Mr. MALCOLM MORRIS considered that headache, in some cases, might be a distinct disease, and not merely a symptom, as when an attack occurred and passed off suddenly in a person all whose functions were normal at the time.—The PRESIDENT said that headache, though not a common symptom in children, was one of import, and frequently indicated advanced disease.—Dr. DAY, in reply, remarked that the urine was usually healthy, the specific gravity being high.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH:
PATHOLOGICAL SECTION.

JANUARY 27TH, 1882.

J. F. WEST, F.R.C.S. Eng., in the Chair.

Amputation of Arm for Sarcoma.—Dr. BARLING introduced a boy, aged 11 years, whose arm had been amputated at the shoulder about fifteen months previously by Mr. Baker at the General Hospital. The growth was a small spindle-celled sarcoma, and appeared to have originated in the periosteum, near the lower end of the humerus. The tumour was as large as the boy's body in circumference, and was wearing him out by its cumbrousness, and the severity of the pain. There had been no recurrence, and the lad enjoyed perfect health.

Tumour of Brain.—Dr. BARLING also showed a tumour occupying the præfrontal lobe of the brain on the left side. The main symptoms during life were chronic epileptoid convulsions, mental dulness, slowness of speech, and some weakness in walking.

Acute Membranous Bronchitis.—Dr. BARLING (for Dr. WADE) also exhibited casts of the larger bronchi expelled by coughing from a case of acute membranous inflammation of the air-tubes. There was no evidence to show that it was an ordinary case of diphtheria.

Embolism of Superior Mesenteric Artery.—Mr. J. W. TAYLOR exhibited a portion of small intestine with mesentery infiltrated with blood, probably due to embolism of the superior mesenteric artery. The chief symptoms during life were: great abdominal pain and tenderness, mainly to the left of the median line, tympanites, constipation, and almost constant vomiting. Death occurred at the close of the sixth day from the commencement of symptoms.

Removal of a Piece of Egg-shell by Tracheotomy.—Mr. JORDAN LLOYD showed a piece of egg-shell, three-eighths of an inch in diameter, removed from the trachea of a baby ten months old by means of tracheotomy, after impaction for nine days, during which the child had been thought to be suffering from croup. The true diagnosis was based on

the sudden onset of symptoms after a meal, the absence of fever, and the peculiarity of the stridor and cough. The child was in *extremis* at the time of operation; the fragment escaped immediately on opening the trachea; a tube was worn for twenty-four hours; and complete recovery was made in a fortnight.

Suppurative Arthritis of Left Elbow.—Mr. JORDAN LLOYD exhibited a specimen of central necrosis of the olecranon, which had set up suppurative inflammation of the elbow-joint. The patient had previously suffered from a similar affection of the os calcis, which had been excised. The specimen was obtained by excision of the elbow. Complete recovery had not as yet occurred.

Fracture of Base of Skull from Direct Violence.—Mr. WEST showed a specimen of fracture of the roof of the right orbit, caused by a blow on the face from a piece of wood. The nasal bones were broken, but neither eye was injured.

MIDLAND MEDICAL SOCIETY.

BIRMINGHAM, WEDNESDAY, FEBRUARY 1ST, 1882.

J. BASSETT, M.D., in the Chair.

Disease of Knee.—Mr. BENNETT MAY showed two specimens of disease of the knee-joint, which had originated in acute necrosis of the head of the femur.

Inflammation of Ear and Abscess of Brain.—Mr. A. O. HOLBECKE showed the left hemisphere of the brain of a child aged eight years, exhibiting a large abscess cavity, from which about half a pint of most offensive pus had escaped. On making the *post mortem* examination, a small round perforation in the petrous portion of the temporal bone was found, which communicated with the ear on the one hand, and the abscess cavity on the other. The dura mater was healthy. Thirteen weeks before death, the child received a blow on the ear, and complained of much pain at the time. Subsequently, her health became impaired, and a discharge of pus from the left ear appeared, the pain in the head becoming relieved. Several times the discharge disappeared, the pain in the head being always simultaneously increased. There was no paralysis. Convulsions had occasionally occurred. She was rational, and answered questions intelligently. Twelve hours before death, the discharge from the ear ceased, and she at once became comatose and died.

Specimens from a Subject aged Sixty.—Mr. A. O. HOLBECKE also showed the following specimens, all taken from the same patient, aged sixty: 1. An ununited fracture of the humerus; 2. Two fractures of the femur, united firmly but irregularly, and causing much shortening; 3. Two large deposits in the liver (together with microscopic specimens of the same, prepared by Dr. Barling), which presented the character of carcinoma; 4. A calculus, removed from the gall-bladder; 5. The right kidney, stuffed throughout with calculi; the left kidney presenting well-marked granular degeneration. The fractures had occurred last June. The left mamma had been removed nineteen years previously for scirrhus. Her father died of cancer.

Necrosis of First Phalanx of Index-finger.—Mr. JORDAN LLOYD showed a specimen of central necrosis of the first phalanx of the index-finger, without suppuration, attended by the expansion of the whole bone into a cyst, with very thin walls. The cartilage was healthy. In another case, Mr. J. Lloyd would try to save the member, by removing elliptical pieces from the bony shell before proceeding to amputation.

Fracture of Femur from Direct Violence.—Mr. HENRY THOMAS showed a specimen of fracture of the femur, with evidence of calcareous degeneration, and having an unusually short end (only eight inches long), taken from a man aged twenty-two, in whom *osteomyelitis* had been followed in eight months by a fracture of the bone, occurred about the seventh month of pregnancy. The bone was removed, the ends re-joined.

Specimen of Cancer.—Mr. H. THOMAS showed a specimen of carcinoma of the rectum, taken from a man aged fifty-seven, in whom, after a protracted illness, death occurred from perforation, attended by a perforation of the gut having occurred just above the fracture, which was the cause of the fatal result.

Specimen of Cancer.—Mr. H. THOMAS showed a specimen of carcinoma of the rectum, taken from a man aged fifty-seven, in whom, after a protracted illness, death occurred from perforation, attended by a perforation of the gut having occurred just above the fracture, which was the cause of the fatal result.

Specimen of Cancer.—Mr. H. THOMAS showed a specimen of carcinoma of the rectum, taken from a man aged fifty-seven, in whom, after a protracted illness, death occurred from perforation, attended by a perforation of the gut having occurred just above the fracture, which was the cause of the fatal result.

swelling in the legs; rapid rise of pulse, and its disappearance from the extremities some time before death; breathlessness, ending in suffocation; and slight delirium. He had seen several such deaths, but not one in a patient who had not been previously tapped. His explanation was, that repeatedappings deprived the blood of some element, or elements, included in the infinite variety of albuminous substances found in ovarian cysts, the deficiency of which predisposed to coagulation of the blood. The author thought that no case of ovarian tumour should be tapped till previous abdominal section had shown that it could not be removed. He believed, if this rule were followed, the mortality might be reduced to less than one per cent., if cases were operated on early. As long as the clamp gave a mortality of twenty-five per cent., it was right to stave off, by all possible means, so fatal an operation as ovariectomy.

Hydatids of the Peritoneum.—Mr. LAWSON TAIT read a paper on two cases of hydatids of the peritoneum, successfully treated by abdominal section. In the first, the operation was incomplete, because the hydatid had so matted the intestines together, that the larger number could not be removed. All the cysts which could be reached were broken down, and a drainage-tube was inserted in the pelvis from above. The patient's symptoms previous to the operation were very severe, but they rapidly disappeared; the patient completely recovered, and the hydatid masses had entirely gone when she left the hospital, on the twenty-fourth day after the operation. The second case was of a more simple kind; for the parasites were contained in a cyst in the lower abdomen, which was completely emptied, and drained through the wound. The patient made a very rapid and complete recovery.—A discussion followed, in which Dr. Bassett, Mr. Jordan Lloyd, Dr. Carter, and Mr. Bennett May took part; and Mr. Tait replied.

Treatment of Eczema.—Dr. SIMON read a paper on the treatment of eczema.—A discussion followed, in which Dr. Bassett, Mr. Greene, Mr. Lawson Tait, Mr. Bennett May, Mr. Taylor, and Dr. Johnstone took part; and Dr. Simon replied.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, FEBRUARY 6TH, 1882.

S. LEE RYMER, L.D.S.R.C.S.Eng., President, in the Chair.

Alveolar Periostitis and Diabetes.—Mr. HENRY SEWILL called attention to a communication recently made by Dr. Magitot to the French Académie de Médecine, in which he stated that alveolar periostitis was always met with in the mouths of patients suffering from diabetes mellitus, and was therefore of great assistance in forming a diagnosis of that disease. He (Mr. Sewill) had himself met with two cases which appeared to bear out the correctness of this observation, and he should be glad to hear if others had met with the same experience.

Business.—Matters were brought forward by Messrs. HUTCHINSON, MOORE, FRODIPAR, and Dr. CAMPBELL.

President's Address.—After thanking the Society for the honour it had conferred upon him by electing him to his present distinguished position, Mr. RYMER referred to the recent alteration in the by-laws which enabled the Society occasionally to elect a President from among the provincial members—a change of which he had been the first to reap the advantage. Mr. Rymer then went on to speak of the part taken by the old College of Dentists in the reform movement of 1850 and following years. This institution—in the management of which he had, as Secretary, taken a very active part—had been established for the purpose of carrying on the education and licensing of dentists on an independent basis, it being thought that too strong a feeling existed in the medical profession to allow the institution of examinations and the issue of diplomas in a speciality of any kind by any of the medical corporations. When, however, it was announced that the Royal College of Surgeons, after long deliberation, had come to the conclusion that it would tend to the public advantage to grant diplomas in dentistry, the duty of those who had the direction of the affairs of the College of Dentists at once became clear. To have continued the College as an independent body would have been unwarrantable under the circumstances. Instead of helping in a project, it could only have acted as an embarrassing impediment, and would undoubtedly have resulted in the institution of a permanent body. The College was accordingly merged with the Council of the College of Surgeons, which had the effect of securing the establishment of the dental as a branch of the medical profession, with the view of attaining uniform regulation. This was done in accordance with entire unanimity on both sides, and he had no hesitation in saying that it had never for a moment been regretted. Had the profession continued to be racked with warring sects, the Dental Act of 1878 would never have been passed; as it was, the opposition to the measure, arising from a small section of men with narrow views, was speedily overcome. This

was unquestionably the most important event which had happened during the twenty years that had elapsed since the amalgamation. Its healthy action had already become apparent, but it would require some time yet before all its latent powers for good could be fully developed. Its elevating influence would increase with each succeeding year. Mr. Rymer then spoke of other signs of progress in the profession: of the growth of the British Dental Association, the establishment of new schools in the provinces, the flourishing condition of the dental societies and the progress of dental literature and journalism; and concluded by referring to some of the unsolved problems still before the profession, the most important being a clearer knowledge of the conditions which would favour longevity in the dental organs.

REVIEWS AND NOTICES.

SUR LES LESIONS HISTOLOGIQUES DE LA SYPHILIS. Par L. MALASSEZ et P. RECLUS (Travail du Laboratoire du Collège de France). Paris: G. Masson. 1881.

M. MALASSEZ and M. RECLUS having, to quote their own words, "the rare good fortune to collect eight pathological specimens of syphilitic testicle", publish the result of their histological examination of them, with the view of furnishing some data concerning the pathological histology of this affection, which up to the present time, as the authors justly remark, is but imperfectly known. The following is a *résumé* of the conclusions at which MM. Malassez and Reclus arrive.

Syphilis appears to attack the testicle here and there, and in paroxysms. The interstitial tissue is a favourite point of attack. Little nodules appear, which are small centres of inflammation similar to what is induced by injections of small solid particles. There are two kinds of nodules: 1. Lymphoid nodules, which are the more numerous, and are composed of a mass of round cells; 2. Epithelioid nodules, formed of large granular cells. The lymphoid nodules seem to correspond to acute states; contiguous epithelioid nodules sometimes join one with the other, still retaining their individual features. When the lymphoid nodules unite, their fusion is so complete, that the constituent nodules of the mass are no longer recognisable. The nodulating process acts on the surrounding parenchyma, and determines considerable and extensive alterations. The interstitial tissue is the first attacked. Hypertrophic progressive sclerosis appears. Consecutively, the tubuli seminiferi are compressed and irritated, and become atrophied; their walls of connective tissue are hypertrophied; and their central cavity becomes less and less. The epithelium degenerates, the gland loses its function, and sometimes is reduced to a simple fibrous cord. The capillaries, arteries, and veins take on a covering of connective tissue, and their calibre is lessened. Hence nutrition is carried on with more difficulty. In the large vessels near the nodules, there is a new formation of connective tissue in the middle and internal coats, reducing still more the calibre of the vessels, and increasing the disorder of the circulation. Disordered nutrition follows, resulting in a necrosis of the parenchyma, already sclerotic; and especially so in the parts where the nodular development is considerable. This necrosis resembles syphilitic necrosis of bone-tissue. The necrosed parts are not encysted until later on, when the caseous masses, a cause of irritation to the parenchyma, determine the development of layers which encyst them. These layers, from outwards inwards, are: 1. *Fibrous Zone*. The contiguity of the caseous masses irritate the parenchyma, which thus, more sclerosed than the rest of the testicle, forms the fibrous zone. 2. *Opaque Band*. The most internal portion of this zone is the most irritated, and constitutes a layer of fleshy granulations, which invades, little by little, the cheesy centre, leaving behind it in its progress a cicatricial tissue, which joins the fibrous zone; it is the layer of repair, or opaque band. 3. *Clear Band*. Between the caseous centre and the layer of repair, or opaque band, is a layer, principally composed of large granular cells, similar to those seen round foreign substances which become absorbed. This layer seems to eat away, little by little, the caseous centre; it is the layer of absorption, or clear band. The peripheral parts of the caseous centre are invaded by migrating cells, which appear to prepare the work of absorption.

MM. Malassez and Reclus here remark that they differ from Virchow and others, and that they interpret differently the pathological conditions described. Virchow believes that the affection acts on the testicle in the same way as it does on all other parenchymata, inducing a chronic interstitial diffused inflammation—a simple syphilitic orchitis; or a more intense and more limited inflammation, of which the products undergo fatty degeneration—a gumma-like syphilitic orchitis. The authors do not consider the interstitial inflammation as the immediate and direct product of syphilis but as caused by the pre-

sence of the small nodules which Virchow has either not observed, or has omitted to mention. What Virchow considers to be a gumma, is, according to MM. Malassez and Reclus, a necrosis—a secondary lesion. The primitive lesion, the true gumma, according to these gentlemen, is what they have described as syphilitic nodule. The difference between the histological lesions of syphilis and those of tuberculosis of the testicle is generally sufficiently marked to enable the diagnosis to be made by a microscopical examination.

Tuberculosis and syphilis both determine in the testicle the formation of small centres of irritation, generally spherical in form (elementary tuberculous granulation, syphilitic nodule). These centres are composed of masses of small round cells (tuberculous granulations and syphilitic lymphatic nodules) or sometimes of large cells, principally granular (tuberculous granulations, syphilitic epithelioid nodules). These centres or foci are generally isolated; but if here and there the eruption is more markedly confluent, they fuse together. Sometimes they fuse together, and form large homogeneous masses, purulent granulations, conglomerated gummata.

These different products act on the parenchyma of the testicle, and induce the development of an interstitial chronic orchitis; disordered nutrition follows as a consequence, resulting in hyaline degeneration, and the necrosed parts become encysted. These lesions, according to their place of origin, have a special aspect. The tuberculous granulations almost always have their starting-point in the tubuli seminiferi. Syphilitic nodules, on the contrary, have their birthplace in the interstitial tissue. In tuberculosis, the tubuli seminiferi, surrounded by granulation, present characteristic lesions. The epithelium proliferates, enlarges, and remains enlarged, when degeneration ensues. In microscopical preparations, the tubuli seminiferi primarily attacked are very much dilated in the centre of the tuberculous product, and contrast in a marked manner with those of the subjacent regions, which, on the contrary, are atrophied, and their walls are thickened.

When the syphilitic nodule is small, there is never a seminal tubule in the centre. If the syphilitic product be sufficiently considerable to include several, not one is dilated. These tubuli may be rather larger than those that have no connection with the products; but, like them, they are atrophied, with thickened walls. Like the rest of the testicle, they are affected by the interstitial lesions.

The authors conclude by warning their readers that possibly there are cases more difficult to diagnose than those studied by them, but such have not fallen under their notice, owing to the relatively small number of pathological specimens at their command. They also protest against generalising the results of their observation, and applying them to other tissues, unless authorised by the most careful observation. In support of their propositions, they instance the tuberculous granulations of the mediastinum testis, which, as they do not invariably develop round the ducts of this region, do not present any traces of an anterior central cavity. These granulations sometimes appear as little elevations on the parenchyma, and may be mistaken for actual granulations of the testicle.

A PLEA FOR EARLY OVARIOTOMY. By G. GRANVILLE BANTOCK, M.D., F.R.C.S.Ed., Surgeon to the Samaritan Free Hospital for Women and Children. London: H. K. Lewis. 1882.

NOT many years ago, ovariectomy was considered almost as a last resource, to be performed when a patient had endured months of misery through the presence of a bulky ovarian tumour. At the present day, surgeons, for the most part, act after the doctrines of two great and successful authorities—Mr. Spencer Wells and the late Dr. Peaslee—who have both taught that, important though it is to operate before the patient is exhausted, or brought near to death by complications, ovariectomy should not be performed until the ovarian cyst has become large enough to cause discomfort, and to impair the general health. All other modern authorities teach similar doctrines; Drs. West and Duncan being particularly cautious against operating too soon, and interfering with cases where sundry complications, in their opinion, render ovariectomy specially dangerous. Dr. BANTOCK, with good reason, shows that, accurate diagnosis being granted, the earlier an ovarian cyst is removed the better it is for the patient, and the easier will the operation be for the surgeon. He deems it highly unsurgical to wait till the patient's health has become impaired, for the whole tendency of modern surgery is to anticipate impairment of general health. The presence of a large cyst is the cause of structural disease of several organs. The liver and kidneys often become seriously affected; ascites and, above all, pleural effusions, are very serious complications that may come on very unexpectedly in patients when operation is delayed; nor is tapping, to relieve the cause of these secondary disorders, either a satisfactory, or even a safe palliative measure. Ovarian tumours are themselves subject to disease, and to accidents—

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 4TH, 1882.

INFECTIVE FORMS OF NEPHRITIS.

DR. DREYFUS-BRISAC, in the *Gazette Hebdomadaire* of January 13th, 1882, analyses a memoir by Professor Bouchard on infective nephritis, which was communicated to the International Congress held here last year, and is reproduced in full in the *Revue de Médecine*, 1881, p. 671. This work, of which the conclusions are based on fifty clinical observations, may be taken as the most distinct application hitherto attempted of the doctrine of parasitism to nosology. That infectious diseases have a reflex influence on the kidneys, is a fact which has long been recognised. No one ignores the production, in the course of these diseases, of albuminuria, generally transitory, but sometimes lasting, which may even be accompanied by uræmic phenomena, and which must often be referred to inflammatory or degenerative changes of the kidneys. But the pathogenesis of these various functional or organic disturbances has remained obscure in many cases. The only hypothesis which has been put forward is the very plausible one that attributes the albuminuria to the dyscrasia engendered by the disease as a whole. In this manner should be comprehended the genesis of so-called febrile forms of albuminuria which are frequently observed in the course of general diseases. But, in proportion as contemporary researches have demonstrated the considerable pathogenetic part played by the inferior organisms, it has become a question whether, concurrently with the principal foci of germination of microphytes, secondary foci might not establish themselves, and the complications of infectious diseases might not be considered as the result of the accumulation of microphytes in various regions of the body. If, for instance, the bacteria of typhoid fever migrate from the intestine towards the kidneys, and there find a favourable soil for development, infective nephritis, in the true sense of the word, will be set up.

Microscopical observations and experimentation, in the hands of numerous investigators, such as Birsch-Hirschfeld, Grawitz, and Cohnheim, have furnished proof that, in various infective processes, microphytes may, on the one hand, accumulate in the vascular system of the kidney, and, on the other hand, become eliminated by the urine. It is especially the extensive researches of Klebs and Letzerich (*Arch. für exper. Path.*, Band viii, ix, xii, xiii) which have brought this fact into full prominence. In the same order of ideas, may be noted Kannenberg's article on albuminuria in typhoid fever, published in the *Gazette Hebdomadaire* for 1881. No one, however, besides Kaunenberg, has endeavoured to construct from these somewhat scattered data, devoid of all clinical indications, the pathological history of infective nephritis. M. Bouchard has been the first to show that it may be recognised during life, and that it furnishes valuable information of the prognosis of the diseases whence it originates. Although M. Bouchard has noted processes of this kind in a large number of infectious diseases, such as measles, erysipelas, puerperal fever, typhoid fever, and tuberculosis, it is principally in the specially infective pyrexia, typhoid fever, that he has studied them; and it is typhoid nephritis which he has especially described. In his article above mentioned, M. Bouchard attaches great importance to certain physical characteristics of the albumen of the urine. When albuminous urine is

treated with picric acid, the liquid sometimes remains uniformly turbid or opalescent. "Sometimes, on the contrary, the albumen thus precipitated contracts in a single mass or in their particles at the same time as the liquid clears itself. Whilst the first variety of albuminuria—that of the known retractile albumen—belongs to the dyscrasic conditions, retractile albumen shows the existence of nephritis; and experience shows that typhoid nephritis is an infectious nephritis; for, so long as the albuminuria lasts, the urine contains bacteria identical with those found in the blood or in various pathological fluids, and with those which are met with in the original foci of infection amongst Peyer's patches.

The other urinary changes are the same as those of all forms of acute nephritis: the presence of casts in varying quantity, and sometimes an accumulation of blood-corpuscles more or less malformed, and hæmaturia in variable amount. In some cases the renal complication shows itself by other symptoms, such as lumbar pain, cedema, or even eclamptic symptoms, as in Renau's case (*Arch. de Phys.*, 1881); sometimes this train of symptoms is sufficiently intense to justify the denomination of "renal dothienteneria" (Gubler), but in most cases nothing of the kind occurs. It is by the examination of the urine alone that infectious nephritis is discovered. This investigation should never be neglected, for the facts brought forward by M. Bouchard, prove that infectious nephritis has a considerable prognostic value in typhoid fever. Out of his twenty-one typhoid patients in whom the kidneys were thus affected nine died. M. Dreyfus-Brissac found that, in three similar cases, two ended fatally; and in the patient who recovered, the albuminuria became chronic. According to M. Bouchard, the nephritis generally shows itself during the infection period of the disease, as it is discovered in a very short period of time—from three days to a week.

M. Bouchard describes the pathological characteristics of this nephritis as follows. Examination with the naked eye shows increase in the size and weight of the kidneys. The cortical substance is either greyish or congested, while the medullary substance is perfect. The microscope shows the integrity of Henle's tubes, catarrhal change in the collecting tubes, and especially in the tubuli contorti, in which the epithelial cells are swollen and adhere, showing a very marked granular degeneration.

From the pathogenetic point of view, a very important fact is noticed, that, in the examination of the kidney in the fresh condition, it is extremely difficult to find the presence of very numerous bacteria. In sections prepared after hardening, and made transparent by carbonate of soda, the bacteria appear in a very manifest way in the interstitial tissue and in the lumen of the tubules. These data are conformable with those resulting from Letzerich's researches. Thus infectious nephritis does not only show itself by retractile albumen; it is not only in the urine, it is also in the kidneys, that the offending matter is found, under the form, not of common micrococci, which might be attributed to a process of decomposition or putrefaction, but of specific bacillary bacteria.

It seems established that in infectious diseases, besides the generally recognised functional disorders, a renal complication of a much more serious character, the sole cause of which is the presence of the characteristic bacteria of the disease, may be produced. It must not here be imagined that this is a question of exceptional facts or of pure pathological curiosity. Taking only typhoid fever, it may be said that the infectious agent of that disorder has a preference for the kidneys; for, out of sixty-five typhoid patients in his hospital practice, M. Bouchard discovered infectious nephritis in twenty-one cases. The micro-organisms of other infectious diseases doubtless have not an equal affinity for the kidneys; if renal complication be exceptional with certain of them, it is, on the contrary, more frequently observed than in typhoid fever in the course of other febrile diseases, such as scarlatina and diphtheria. It is likewise to be remarked that no other morbid process is known in which the renal complication is the first in order, or may be considered as forming part of the ordinary train of symptoms of the disease; in other terms, it is always in the secondary

excluding medical men from the staff of this institution was a policy of unnatural exclusion and extermination of the fittest.

The question thus raised by Sheriff Smith is not likely to be allowed to drop, until some other system has been introduced into the Greenock Infirmary.

The subject is of importance to many similar institutions. In the abstract, it will scarcely be denied that medical men should have a large share in the management of hospitals; and yet, as a matter of fact, such is seldom the case. In some hospitals, they are rigorously excluded from the governing body, and in few have they that share in the administration to which their special knowledge and their services to the hospital entitle them. Events which have recently occurred in the metropolis, and which must be fresh in the minds of our readers, show how important it is that the medical staff should be able to make its voice heard in an authoritative manner. We hope that the movement at Greenock may be a step towards this desirable result.

THE Duke of Connaught will preside at the anniversary festival of the Hospital for Sick Children on the 8th of March.

THE celebration of the three hundredth anniversary of the University of Würzburg will take place from the 1st to the 3rd of August.

PRINCE LEOPOLD will preside at a festival dinner on March 14th in aid of the funds of the National Hospital for the Paralyzed and Epileptic.

Two distinguished German anatomists, Professor Henle in Göttingen, and Professor Bischoff in Munich, are about to celebrate their jubilees, having held their degree as doctor for fifty years.

AMONGST the specimens exhibited at the Obstetrical Society on Wednesday last was a tubal cyst containing a small foetus, with the placenta, removed on Tuesday from a young woman, by Mr. J. Knowsley Thornton, at the Samaritan Free Hospital. The patient was doing well on Thursday morning.

THERE are many candidates for the seat which the death of M. Bouillaud leaves vacant in the medical section of the Académie des Sciences, comprising MM. Paul Bert, Charcot, Davaine, Sappey, and Brown-Séquard. Owing to the absence of M. Marey, the election is delayed.

M. TISSART, Dispenser at the Hospital of the Val-de-Grâce, has made a communication to the Medical Section of the Academy of Sciences, alleging that a series of experiments demonstrate that the blue, green, and yellow on the linen of dressings is owing to the action of a microphyte which acts on nitrogenous substances.

APROPOS of the copyright question, we read, in the *Athenæum* of the 25th ultimo, that two separate editions of Dr. Matthews Duncan's lectures have appeared in the United States at a price of ten cents; the cost of the lectures as published in England being about as many shillings.

APPLICATION has been made in the Wimbledon poisoning case to postpone the trial of Dr. Lamson until the next session, on the ground that Dr. Tidy, who was engaged in making the necessary analyses of the contents of the stomach of the deceased, had not had time to complete the examination. Mr. Justice Hawkins consented to the trial being postponed until Monday next.

AT the monthly meeting of the Committee of the British Medical Benevolent Fund, on Tuesday, February 28th, there were seventeen applications for aid. Relief was granted in every case, the amount voted being £225. Among the applicants were a medical man aged 78, two widows over the age of 70, and a lady recently widowed under most distressing circumstances.

THE recently made census in Paris shows an increase in five years of 237,104 inhabitants. In 1876, the population was 1,988,806; it is now 2,225,902. The annual increase has been at the rate of 47,420 *per annum*, or of about 124 *per diem*.

M. DE QUATREFAGES affirms that M. de Lacerda, a Brazilian, has an antidote against the bite of serpents. Several members of the Medical Section of the Académie des Sciences propose that the discovery should be communicated to the Minister of Agriculture. As a preliminary step, a commission of inquiry is named—MM. Pasteur, Frémy, Quatrefages, Vulpian, Gosselin, Bouley. The remedy is hypodermic injections of permanganate of potash on the seat of the bite, and wherever there is œdema.

THE Municipal Council of Paris has revived the question opened by M. Bourneville last year, as to cremating the remains of bodies used for anatomical purposes at Clamart, and the practical school of anatomy. This is a question of some importance, as, during the year 1870, 3,675 bodies were sent to these two establishments. The then Minister for Home Affairs replied to the appeal made to him, that the existing state of the law did not allow him to authorise cremation. The new Prefect of the Seine will, it is stated, make a fresh representation to the minister on the subject.

M. BROWN-SÉQUARD, Professor at the Collège de France, has communicated a paper to the Académie des Sciences, entitled "*Arrêt des Échanges entre le Sang et les Tissus.*" M. Brown-Séquard believes that a nervo-dynamic influence is the cause of this arrest; secretions are suspended, animal heat is lessened, serious and rapid modifications take place in the respiratory and circulatory apparatuses. The principal causes are: lesions of the central nervous system, either by direct influence or by reflex action; crises in different affections, such as angina pectoris, peritonitis, injuries which influence nerves and ganglia; submersion; strangulation; and puncture of the diaphragm. The effects are various. 1. Venous blood may become red; 2. The quantity of carbonic acid present in the blood is lessened; 3. The final convulsions which precede death in ordinary cases of asphyxia are not present; 4. A general frigidity appears during life, and increases after death; 5. Contraction of the blood-vessels is constant; 6. The physiological vitality of the spinal cord persists some time after death; rigidity supervenes slowly, and lasts a long time.

HOSPITAL AMBULANCE SERVICE.

WE have received a communication from Dr. Allfrey of St. Mary Cray, with reference to his letter in the *JOURNAL* of February 11th, and our remarks thereon in the same number. He assures us that he made no claim to be considered the originator of any system of ambulance service. His only object was, to advise that the whole of the metropolitan police district should be placed in electric communication for ambulance purposes; for he feared that, unless attention were called to the subject, the interests of the outer portions of the district would be overlooked in the arrangements now under consideration. Dr. Allfrey's explanation makes it clear that the question of priority in regard to devising an ambulance system, or to placing the hospitals in electric or telephonic communication, is one which does not in any way concern him. The suggestion which he does make is one calculated to extend the utility of already existing schemes; and the thanks of all who are interested in the provision of an ambulance service for London are due to him for having made so useful a proposal.

POISONING BY COAL-GAS.

A RARE instance of fatal poisoning from the inhalation of coal-gas has just occurred in Birmingham. A servant girl, aged 17, retired to bed in her usual health on the night of Saturday, the 18th ult. The following morning, she could not be roused. Mr. Hunt, surgeon, was summoned; and he found the girl lying insensible, and presenting the usual signs of poisoning by coal-gas—namely, besides coma, dilated pupils, flushed face, vomiting, and frequent pulse. In the room, about

twelve feet square, there was an overpowering smell of gas, which was found to be issuing freely from a hole in a pipe in the wall. The window and door of the room had been closed all the night, and a small chimney was tightly stopped. Dr. Sawyer saw the patient with Mr. Hunt. In spite of energetic treatment, by free exposure to fresh air, affusion of cold water, and diffusible stimulants, the girl never rallied.

THE DUCHESS OF CONNAUGHT.

THE condition which has delayed the convalescence of H.R.H. the Duchess of Connaught was obstruction of the veins of the lower limb, giving rise to the well known oedematous swelling known as "white leg". This condition was traceable, as has been previously stated, to a form of blood-poisoning arising from the depressing influence of sewer-gas. Since the removal of Her Royal Highness to Windsor, her condition, which had at one time given rise to much anxiety on the part of Dr. Playfair, has yielded to treatment in the most satisfactory manner. Her Royal Highness is now able to take short daily walks, and is in process of recovering her usual strength. She will shortly leave Windsor for Biarritz, where, no doubt, the warm southern sun and the sea-breezes will complete the convalescence now happily progressing.

A SUCCESSFUL CÆSAREAN SECTION.

THE patient, suffering from epithelioma of the cervix uteri complicated pregnancy, whose case Dr. Edis brought under the notice of the Fellows of the Obstetrical Society at the December meeting, was taken in labour at term on Saturday evening last, in the Midwifery Hospital. On Sunday morning, Mr. Henry Morris performed Cæsaræan section. The operation was performed in the interests of both mother and child. We are glad to learn that, on Wednesday, both mother and child were progressing favourably.

THE LANCET AND THE LANCET.

ON Thursday, March 2nd, Mr. Thomas Lister was duly elected surgeon to the hospital. The appointment of assistant-surgeon was conferred on Mr. W. H. Cripps, F.R.C.S., Surgeon to the Great Northern Hospital. Mr. Cripps, who was unopposed in his candidature, held the appointment of assistant-surgeon of anatomy, and had served his term in St. Bartholomew's Hospital. He was the first holder of the office of Royal College of Surgeons in 1876 for an essay on Cancer of the Rectum—a subject which he has investigated with care, and that date, the result of his researches, has been published as an elaborate and well-illustrated special communication to the Royal College of Surgeons. The vacancy for a fifth assistant-surgeon will, as we have previously stated, be filled up by Mr. Cripps. The election will take place on March 15th.

THE LANCET, in its issue of the 24th inst., contains a notice of the death of the late lamented Mr. Murray, who for many years past had been their investigator with regard to the subject of the "white leg". He had received on all the numerous committees appointed to consider the subject, as well as on the Royal Commission, and in his private capacity, a share of the attention in all directions. The LANCET will bear the following notice of his death in its issue of the 24th inst.

THE LANCET, in its issue of the 24th inst., contains a notice of the death of the late lamented Mr. Murray, who for many years past had been their investigator with regard to the subject of the "white leg". He had received on all the numerous committees appointed to consider the subject, as well as on the Royal Commission, and in his private capacity, a share of the attention in all directions. The LANCET will bear the following notice of his death in its issue of the 24th inst.

he promoted to be Major-General on the retired list. Surgeon Woodward is to be promoted to the rank of Lieutenant-Colonel. The Committee also grant Mrs. Garfield the remainder of the President's salary for the current year.

CAMBRIDGE LOCAL EXAMINATIONS.

THE grace for holding one of these examinations in September or the end of August has passed the Senate of the University; but it is not yet determined in which towns the examination will be held: London, Liverpool, and a few other large towns, will probably be selected—Cambridge, perhaps, being one of them. The new examination, as stated in our last number, is intended to accommodate students who desire to pass, in September, a preliminary examination recommended by the Medical Council; and also students who desire, before entering at the University of Cambridge, to obtain the certificates which exempt them from the necessity of going in for the "Previous Examination" of the University. Students, especially medical students, are recommended to take this course; because those who do so are enabled, immediately on commencing residence in October, to commence attendance on the professors' lectures, and to pass their medical examinations at an earlier period than they could otherwise do.

QUARANTINE AND COMMERCE.

THE LANCET, in its issue of the 24th inst., contains a notice of the death of the late lamented Mr. Murray, who for many years past had been their investigator with regard to the subject of the "white leg". He had received on all the numerous committees appointed to consider the subject, as well as on the Royal Commission, and in his private capacity, a share of the attention in all directions. The LANCET will bear the following notice of his death in its issue of the 24th inst.

THE LANCET, in its issue of the 24th inst., contains a notice of the death of the late lamented Mr. Murray, who for many years past had been their investigator with regard to the subject of the "white leg". He had received on all the numerous committees appointed to consider the subject, as well as on the Royal Commission, and in his private capacity, a share of the attention in all directions. The LANCET will bear the following notice of his death in its issue of the 24th inst.

CAMBRIDGE LOCAL EXAMINATIONS.

THE number of women delivered in the General Lying-in Hospital in 1881 was 1,000. The maternal mortality was 10. There were nine still-born children, and six died in the hospital.

after birth. Of the one hundred and seventy-two women delivered in the hospital, eight were instrumental cases. There was one case of puerperal mania, which recovered before leaving the hospital. There were six hundred and ten women delivered outside the hospital without a death. It is not stated, however, whether any of these were delivered with instruments or not. Antiseptic treatment is adopted in the hospital in all cases.

THE MEDICAL STATISTICS OF GERMANY.

IN the year 1881, there were in the German Empire, according to Dr. Berner's *Reichs-Medicinal Kalendar*, 17,591 physicians, and 4,457 apothecaries. Of hospitals, there existed 2,576, with 127,062 beds. In the whole German Empire, there were 3.26 physicians, on an average, in every 30 square miles of country; and to every 10,000 inhabitants, there was an average of 3.89 physicians. In the 20 medical faculties of Germany, 198 ordinary and 136 extraordinary professors, and 186 assistant-professors, were employed in teaching. There were 56 learned medical societies in all Germany, with 5,663 associates; 18 sanitary associations, with 6,492 members; 12 associations for the protection of medical rights. These associations published their proceedings in 54 different publications. The number of medical and sanitary periodicals amounted in the year 1881 to 83.

ATAXY AND SEWING MACHINES.

M. OCTAVE GUELLIOT publishes, in the *Union Médicale*, an interesting paper on two cases of locomotor ataxy in women employed in working at sewing machines. In women predisposed to hysteria, working at the sewing machine seems to be, in certain cases, the occasional cause of the appearance of locomotor ataxy. The symptoms commence in the lower limbs, and follow an ascending progression. Lightning pains appear in the form of shooting pains, and traverse the limbs from below upwards. Improvement occurs when the patient rests, and may last a long time. Working at the machine by means of a treadle probably acts chiefly by the concussion, which is diffused throughout the spinal cord. Therefore, the continuous movement of the treadle is dangerous to the workwomen; and endeavours should be made to replace, in sewing machines, the foot-movement by some other mechanical motor power.

MEDICAL DEGREES IN THE UNITED STATES.

AT the recent annual meeting of the Medical Society of the State of New York, a resolution was unanimously adopted, recommending that degrees of Doctor in Medicine should be conferred by the medical colleges, only after examination and recommendation of the candidate by an independent board of examiners; and that such board should be common to all the colleges.

DIVORCE AND MENTAL ALIENATION.

MM. BLANCHE, CHARCOT, and LEGRAND DU SAULLE have been heard by the commission on divorce now sitting in Paris, for the purpose of recording their opinion on the question whether insanity should rank amongst the reasons for divorce. A writer in the *Gazette Hebdomadaire* for February 17th, who signs himself "A. D.," states that they answered the question in the negative sense, with some reservations; which, however, he does not specify. The writer approves of this conclusion, and goes on to state his reasons as follows. The most general consideration to be brought into relief is, that insanity is a disease; and that no disease, even impotence, is a reason for dissolution of marriage. The lunatic is a man suffering in his moral and intellectual health, as others suffer in their physical health. He deserves the same or even greater care; only there may be need to take precautions against the effects of his mental loss of balance; for which, however, there is no need either of divorce or separation. In the second place, chronic insanity, although often incurable, is not necessarily so; and it would be difficult to imagine a more cruel and unjust situation than for a married person to return to the domestic hearth after an unexpected recovery, and to find the other party to the contract in the bonds of a fresh marriage. The form of dementia known in France as

folie circulaire frequently yields these surprises; and we are told that M. Blanche cited a remarkable example before the commission, in which the insanity had lasted sixteen years. General paralysis, it is true, is incurable; but it will not be denied that it may show such long and complete remissions that the most experienced practitioners may be inclined to consider them definitive; and that, in any case, the patient must be restored to his or her family. As to those cases in which the mischief makes almost continuous progress, and distinctly authorises a fatal prognosis, M. Charcot is stated to have laid down the dictum that the only conduct to be prescribed to families is to redouble every possible attention, and to have patience. As to epilepsy, nothing is more common, especially in young persons, than to meet with it limited to one or two attacks, never to show itself again. It is these cases specially which Foville thought were connected with the eruption of the large molars or wisdom teeth. There are epilepsies from worms; and the author cites the case of a librarian in whom the attacks entirely disappeared during the twelve or fifteen years he lived after evacuating a tenia. The writer of the article, whence we take these considerations on an interesting and important social question, points out that it is by no means uncommon to meet with persons sufficiently wanting in the moral sense to speculate by marriage on the diseased condition of their fellow-creatures. Those affections which are slow in presenting their true character, but are not unfrequently recognisable in their early stages, as phthisis and insanity, are particularly adapted to this kind of calculation. The prospect of divorce would be yet another encouragement, and so much the more tempting, so far as regards dementia, that it would be much more easy to accomplish an act of spoliation in the case of a person of weak intellect after marriage.

VITAL STATISTICS OF NEW YORK.

THE official vital statistics of New York for the year just closed show a surprising and alarming series of figures, which indicate the necessity for very energetic action by the practical sanitarians of that great city. In a population of 1,242,543, there were 38,000 deaths, showing a death-rate of 31.07 per 1,000; the mortality of our ancient, overbuilt, and partly worn-out London showing a mortality of less than 20 per 1,000 in a less prosperous population of four millions. The mortality is, moreover, largely due to the increase of filth-diseases—diphtheria, which springs from bad drains; diarrhoea and typhoid fever, which are largely due to pollution of drinking-water. The drinking-water and the drainage of New York appear both to be poisonous and polluted, beyond even the degree to which they are so in the older capitals. This, and other such defects of sanitation, it is surely not beyond the active intelligence and practical energy of our Anglo-Saxon cousins beyond the sea to recognise and to remedy. It is now the boast of the Anglo-Saxon race to have recognised, to have enforced, and to have acted on, the doctrine that purity of the air, water, and soil are the first elements of health, and are the dues of all in the most crowded community. With adequate effort, New York might be made the healthiest, as it is now one of the unhealthiest, of great cities. It once boasted of a pure water-supply, and it has now to lament its preventable contamination. Its situation is favourable to good drainage; and, with good house-sanitation, the sea-breezes which sweep freely over it should ensure purity of air.

PERIPHERAL TROPHIC INFLUENCES ON NERVE-CENTRES.

WE are familiar with atrophic degeneration of tissues, as the result of a morbid or deficient activity of nervous centres. We recognise, for instance, as atrophies of nervous origin, degeneration of the spinal cord and of the nerves themselves, amyotrophy, acute decubitus, etc., the process being in all these cases centrifugal in relation to ganglionic matter. Rumpf's experiments, recorded in the number of Pflüger's *Archiv*, afford an important addition to our knowledge; and forcibly recall to mind that a nerve-fibre, with its terminal cells, peripheral and central, is an "individuum", with regard to its nutrition as well as to its function. His observations relate to the trophic action exerted upon

centres from the periphery. He finds in frogs that the spinal cord or brain, after severance of all nervous connection with the tissues, is absorbed after a preliminary stage of swelling; and, by exclusion, he determined that the immediate antecedent of this event is interruption of the motor channels. The absorption proceeds with great rapidity; isolated portions of brain are absorbed in twenty-four hours, and the spinal cord disappears in five to eight days, leaving only connective tissue in its place. If the sensory roots be alone divided, the motor roots being left intact, removal by absorption does not ensue, or is much delayed, which indicates the existence of a centripetal influence maintaining the integrity of the cord, passing mainly by motor channels. Nor is absorption notable if only some of the motor roots be divided, leaving others intact; which goes to prove that the latter act vicariously in the preservation—or, in other words, that the trophic influence spreads throughout the cord. Considering it as a continuous action of periphery upon centre, the converse of tonus or the continuous action of centre upon periphery, Rumpf denotes the supposed action by the term "*retrotonus*". These observations, if well established, are data for points of doctrine which, if they are not absolutely novel, have been hitherto at the least nebulous. Retrograde stimulation of nutrition has been invoked, when, by electrical stimulation of muscles, it has been sought to act beneficially upon damaged centres. Rumpf's experiments to some extent support the theory, that centres may be influenced through motor as well as sensory channels, and make it credible that centres, which are incapable of motor expression, should nevertheless be affected by the retrograde stimulus of artificial motion at the periphery. But, in the present state of the subject, it must be said that the facts, even if certain for the frog, render the existence of an analogous influence on higher animals neither certain nor probable, but only less improbable. The facts, however, are a considerable addition to the ideas of physiological procedure, on which our clinical inferences are based; and we hope that the study of more differentiated nervous systems than that of the frog may lead to more definite and practical information.

SCOTLAND.

MEMENTO MORTE.

THE Edinburgh Royal Infirmary and the Royal Maternity Hospital there have recently benefited to a large extent from the residue of the estate of the late Dr. Thomas Hunter, Deputy-General Inspector of Hospitals. It would seem that the residue of Dr. Hunter's estate was bequeathed to charitable institutions, the amount to be fixed by his executors. Accordingly, they have caused to be paid to the Royal Infirmary the sum of £13,500, and to the Maternity and Simpson Memorial Hospital £2,100. It may be remembered that there was a considerable debt on the new maternity buildings; but, the managers having devoted Dr. Hunter's bequest to the liquidation of that debt, only £200 now remains to free the institution from the incubus. The late deputy-keeper of the Signet, Mr. Hope, who was for some time law-agent, and many years a member of the hospital, has bequeathed to it the sum of £500.

THE UNIVERSITY OF EDINBURGH, 1881-82.

At the University of Edinburgh, the University of the Scottish Medical Institution for the year, 1881-82, held in Edinburgh, there were, it was reported, that at present there are one hundred and twenty-three medical students in the institution, and, notwithstanding that there is a considerable deficiency of students, the institution is still in a flourishing state. On the 1st of January last year, a lecture (Mr. Hunter's) was delivered on the subject of the history of the University of Edinburgh, and, in the course of the lecture, it was stated that the University of Edinburgh, which was founded in 1582, and which has since that time been the seat of the highest medical education in Scotland, has, in the year 1881-82, had the greatest number of students in its history, and that the University of Edinburgh, which was founded in 1582, and which has since that time been the seat of the highest medical education in Scotland, has, in the year 1881-82, had the greatest number of students in its history.

tory, the balance in favour of the institution for the year just ended being £1611, as compared with £1276 the previous year. Dr. Alexander Wood, who spoke at the meeting, alluded favourably to the choice of a layman as superintendent.

COMBEE LECTURES IN ABERDEEN.

THE seventh lecture of this course was delivered by Dr. Stirling on Saturday evening, the subject being the physiology of the blood-vessels. After describing the chief points in connection with the distribution of the arteries, capillaries, and veins, the lecturer showed some limelight views of great size, so that every member of the audience could see even the minutiae. In speaking of the barbers who formerly practised bleeding, the lecturer mentioned that the Royal College of Surgeons of Edinburgh still pays an annual tribute of £10 to the "Society of Barbers". Experiments were shown to illustrate the pulse; first, by means of a long jet of gas, which oscillates with each beat of the radial artery; and, secondly, by means of the sphygmograph: the tracing taken by this instrument being then projected on the screen. The cause of the disappearance of the pulse in the capillaries and veins was then explained, and also illustrated, by several experiments. The effect of the nervous system on the blood-vessels was mentioned, as in blushing; in the results of division of the sympathetic nerve in the neck of a rabbit; and in blushing produced by drugs. The lecture was brought to a close with some remarks on the relation of the nervous system, and especially the vaso-motor nerves, to what is popularly termed "taking a cold". The lecturer then showed various experiments upon the arm of a lad to illustrate what ought to be done in cases of wounds of veins or arteries, in order to staunch the bleeding, so as to permit the wounded person to be taken to the nearest hospital without losing blood.

THE EDINBURGH MEDICAL MISSIONARY SOCIETY.

THIS Society, for which an appeal is now being extensively made to the public, has done good work since its establishment in 1841. During the past ten years, thirty-four young men have been educated and trained under the auspices of the Society, and have obtained legal medical qualifications. Of these, twenty-seven are now in active service in all parts of the world, as agents for the Society. Medical mission work has always had a just and strong hold upon the hearts of the Edinburgh medical men, and it is to be hoped that its moral aims and religious uses are strengthened by the collateral consideration of the powerful humanising and civilising work of earnest minded medical men among the savage tribes, and in unexplored, or but little explored, parts of the world. It is to be hoped, especially, that, by their observations of the diseases prevalent in the countries in which they reside, and of the native medicines used by the people, these medical missionaries have been able to make valuable additions to knowledge in respect to medical diseases, pathology, ethnology, botany, materia medica, and therapeutics.

THE QUARTERLY REPORT OF THE REGISTRAR-GENERAL.

The quarterly report of the Registrar-General for the last quarter of 1881, shows that a total of 17,500 deaths were registered, being in the proportion of 1 in 100 of the population, and very much below the average of the last two years, when it was 1 in 84 and 1 in 81 respectively. In the two quarters of Scotland, the proportion was 1 in 100 and 1 in 98 respectively, in the former of the two quarters, and 1 in 98 and 1 in 97 respectively in the latter two quarters; and in the metropolitan area, the proportion was 1 in 100 and 1 in 98 respectively, in the former of the two quarters, and 1 in 98 and 1 in 97 respectively in the latter two quarters. The number of deaths registered in the last quarter of 1881 was 17,500, and in the last quarter of 1880 it was 17,500, and in the last quarter of 1879 it was 17,500, and in the last quarter of 1878 it was 17,500, and in the last quarter of 1877 it was 17,500, and in the last quarter of 1876 it was 17,500, and in the last quarter of 1875 it was 17,500, and in the last quarter of 1874 it was 17,500, and in the last quarter of 1873 it was 17,500, and in the last quarter of 1872 it was 17,500, and in the last quarter of 1871 it was 17,500, and in the last quarter of 1870 it was 17,500, and in the last quarter of 1869 it was 17,500, and in the last quarter of 1868 it was 17,500, and in the last quarter of 1867 it was 17,500, and in the last quarter of 1866 it was 17,500, and in the last quarter of 1865 it was 17,500, and in the last quarter of 1864 it was 17,500, and in the last quarter of 1863 it was 17,500, and in the last quarter of 1862 it was 17,500, and in the last quarter of 1861 it was 17,500, and in the last quarter of 1860 it was 17,500, and in the last quarter of 1859 it was 17,500, and in the last quarter of 1858 it was 17,500, and in the last quarter of 1857 it was 17,500, and in the last quarter of 1856 it was 17,500, and in the last quarter of 1855 it was 17,500, and in the last quarter of 1854 it was 17,500, and in the last quarter of 1853 it was 17,500, and in the last quarter of 1852 it was 17,500, and in the last quarter of 1851 it was 17,500, and in the last quarter of 1850 it was 17,500, and in the last quarter of 1849 it was 17,500, and in the last quarter of 1848 it was 17,500, and in the last quarter of 1847 it was 17,500, and in the last quarter of 1846 it was 17,500, and in the last quarter of 1845 it was 17,500, and in the last quarter of 1844 it was 17,500, and in the last quarter of 1843 it was 17,500, and in the last quarter of 1842 it was 17,500, and in the last quarter of 1841 it was 17,500, and in the last quarter of 1840 it was 17,500, and in the last quarter of 1839 it was 17,500, and in the last quarter of 1838 it was 17,500, and in the last quarter of 1837 it was 17,500, and in the last quarter of 1836 it was 17,500, and in the last quarter of 1835 it was 17,500, and in the last quarter of 1834 it was 17,500, and in the last quarter of 1833 it was 17,500, and in the last quarter of 1832 it was 17,500, and in the last quarter of 1831 it was 17,500, and in the last quarter of 1830 it was 17,500, and in the last quarter of 1829 it was 17,500, and in the last quarter of 1828 it was 17,500, and in the last quarter of 1827 it was 17,500, and in the last quarter of 1826 it was 17,500, and in the last quarter of 1825 it was 17,500, and in the last quarter of 1824 it was 17,500, and in the last quarter of 1823 it was 17,500, and in the last quarter of 1822 it was 17,500, and in the last quarter of 1821 it was 17,500, and in the last quarter of 1820 it was 17,500, and in the last quarter of 1819 it was 17,500, and in the last quarter of 1818 it was 17,500, and in the last quarter of 1817 it was 17,500, and in the last quarter of 1816 it was 17,500, and in the last quarter of 1815 it was 17,500, and in the last quarter of 1814 it was 17,500, and in the last quarter of 1813 it was 17,500, and in the last quarter of 1812 it was 17,500, and in the last quarter of 1811 it was 17,500, and in the last quarter of 1810 it was 17,500, and in the last quarter of 1809 it was 17,500, and in the last quarter of 1808 it was 17,500, and in the last quarter of 1807 it was 17,500, and in the last quarter of 1806 it was 17,500, and in the last quarter of 1805 it was 17,500, and in the last quarter of 1804 it was 17,500, and in the last quarter of 1803 it was 17,500, and in the last quarter of 1802 it was 17,500, and in the last quarter of 1801 it was 17,500, and in the last quarter of 1800 it was 17,500, and in the last quarter of 1799 it was 17,500, and in the last quarter of 1798 it was 17,500, and in the last quarter of 1797 it was 17,500, and in the last quarter of 1796 it was 17,500, and in the last quarter of 1795 it was 17,500, and in the last quarter of 1794 it was 17,500, and in the last quarter of 1793 it was 17,500, and in the last quarter of 1792 it was 17,500, and in the last quarter of 1791 it was 17,500, and in the last quarter of 1790 it was 17,500, and in the last quarter of 1789 it was 17,500, and in the last quarter of 1788 it was 17,500, and in the last quarter of 1787 it was 17,500, and in the last quarter of 1786 it was 17,500, and in the last quarter of 1785 it was 17,500, and in the last quarter of 1784 it was 17,500, and in the last quarter of 1783 it was 17,500, and in the last quarter of 1782 it was 17,500, and in the last quarter of 1781 it was 17,500, and in the last quarter of 1780 it was 17,500, and in the last quarter of 1779 it was 17,500, and in the last quarter of 1778 it was 17,500, and in the last quarter of 1777 it was 17,500, and in the last quarter of 1776 it was 17,500, and in the last quarter of 1775 it was 17,500, and in the last quarter of 1774 it was 17,500, and in the last quarter of 1773 it was 17,500, and in the last quarter of 1772 it was 17,500, and in the last quarter of 1771 it was 17,500, and in the last quarter of 1770 it was 17,500, and in the last quarter of 1769 it was 17,500, and in the last quarter of 1768 it was 17,500, and in the last quarter of 1767 it was 17,500, and in the last quarter of 1766 it was 17,500, and in the last quarter of 1765 it was 17,500, and in the last quarter of 1764 it was 17,500, and in the last quarter of 1763 it was 17,500, and in the last quarter of 1762 it was 17,500, and in the last quarter of 1761 it was 17,500, and in the last quarter of 1760 it was 17,500, and in the last quarter of 1759 it was 17,500, and in the last quarter of 1758 it was 17,500, and in the last quarter of 1757 it was 17,500, and in the last quarter of 1756 it was 17,500, and in the last quarter of 1755 it was 17,500, and in the last quarter of 1754 it was 17,500, and in the last quarter of 1753 it was 17,500, and in the last quarter of 1752 it was 17,500, and in the last quarter of 1751 it was 17,500, and in the last quarter of 1750 it was 17,500, and in the last quarter of 1749 it was 17,500, and in the last quarter of 1748 it was 17,500, and in the last quarter of 1747 it was 17,500, and in the last quarter of 1746 it was 17,500, and in the last quarter of 1745 it was 17,500, and in the last quarter of 1744 it was 17,500, and in the last quarter of 1743 it was 17,500, and in the last quarter of 1742 it was 17,500, and in the last quarter of 1741 it was 17,500, and in the last quarter of 1740 it was 17,500, and in the last quarter of 1739 it was 17,500, and in the last quarter of 1738 it was 17,500, and in the last quarter of 1737 it was 17,500, and in the last quarter of 1736 it was 17,500, and in the last quarter of 1735 it was 17,500, and in the last quarter of 1734 it was 17,500, and in the last quarter of 1733 it was 17,500, and in the last quarter of 1732 it was 17,500, and in the last quarter of 1731 it was 17,500, and in the last quarter of 1730 it was 17,500, and in the last quarter of 1729 it was 17,500, and in the last quarter of 1728 it was 17,500, and in the last quarter of 1727 it was 17,500, and in the last quarter of 1726 it was 17,500, and in the last quarter of 1725 it was 17,500, and in the last quarter of 1724 it was 17,500, and in the last quarter of 1723 it was 17,500, and in the last quarter of 1722 it was 17,500, and in the last quarter of 1721 it was 17,500, and in the last quarter of 1720 it was 17,500, and in the last quarter of 1719 it was 17,500, and in the last quarter of 1718 it was 17,500, and in the last quarter of 1717 it was 17,500, and in the last quarter of 1716 it was 17,500, and in the last quarter of 1715 it was 17,500, and in the last quarter of 1714 it was 17,500, and in the last quarter of 1713 it was 17,500, and in the last quarter of 1712 it was 17,500, and in the last quarter of 1711 it was 17,500, and in the last quarter of 1710 it was 17,500, and in the last quarter of 1709 it was 17,500, and in the last quarter of 1708 it was 17,500, and in the last quarter of 1707 it was 17,500, and in the last quarter of 1706 it was 17,500, and in the last quarter of 1705 it was 17,500, and in the last quarter of 1704 it was 17,500, and in the last quarter of 1703 it was 17,500, and in the last quarter of 1702 it was 17,500, and in the last quarter of 1701 it was 17,500, and in the last quarter of 1700 it was 17,500, and in the last quarter of 1699 it was 17,500, and in the last quarter of 1698 it was 17,500, and in the last quarter of 1697 it was 17,500, and in the last quarter of 1696 it was 17,500, and in the last quarter of 1695 it was 17,500, and in the last quarter of 1694 it was 17,500, and in the last quarter of 1693 it was 17,500, and in the last quarter of 1692 it was 17,500, and in the last quarter of 1691 it was 17,500, and in the last quarter of 1690 it was 17,500, and in the last quarter of 1689 it was 17,500, and in the last quarter of 1688 it was 17,500, and in the last quarter of 1687 it was 17,500, and in the last quarter of 1686 it was 17,500, and in the last quarter of 1685 it was 17,500, and in the last quarter of 1684 it was 17,500, and in the last quarter of 1683 it was 17,500, and in the last quarter of 1682 it was 17,500, and in the last quarter of 1681 it was 17,500, and in the last quarter of 1680 it was 17,500, and in the last quarter of 1679 it was 17,500, and in the last quarter of 1678 it was 17,500, and in the last quarter of 1677 it was 17,500, and in the last quarter of 1676 it was 17,500, and in the last quarter of 1675 it was 17,500, and in the last quarter of 1674 it was 17,500, and in the last quarter of 1673 it was 17,500, and in the last quarter of 1672 it was 17,500, and in the last quarter of 1671 it was 17,500, and in the last quarter of 1670 it was 17,500, and in the last quarter of 1669 it was 17,500, and in the last quarter of 1668 it was 17,500, and in the last quarter of 1667 it was 17,500, and in the last quarter of 1666 it was 17,500, and in the last quarter of 1665 it was 17,500, and in the last quarter of 1664 it was 17,500, and in the last quarter of 1663 it was 17,500, and in the last quarter of 1662 it was 17,500, and in the last quarter of 1661 it was 17,500, and in the last quarter of 1660 it was 17,500, and in the last quarter of 1659 it was 17,500, and in the last quarter of 1658 it was 17,500, and in the last quarter of 1657 it was 17,500, and in the last quarter of 1656 it was 17,500, and in the last quarter of 1655 it was 17,500, and in the last quarter of 1654 it was 17,500, and in the last quarter of 1653 it was 17,500, and in the last quarter of 1652 it was 17,500, and in the last quarter of 1651 it was 17,500, and in the last quarter of 1650 it was 17,500, and in the last quarter of 1649 it was 17,500, and in the last quarter of 1648 it was 17,500, and in the last quarter of 1647 it was 17,500, and in the last quarter of 1646 it was 17,500, and in the last quarter of 1645 it was 17,500, and in the last quarter of 1644 it was 17,500, and in the last quarter of 1643 it was 17,500, and in the last quarter of 1642 it was 17,500, and in the last quarter of 1641 it was 17,500, and in the last quarter of 1640 it was 17,500, and in the last quarter of 1639 it was 17,500, and in the last quarter of 1638 it was 17,500, and in the last quarter of 1637 it was 17,500, and in the last quarter of 1636 it was 17,500, and in the last quarter of 1635 it was 17,500, and in the last quarter of 1634 it was 17,500, and in the last quarter of 1633 it was 17,500, and in the last quarter of 1632 it was 17,500, and in the last quarter of 1631 it was 17,500, and in the last quarter of 1630 it was 17,500, and in the last quarter of 1629 it was 17,500, and in the last quarter of 1628 it was 17,500, and in the last quarter of 1627 it was 17,500, and in the last quarter of 1626 it was 17,500, and in the last quarter of 1625 it was 17,500, and in the last quarter of 1624 it was 17,500, and in the last quarter of 1623 it was 17,500, and in the last quarter of 1622 it was 17,500, and in the last quarter of 1621 it was 17,500, and in the last quarter of 1620 it was 17,500, and in the last quarter of 1619 it was 17,500, and in the last quarter of 1618 it was 17,500, and in the last quarter of 1617 it was 17,500, and in the last quarter of 1616 it was 17,500, and in the last quarter of 1615 it was 17,500, and in the last quarter of 1614 it was 17,500, and in the last quarter of 1613 it was 17,500, and in the last quarter of 1612 it was 17,500, and in the last quarter of 1611 it was 17,500, and in the last quarter of 1610 it was 17,500, and in the last quarter of 1609 it was 17,500, and in the last quarter of 1608 it was 17,500, and in the last quarter of 1607 it was 17,500, and in the last quarter of 1606 it was 17,500, and in the last quarter of 1605 it was 17,500, and in the last quarter of 1604 it was 17,500, and in the last quarter of 1603 it was 17,500, and in the last quarter of 1602 it was 17,500, and in the last quarter of 1601 it was 17,500, and in the last quarter of 1600 it was 17,500, and in the last quarter of 1599 it was 17,500, and in the last quarter of 1598 it was 17,500, and in the last quarter of 1597 it was 17,500, and in the last quarter of 1596 it was 17,500, and in the last quarter of 1595 it was 17,500, and in the last quarter of 1594 it was 17,500, and in the last quarter of 1593 it was 17,500, and in the last quarter of 1592 it was 17,500, and in the last quarter of 1591 it was 17,500, and in the last quarter of 1590 it was 17,500, and in the last quarter of 1589 it was 17,500, and in the last quarter of 1588 it was 17,500, and in the last quarter of 1587 it was 17,500, and in the last quarter of 1586 it was 17,500, and in the last quarter of 1585 it was 17,500, and in the last quarter of 1584 it was 17,500, and in the last quarter of 1583 it was 17,500, and in the last quarter of 1582 it was 17,500, and in the last quarter of 1581 it was 17,500, and in the last quarter of 1580 it was 17,500, and in the last quarter of 1579 it was 17,500, and in the last quarter of 1578 it was 17,500, and in the last quarter of 1577 it was 17,500, and in the last quarter of 1576 it was 17,500, and in the last quarter of 1575 it was 17,500, and in the last quarter of 1574 it was 17,500, and in the last quarter of 1573 it was 17,500, and in the last quarter of 1572 it was 17,500, and in the last quarter of 1571 it was 17,500, and in the last quarter of 1570 it was 17,500, and in the last quarter of 1569 it was 17,500, and in the last quarter of 1568 it was 17,500, and in the last quarter of 1567 it was 17,500, and in the last quarter of 1566 it was 17,500, and in the last quarter of 1565 it was 17,500, and in the last quarter of 1564 it was 17,500, and in the last quarter of 1563 it was 17,500, and in the last quarter of 1562 it was 17,500, and in the last quarter of 1561 it was 17,500, and in the last quarter of 1560 it was 17,500, and in the last quarter of 1559 it was 17,500, and in the last quarter of 1558 it was 17,500, and in the last quarter of 1557 it was 17,500, and in the last quarter of 1556 it was 17,500, and in the last quarter of 1555 it was 17,500, and in the last quarter of 1554 it was 17,500, and in the last quarter of 1553 it was 17,500, and in the last quarter of 1552 it was 17,500, and in the last quarter of 1551 it was 17,500, and in the last quarter of 1550 it was 17,500, and in the last quarter of 1549 it was 17,500, and in the last quarter of 1548 it was 17,500, and in the last quarter of 1547 it was 17,500, and in the last quarter of 1546 it was 17,500, and in the last quarter of 1545 it was 17,500, and in the last quarter of 1544 it was 17,500, and in the last quarter of 1543 it was 17,500, and in the last quarter of 1542 it was 17,500, and in the last quarter of 1541 it was 17,500, and in the last quarter of 1540 it was 17,500, and in the last quarter of 1539 it was 17,500, and in the last quarter of 1538 it was 17,500, and in the last quarter of 1537 it was 17,500, and in the last quarter of 1536 it was 17,500, and in the last quarter of 1535 it was 17,500, and in the last quarter of 1534 it was 17,500, and in the last quarter of 1533 it was 17,500, and in the last quarter of 1532 it was 17,500, and in the last quarter of 1531 it was 17,500, and in the last quarter of 1530 it was 17,500, and in the last quarter of 1529 it was 17,500, and in the last quarter of 1528 it was 17,500, and in the last quarter of 1527 it was 17,500, and in the last quarter of 1526 it was 17,500, and in the last quarter of 1525 it was 17,500, and in the last quarter of 1524 it was 17,500, and in the last quarter of 1523 it was 17,500, and in the last quarter of 1522 it was 17,500, and in the last quarter of 1521 it was 17,500, and in the last quarter of 1520 it was 17,500, and in the last quarter of 1519 it was 17,500, and in the last quarter of 1518 it was 17,500, and in the last quarter of 1517 it was 17,500, and in the last quarter of 1516 it was 17,500, and in the last quarter of 1515 it was 17,500, and in the last quarter of 1514 it was 17,500, and in the last quarter of 1513 it was 17,500, and in the last quarter of 1512 it was 17,500, and in the last quarter of 1511 it was 17,500, and in the last quarter of 1510 it was 17,500, and in the last quarter of 1509 it was 17,500, and in the last quarter of 1508 it was 17,500, and in the last quarter of 1507 it was 17,500, and in the last quarter of 1506 it was 17,500, and in the last quarter of 1505 it was 17,500, and in the last quarter of 1504 it was 17,500, and in the last quarter of 1503 it was 17,500, and in the last quarter of 1502 it was 17,500, and in the last quarter of 1501 it was 17,500, and in the last quarter of 1500 it was 17,500, and in the last quarter of 1499 it was 17,500, and in the last quarter of 1498 it was 17,500, and in the last quarter of 1497 it was 17,500, and in the last quarter of 1496 it was 17,500, and in the last quarter of 1495 it was 17,500, and in the last quarter of 1494 it was 17,500, and in the last quarter of 1493 it was 17,500, and in the last quarter of 1492 it was 17,500, and in the last quarter of 1491 it was 17,500, and in the last quarter of 1490 it was 17,500, and in the last quarter of 1489 it was 17,500, and in the last quarter of 1488 it was 17,500, and in the last quarter of 1487 it was 17,500, and in the last quarter of 1486 it was 17,500, and in the last quarter of 1485 it was 17,500, and in the last quarter of 1484 it was 17,500, and in the last quarter of 1483 it was 17,500, and in the last quarter of 1482 it was 17,500, and in the last quarter of 1481 it was 17,500, and in the last quarter of 1480 it was 17,500, and in the last quarter of 1479 it was 17,500, and in the last quarter of 1478 it was 17,500, and in the last quarter of 1477 it was 17,500, and in the last quarter of 1476 it was 17,500, and in the last quarter of 1475 it was 17,500, and in the last quarter of 1474 it was 17,500, and in the last quarter of 1473 it was 17,500, and in the last quarter of 1472 it was 17,500, and in the last quarter of 1471 it was 17,500, and in the last quarter of 1470 it was 17,500, and in the last quarter of 1469 it was 17,500, and in the last quarter of 1468 it was 17,500, and in the last quarter of 1467 it was 17,500, and in the last quarter of 1466 it was 17,500, and in the last quarter of 1465 it was 17,500, and in the last quarter of 1464 it was 17,500, and in the last quarter of 1463 it was 17,500, and in the last quarter of 1462 it was 17,500, and in the last quarter of 1461 it was 17,500, and in the last quarter of 1460 it was 17,500, and in the last quarter of 1459 it was 17,500, and in the last quarter of 1458 it was 17,500, and in the last quarter of 1457 it was 17,500, and in the last quarter of 1456 it was 17,500, and in the last quarter of 1455 it was 17,500, and in the last quarter of 1454 it was 17,500, and in the last quarter of 1453 it was 17,500, and in the last quarter of 1452 it was 17,500, and in the last quarter of 1451 it was 17,500, and in the last quarter of 1450 it was 17,500, and in the last quarter of 1449 it was 17,500, and in the last quarter of 1448 it was 17,500, and in the last quarter of 1447 it was 17,500, and in the last quarter of 1446 it was 17,500, and in the last quarter of 1445 it was 17,500, and in the last quarter of 1444 it was 17,500, and in the last quarter of 1443 it was 17,500, and in the last quarter of 1442 it was 17,500, and in the last quarter of 1441 it was 17,500, and in the last quarter of 1440 it was 17,500, and in the last quarter of 1439 it was 17,500, and in the last quarter of 1438 it was 17,500, and in the last quarter of 1437 it was 17,500, and in the last quarter of 1436 it was 17,500, and in the last quarter of 1435 it was 17,500, and in the last quarter of 1434 it was 17,500, and in the last quarter of 1433 it was 17,500, and in the last quarter of 1432 it was 17,500, and in the last quarter of 1431 it was 17,500, and in the last quarter of 1430 it was 17,500, and in the last quarter of 1429 it was 17,500, and in the last quarter of 1428 it was 17,500, and in the last quarter of 1427 it was 17,500, and in the last quarter of 1426 it was 17,500, and in the last quarter of 1425 it was 17,500, and in the last quarter of 1424 it was 17,500, and in the last quarter of 1423 it was 17,500, and in the last quarter of 1422 it was 17,500, and in the last quarter of 1421 it was 17,500, and in the last quarter of 1420 it was 17,500, and in the last quarter of 1419 it was 17,500, and in the last quarter of 1418 it was 17,500, and in the last quarter of 1417 it was 17,500, and in the last quarter of 1416 it was 17,500, and in the last quarter of 1415 it was 17,500, and in the last quarter of 1414 it was 17,500, and in the last quarter of 1413 it was 17,500, and in the last quarter of 1412 it was 17,500, and in the last quarter of 1411 it was 17,500, and in the last quarter of 1410 it was 17,500, and in the last quarter of 1409 it was 17,500, and in the last quarter of 1408 it was 17,500, and in the last quarter of 1407 it was 17,500, and in the last quarter of 1406 it was 17,500, and in the last quarter of 1405 it was 17,500, and in the last

HEALTH-RETURNS OF EIGHT PRINCIPAL SCOTCH TOWNS.

DURING the month of January, there were registered in the eight principal Scotch towns the deaths of 1,130 males, and 1,220 females; the total, 2,356, was 685 under the average for the same month during the previous ten years, due allowance being made for proportionate increase of population. The respective death-rates per thousand of the population were: Leith, 18; Edinburgh, 20; Dundee, 21; Perth, 22; Aberdeen, 23; Paisley, 24; Glasgow, 25; and Greenock, 27. Forty per cent. of the deaths were of children under five years of age, and the individual percentages were: Paisley, 27; Edinburgh, 31; Perth, 32; Leith, 33; Dundee, 35; Aberdeen, 38; Greenock, 43; and Glasgow, 46. Zymotic diseases contributed 15.6 per cent. of all the deaths, but in Glasgow a much larger proportion, owing to the prevalence there of fever and diseases of childhood. Whooping-cough was most fatal, and caused 3.4 per cent. of the entire mortality; in Glasgow, however, it caused 4.7, and in Aberdeen 5.7, per cent. Of 51 deaths due to fever, 14 were registered as typhus, 36 as enteric, and 1 as simple continued fever. Measles caused 60 deaths, and was especially fatal in Perth, where it caused 7.4 per cent. of all the deaths. Scarlet fever and diarrhoea each contributed 40 deaths, croup 30, and diphtheria 24. To apoplexy, 62 deaths were attributed; to paralysis, 61; to cardiac diseases, 156; to hydrocephalus, 62; and to premature birth debility, 70 deaths. As to the respiratory system, phthisis pulmonalis caused 241 deaths, equal to 10.2 per cent. of the whole; while inflammatory affections of the respiratory organs, other than those before mentioned, contributed 21.9 per cent. of the entire mortality. Of 93 deaths due to violent causes, 5 were of suicides. Seven persons—3 males and 4 females—were over 90 years of age, the eldest, a farmer, being 94. The births of 3,685 children, 1,834 of them males, and 1,851 females, were registered during the month. The meteorological returns for January show that the mean barometric pressure was greater by 0.339 inch, the barometric monthly range greater by 0.332 inch, the mean temperature greater by 4.9°, the mean daily range of temperature greater by 0.2°, the mean humidity less by 3, the rain-depth less by 0.97 inch, and the wind-pressure greater by 1.30 lbs. than the average for the same month during the preceding 25 years. The most noticeable features, therefore, are the high temperature and the great barometric pressure. These and the other conditions have all been favourable for good weather. The highest mean temperature, 44.0°, was at Paisley, and the lowest, 41.6°, at Dundee.

IRELAND.

DURING the past week, two additional cases of small-pox were admitted into the Lisburn Union Hospital.

EIGHTEEN deaths from small-pox were registered in Belfast during the December quarter, and nine in Waterford, but none in any other of the town districts throughout Ireland.

THE REUBEN HARVEY MEMORIAL FUND.

A MEETING of the committee of this fund has been summoned for Thursday next, the 9th inst., to consider a recommendation from the subcommittee as to the form the memorial should take. It is proposed by the subcommittee that a triennial prize should be awarded, out of the interest on the fund, for the best essay on some subject in physiology, including pathology, to be selected by the candidates themselves, and illustrated by original preparations or drawings; the prize to be open to all students of the Dublin Medical Schools, as well as to graduates and licentiates, under three years' standing, of all Irish Medical licensing bodies. It is further proposed, that the Presidents of the King and Queen's College of Physicians in Ireland, and the President of the Royal College of Surgeons in Ireland, should be requested to undertake jointly the award of the prize. The fund at present amounts to about £250. Any further subscriptions should be sent at once to Dr. George F. Duffey, Honorary Treasurer, as the list will be shortly closed.

SMALL-POX IN ARMAGH UNION.

At a meeting of the guardians last week, it was reported that four additional cases had been admitted, which with those previously under treatment, made a total of thirty-two. As the disease appeared to be increasing, a discussion took place as to the desirability of removing the five patients at present in the Fever Hospital, which contains forty beds, and placing the small-pox patients in that institution. It was also suggested to erect a small-pox hospital, which could accommodate about forty patients, at an estimated cost of £1,000. It was ultimately agreed that a committee of the guardians should report as to what arrangements could be made subject to the approval of the Local Government Board.

BELFAST ROYAL HOSPITAL.

Dr. H. S. PURDON, one of the visiting physicians to this hospital, has resigned in consequence of having received an important appointment. For nearly twelve years Dr. Purdon discharged the onerous duties in connection with his appointment with the greatest satisfaction to the Board of Management. Dr. Whitla, who was formerly connected with the hospital, has been unanimously elected in his room. There were several candidates, but they all withdrew in Dr. Whitla's favour.

CORK NORTH INFIRMARY.

At a meeting of the trustees held last week, the resignation of one of the physicians, Dr. John Popham, was received and accepted. Dr. Popham has been attached as one of the medical officers to the institution for the past thirty years, and the trustees, in recognition of his services, have appointed him consulting-physician to the hospital. Dr. Golding, assistant-physician, was unanimously elected to the vacancy caused by Dr. Popham's retirement.

MALE AND FEMALE PRISONS, CORK.

WE recently alluded to the retirement of Dr. Beamish, late medical officer to the Male and Female Prisons, after forty-one years' service; and that the Treasury had granted him a pension of £110 per annum, of which £33 5s. was the portion payable by the City. This sum did not equal two-thirds of his late salary, and Dr. Beamish brought the matter before the Corporation, who referred his application to the Law and Finance Committee for consideration. On their recommendation the sum of £33 5s. was increased to £46 15s. At a meeting of the Town Council last week, this recommendation was objected to by a minority of the Corporation, but we are gratified to state that the increase was agreed to by a large majority.

HEALTH OF DUBLIN FOR 1881.

THERE were 10,155 births registered, being equal to 29 per 1,000 of the population. The deaths numbered 9,424, and omitting 1,244, being those of persons admitted into public institutions from localities outside the district, the death-rate for last year was 26.3 per 1,000. Zymotic diseases caused 1,201 deaths, or a decrease of 1,522 as contrasted with 1880, and 696 below the average number registered during the ten years 1871-80. Fever caused 361 deaths; measles, 155; diarrhoea, 132; scarlet fever, 120; whooping-cough, 82; diphtheria, 31; and small-pox, 11. To phthisis 1,151 deaths were due, and to diseases of the respiratory organs 2,205, or a total of 3,356, showing an increase of 159 over the previous year. To convulsions 813 deaths were ascribed, and from diseases of the heart and circulatory organs 540. The mortality returns during last year do not show any permanent improvement in the public health.

BEQUESTS AND DONATIONS.—Mrs. Mary Anne Smith of Russell Square has bequeathed £5,000 to the London Hospital, £500 each to the City of London Hospital for Diseases of the Chest and the Royal Free Hospital, £300 to the Royal Sea-bathing Infirmary at Margate, £100 to the London Truss Society, and £50 each to the Bloomsbury Dispensary and University College Hospital.—The East London Hospital for Children and University College Hospital have each received £477 9s. 4d., additional, under the will of Mr. Charles Hargreaves.

same year, the mortality from typhoid fever was exactly double that for the entire kingdom at the date of the latest returns; and complaint was repeatedly made throughout the report of a delay of ten days, and even three weeks, having occurred before the sanitary officer became aware of the cases. Greenock obtained an Act in the same year as Bolton (1877), and great anticipations of its success were formed and publicly expressed; yet, in October, November, and December, 1880, while there were reported to the sanitary officer 86, 266, and 101 cases respectively, there were hunted out by the sanitary officers sufficient additional ones to swell the numbers to 260, 588, and 161, an obvious proof of extensive concealment. It had been early pointed out by Dr. Alfred Carpenter that a probable result of making it compulsory on medical men to notify cases of infectious disease might be incorrect registration; and it was by no means certain that this had not had an effect. An Act was forced on Leicester in the autumn of 1879, contrary to the wishes of all its medical men. In the following year, the mortality from diarrhoea became alarmingly increased, the deaths being 348 in excess of those during 1879; and the disease, according to the medical officer's report, affecting persons of all ages. What was remarkable was the fact that the conditions which ordinarily attended a high diarrhoeal death-rate were not then strikingly present; and, moreover, typhoid fever was prevalent at the time. Another point for serious consideration was, that the local Acts were constantly being rendered more severe. Increased stringency was imposed till the coercion exercised or exercisable in some towns must be wellnigh unendurable. Bolton was this year applying for an alteration, the effect of which would be to remove a safeguard limiting the number of diseases to be notified, which was insisted on by the Local Government Board, after a special inquiry in 1878. But Dundee afforded the most striking example of the lengths to which this kind of legislation might be pushed. It had an Act at present substantially the same as that of Greenock. This year it was applying for further powers. It required that the medical officer should have the right of entry into any house where he suspected infectious or contagious disease to be present; that he should have the right to examine any person in that house whom he might suspect to be the subject of infectious or contagious disease; to have the sick removed to hospital, and the sound to a place of quarantine; and lastly, that he should have the right of marking with a coloured placard any infected house. In view of the proposal to have an early compulsory notification by the medical attendant, it must be remembered that a very large proportion of medical officers of health were, and probably always would be, engaged in private practice, *i.e.*, were the rival medical men of those who would report to them. Two or three, from a considerable number of cases published, would serve to illustrate the evil effects that might result from indiscretion on the part of the medical officer of health. Thus, a case in Chester-le-Street, being certified by the medical man in attendance as typhoid fever, was visited by the medical officer of health, who, on the strength of an examination of the skin after death, publicly stated that the medical man was mistaken. A medical man in Jarrow was summoned because he notified a case as one of infectious disease, without specifying its exact nature; the medical officer of health informing the magistrates that he had no difficulty in at once diagnosing the case. A third asked in a published letter if the medical officer of health to whom he had notified cases had the right to see his patients, inquire what medicines they were taking, and so on. By conduct of this kind, bitterness was engendered between two classes of men whom the interests of the public health required to be kept in harmony. Those private Bills were often passed without discussion, and clauses of great stringency introduced, under cover of titles creating no suspicion of their nature. Thus Nottingham in 1878 obtained an Act for constructing additional gasworks, making a new road, and other purposes; and when it became known what the other purposes were, the indignation was so great, that the Act could not be applied. In Leicester, the Act was opposed by the entire profession. In Liverpool, one was almost passed, and in Birkenhead quite so, without the members of the medical profession being consulted, or in any way being made aware of what was in store for them in the way of pains and penalties; and yet the mere fact that local Acts existed in certain towns was taken as a proof that popular opinion in those towns was in their favour, and was made the reason for demanding an extension of their principles to the country generally. Dr. Carter concluded by moving the following resolution:

"1. That, in the opinion of this meeting, the proposal that medical practitioners should be compelled without any discretionary power to make early notification, either directly or indirectly, of every case of infectious disease to the sanitary authority, is an unwise and unwarrantable interference with the relations between such medical practitioners and their private patients.

"2. That the dread of publicity under a system of compulsory notification might tempt many householders to conceal the existence of infectious disease, and that, owing to such concealment, there would be more danger of its being spread than there is at present, when, under the skilled guidance of medical men, more or less efficient means are in nearly every instance taken to effect isolation.

"3. That there is no reliable statistical or other evidence that the system of compulsory notification has had any beneficial effect in the towns where it has already been in operation for some years."

Dr. SPATLEY (Rockferry) seconded the resolutions.

Dr. LESLIE JONES (Blackpool) stated that he was medical officer of health for his town, and had used his influence to obtain an Act for compulsory notification, and also a hospital to which infectious cases could be removed. He was astonished to hear Dr. Carter's statement that notification was unnecessary and injurious. He considered, on the contrary, that it was of the greatest benefit to the community. In Blackpool last year, no deaths had occurred from small-pox, measles, or scarlatina, and only three deaths from fever, in two of which the disease had been contracted out of the town. He believed that compulsory notification must have contributed to produce this satisfactory state of health. But, while he approved of the Acts, he must say he considered the mode in which they were obtained was not right. He himself had recommended that, in Blackpool, the householder should be compelled to notify; and it was without his knowledge, and much to his astonishment and disgust, that a penalty was laid on his medical brethren for not reporting. He thought medical men should decide for themselves if they would report a case, tell the householder that the case was infectious, and throw the whole responsibility on the householder. He also thought the medical officer of health should be independent, and not engaged in practice. He moved as an amendment: "That, in the opinion of this meeting, the compulsory notification of infectious disease is of great public and national importance, and a great benefit to the community. In carrying out this object, the meeting believes that the responsibility of notifying disease should rest with the householder, and that the medical attendant should possess the voluntary power of notifying cases of infectious disease."

Dr. RANSOME (Manchester) seconded the amendment. He acknowledged that Dr. Carter had obtained the sympathy of the meeting on account of the undoubted defects in the manner in which the notification of disease has been promoted and carried out, and the mode in which the Bills have been obtained; yet he must insist on the great benefit of notification to the community and to medical men. The movement for the registration of disease emanated from the Council of the Lancashire and Cheshire Branch twenty years ago, and it would be stultifying themselves if they now tried to quash it altogether. As to the objection that concealment of disease would result, he thought that, as soon as it came to be understood that the certificate of the medical officer of health declaring the household free from infection would open the house or shop to the public, people would be only too willing to take advantage of this as a boon, and as shortening the period of uncertainty. It was said medical men did all in their power to reduce the spread of infection, but the experience of many years showed that they had no power of dealing with infection without compulsory notification. Dr. Carter said that, where notification had been tried, it had been without much result; but much could not be expected from it in the middle of an epidemic. It was only by dealing with first cases that success could be obtained. The present time was in great measure free from infectious disease, and was therefore most suitable for the establishment of this notifying plan.

Dr. FITZ PATRICK (Liverpool) said that it was only through the vigilance of Mr. Hamilton that the notification clauses in the proposed Liverpool Bill were brought to the notice of the profession, who agitated against them, and the Health Committee then dropped them. Dr. Ransome had written a letter as chairman of the Registration Committee, saying that the penal clauses had the sanction of the British Medical Association. He intended to raise his voice at Worcester against this aiding and abetting a corporation in putting fetters on medical men. As to Blackpool, Dr. Leslie Jones had omitted to state how many thousand pounds had previously been spent in making it a suitable and healthy sea-side resort. What would be the result to the medical profession, when it was known that they entered the houses of their patients, not as friends and advisers of the family, but as two-and-sixpenny detectives? Were the medical officers of health the only men who were fitted to deal with infectious disease? He objected to the statement that the British Medical Association was in favour of compulsory registration of disease, and called upon the general practitioners to repudiate it at Worcester.

Dr. HARKER (Lancaster) said that at Lancaster they tried an Act, which carried out compulsory notification without injury to the medical

Johnson, that if there were not on earth a medical practitioner of any kind, whether physician, surgeon, midwife, or apothecary, it would be all the better for suffering humanity. I should not like to go quite so far as to say we should do better if there was no such thing as sanitary administration, but I think we could do very well without such specimens of it as the following. 1. A child suffering from scarlet fever, with a temperature of 103.50 on the day of removal, was removed to hospital by sanitary authorities in opposition to the opinion of the medical attendant, who stated that removal of a child with the above temperature in cold weather meant certain death. The child died the day after removal. 2. A schoolmistress keeping a private school which had become a centre of infectious disease was urged by two medical men who were attending several of her scholars at the time, to close the school for a week and have the premises disinfected. She sent for the sanitary authorities, who could see nothing in the school to disinfect, told her it need not have been closed at all, and gave a certificate, on the strength of which the schoolmistress visited one of her favourite pupils and conveyed the disease to her. At the same time, the sanitary authorities obtained the names and addresses of all the pupils, and to the great annoyance of the parents, one of whom was an officer in the army, went round to all their houses, asking how many children were ill, what rooms they were occupying, whether they had a supply of disinfectants, and what medical man was attending them. 3. A patient suffering from small-pox in a mild form was removed to hospital for sanitary reasons, and while recovering from that disease in hospital took scarlet fever, and died. 4. The father of the child mentioned above (No. 1) as having died of scarlet fever, was exposed in the dead-house of the hospital in which his child died, to the contagion of small-pox, which he took, and died from it. 5. I have found that the disinfection by heat of bedding in infectious cases is in Balham and several other parishes in South London impossible, for want of any public provision for the purpose by the sanitary authorities, and even where it is carried out I have known it to be done very imperfectly; mattresses being taken away to be baked, but straw palliasses left and also blankets and curtains. Such disinfection is, I consider, a mockery and a snare. 6. Several towns, such as Bolton for example, have obtained local Acts rendering the notification of disease compulsory, while they themselves are unprovided with a single hospital bed in which infectious diseases can be treated. Dr. Dudfield tells us that notification is robbed of half its value where this is the case, and I think we may safely conclude that, where apparatus for disinfection by heat is not provided, the other half of the benefit also disappears. While I do not at all agree, therefore, that a sufficiently strong case has as yet been made out for compelling the notification of infectious disease to sanitary authorities, some of whom are utterly unprepared to deal with it in an efficient manner, I desire to submit for your consideration in the remaining portion of this paper, the three principal proposals for dealing with the subject which are now before the profession—convinced as I am that it will depend very much on the members of our body whether any, and if so which, of these proposals shall pass into law. And first I take Mr. Ernest Hart's model clause. You will see that, where this clause is adopted, the onus of notifying cases of disease to the sanitary authorities is thrown upon the householder or person in charge of the case, and not upon the medical attendant, who is only required to give a certificate to the former; and in this respect the proposal is, I consider, immensely superior to that in the Bill introduced by Mr. Hastings, M.P., which renders it incumbent on the medical attendant to furnish information direct to the sanitary authority. But I confess that to my mind a third proposal, brought forward by the Council of the Dublin Branch of our Association and the Council of the Irish Medical Association jointly, and published in the *BRITISH MEDICAL JOURNAL* for February 4th, 1882, is, if it can be carried out, preferable to either of the others. The principal clause of the Bill which has been drafted by these bodies, runs as follows:—

"Every medical practitioner attending or called in to visit any person suffering from any of the diseases set forth in Schedule A to this Act, may, if he shall think fit, notify the occurrence of such case of disease to the sanitary authority of the district in which the person suffering from such disease resides; and every medical practitioner so notifying shall forthwith fill up, sign, and deliver, or cause to be delivered, or shall transmit by post to such sanitary authority, a certificate according to the form set forth, etc., stating the name, etc., of the patient, and the disease from which such patient is suffering; and shall also fill up, sign, and deliver to the person having charge of such patient, or to the person having charge of the building in which the patient resides, a further certificate, the production of which certificate shall be a good defence for such person against any penalties for breach of the terms of this Act."

By this clause, the medical attendant would not be forced to notify

either to the occupier or to the sanitary authority, but there would be the strongest inducement to the occupier to get the doctor to notify direct, in the provision that a certificate to the effect that he had done so, delivered to the occupier, would save the latter from all further trouble. The comparative merits of these three plans is, however, a fair subject for discussion. What should be the fee payable by the sanitary authority to the medical attendant for his certificate? Jarrold and Burton-on-Trent fix it at the ridiculously low figure of one shilling, while most of the other towns where notification is compulsory give half-a-crown. Dr. J. W. Moore, of Dublin, proposes (*BRITISH MEDICAL JOURNAL*, November 5th, 1881), that it should be a guinea; and I cannot myself see any reason why we should expect less for rendering such an important public service as the notification of disease is expected to be, than for filling up a form for an insurance company. Lest, however, it should be thought that we are striving to throw obstacles in the way, let us fix on some more moderate fee—shall we say half-a-guinea? quite little enough when it is remembered that in case of mistaken diagnosis we may be exposed to an action for damages, while, as matters stand at present, in many provincial towns the mere omission to certify exposes the medical man to a penalty for neglect. And this brings me to the last point for discussion to-night, viz., in case notification were made compulsory on the medical attendant, what should be the penalty for non-compliance. It varies at present from £2 at Edinburgh, Derby, and Burton-on-Trent, to £5 at Nottingham, Huddersfield and Norwich, £5, and £2 a day in case of continuing offence at Jarrold, £5, and for a second or any subsequent offence, £10, at Warrington, and £10 at Bolton, Llandudno, and Leicester. In considering this point, it will be well to remember that the Poor-law medical officers who are so miserably underpaid in various parts of the country, will be equally subject to penalties for accidental omission, as will the best-feed consultant in London practice. There are districts in Yorkshire where the parish doctor's pittance does not amount to £10 a year; and would it not be in the highest degree unreasonable to provide that a whole year's earnings from his appointment should be swept away by the accidental omission to report a single case of infectious disease among his parish patients on a busy day? I trust this and the other points will receive full discussion.

Dr. FORSYTH was opposed to compulsory notification in any shape or form. He believed the public would not submit to being taken from their homes and conveyed to hospitals at the will of sanitary authorities. During the late epidemic of small-pox at Greenwich, he had been shown a whole street infected with small-pox, nearly every house having patients to whom no medical man was called in for fear of removal to hospital. Many patients died in consequence of their removal. They were rattled over the stones for three miles, had a bath, which no doubt was necessary enough, and were then conveyed across a cold corridor, even when the eruption was full out. This had frequently a fatal effect. He did not think medical practitioners would report cases as required for half-a-crown, or even half-a-guinea.—Mr. BRINDLEY JAMES said compulsory registration would not only do harm to the profession, but to the public, for they would not call in medical men at all in such cases. Isolation at home he thought preferable to removal to hospital. A guinea fee he considered little enough.—Dr. DICKSON, R.N., thought the proposal of the Dublin Branch the most desirable of the three which had been laid before the meeting. A great blunder had, he thought, been committed in London, by establishing enormous hospitals for infectious diseases, and bringing the patients great distances to them. He mentioned a case where a lad had been brought from Poplar to Hampstead. He did not think any sanitary authority would agree to pay a guinea for each certificate.—Mr. H. W. ROBERTS thought the Dublin proposal the best. He remembered being called to a family not far from the Deptford Hospital, where several children were suffering from small-pox, and had not been seen by any doctor, because the parents had been told the children would be sent away. As bearing on the question of penalties and fees, he said the resident medical officer of the Small-pox Hospital told him that all sorts of cases were sent there as being small-pox, even measles and inflammation of the lungs being so sent; and if these cases were reported to the sanitary authority as infectious ones, the result might be serious for the practitioner.—Dr. FAGAN, as illustrating the same points, mentioned a case in which all the symptoms of small-pox were present with a temperature of 103.0. He deferred pronouncing an opinion until the following morning, when a papular eruption appeared on the face. The patient, who was a gentleman's butler, was fortunately not taken to the hospital, but to his home, and reappeared in a few days perfectly well.—Several other gentlemen having spoken, the CHAIRMAN said the feeling of the meeting seemed to be quite unanimous in opposing compulsory notification by medical men. It was then resolved:—

"That it be suggested to the Chairman of the Parliamentary Bills

scriptions are invited, are Dr. Holman, Reigate, and Mr. Malcolm Morris, 63, Montague Square, Hyde Park, London, W.

First List.

Sir Wm. Jenner, Bart., M.D., K.C.B., F.R.S., President of the Royal College of Physicians of London	£	s.	d.
Sir James Wilson, F.R.S., LL.D., President of the Royal College of Surgeons of England	5	5	0
E. Saunders, Esq., F.R.C.S., President of the Metropolitan Association of the British Medical Association, London ..	5	5	0
H. C. F. R. S., F.R.S., London ..	10	10	0
J. C. H. S., F.R.S., London ..	5	5	0
E. Truman, Esq., M.R.C.S., London ..	5	5	0
G. H. Pinckard, Esq., Godalming ..	5	5	0
J. G. Cattle, Esq., Shabden, Reigate ..	5	5	0
Wm. Adams, Esq., F.R.C.S., London ..	3	3	0
The Rev. Thos. Burningham, M.A., Charlwood, Surrey ..	3	3	0
Sir James Paget, Bart., F.R.S., D.C.L., LL.D., London ..	2	2	0
Sir W. W. Gull, Bart., M.D., F.R.S., London ..	2	2	0
Sir H. Peck, Bart., M.P., Wimbledon ..	2	2	0
F. B. Hallows, Esq., M.R.C.S., President of the South-Eastern Branch of the British Medical Association, Redhill ..	2	2	0
T. M. Butler, Esq., M.R.C.S., Guildford ..	2	2	0
C. W. Chaldecott, Esq., M.R.C.S., Dorking ..	2	2	0
Dr. S. O. Habershon, London ..	2	2	0
Dr. H. T. Lanchester, Croydon ..	2	2	0
Malcolm A. Morris, Esq., F.R.C.S., London ..	2	2	0
J. Cooper Forster, Esq., F.R.C.S., London ..	2	2	0
J. Hutchinson, Esq., F.R.C.S., London ..	2	2	0
J. E. Erichsen, Esq., F.R.S., F.R.C.S., London ..	2	2	0
Dr. R. L. Bowles, Folkestone ..	2	2	0
Surgeon-Major Waring, M.D., London ..	2	2	0
F. H. Harris, Esq., M.R.C.S., Mildenhall, Suffolk ..	2	2	0
Dr. J. Braxton Hicks, F.R.S., London ..	2	2	0
Dr. W. Withers Moore, Brighton ..	2	2	0
A. J. Keen, Esq., Betchworth, Reigate ..	2	2	0
J. M. Burton, Esq., F.R.C.S., Lee ..	2	2	0
Arthur S. S. S., Esq., Reigate ..	2	2	0
A. E. Durham, Esq., F.R.C.S., London ..	2	2	0
W. J. Harris, Esq., M.R.C.S., Worthing ..	2	2	0
Miss M. C. S., Esq., Reigate Hill ..	2	2	0
Herbert Knowles, Esq., Reigate ..	2	2	0
J. H. Baxendale, Esq., ..	2	2	0
Mrs. J. H. Baxendale ..	2	2	0
The Earl of Onslow ..	1	1	0
W. A. Berridge, Esq., M.R.C.S., Redhill ..	1	1	0
Dr. W. Chessall, Horley ..	1	1	0
R. Gravely, Esq., M.R.C.S., Newick ..	1	1	0
T. Honcroft, Esq., L.R.C.P., Dorking ..	1	1	0
A. Kelsey, Esq., M.R.C.S., Redhill ..	1	1	0
Dr. C. Parsons, Dover ..	1	1	0
A. G. Roper, Esq., F.R.C.S., Croydon ..	1	1	0
Dr. H. S. Stone, Reigate ..	1	1	0
Dr. H. Stowers, London ..	1	1	0
Dr. J. Walters, J.P., Reigate ..	1	1	0
Dr. C. H. Allfrey, St. Mary Cray ..	1	1	0
D. B. Balding, Esq., F.R.C.S., Royston ..	1	1	0
T. Clark, Esq., L.R.C.P., Dunster, Somerset ..	1	1	0
J. L. Jardine, Esq., M.R.C.S., Dorking ..	1	1	0
Dr. Hy. Colgate, Eastbourne ..	1	1	0
T. B. Haywood, Esq., Reigate ..	1	1	0
T. B. Haywood, Esq., Reigate ..	1	1	0
W. Triggs, Esq., Mayor of Guildford ..	1	1	0
Mr. W. Pinn, Guildford ..	1	1	0
T. H. Martin, Esq., M.R.C.S., Crawley ..	1	1	0
J. Croft, Esq., F.R.C.S., London ..	1	1	0
F. W. Parsons, Esq., L.R.C.P., Wimbledon ..	1	1	0
T. E. Parsons, Esq., M.R.C.S., Wimbledon ..	1	1	0
A. Stedman, Esq., M.R.C.S., Great Bookham ..	1	1	0
F. C. S., Esq., L.R.C.P., Hanbrook, Bristol ..	1	1	0
Dr. R. Elliot, J.P., ..	1	1	0
J. A. Bright, Esq., M.R.C.S., Clastonbury ..	1	1	0
Major J. R. S., Esq., W. W. S., ..	1	1	0
St. J. S., Esq., Reigate, Chairman of Committee of ..	1	1	0
The Rev. Wm. Powell, M.A., Newick ..	1	1	0
Edwd. W. Thurston, Esq., L.R.C.P., Ashford ..	1	1	0
Dr. J. H. Galton, Anerley ..	1	1	0
Dr. Alfred Carpenter, J.P., Croydon ..	1	1	0
Dr. T. Rutherford Adams, Croydon ..	1	1	0
Dr. Alfred Hall, Tunbridge Wells ..	1	1	0
James Reid, Esq., F.R.C.S., Canterbury ..	1	1	0
J. B. S., Esq., L.R.C.P., Tunbridge Wells ..	1	1	0
Dr. W. S. S., Esq., ..	1	1	0
H. S. S., Esq., F.R.C.S., Guildford ..	1	1	0
Dr. F. Bagshawe, St. Leonard's ..	1	1	0
Dr. J. R. Stedman, J.P., Guildford ..	1	1	0
M. A. S., Esq., F.R.C.S., Maidstone ..	1	1	0
F. H. S., Esq., F.R.C.S., Maidstone ..	1	1	0
Dr. W. H. A. S., Esq., Southsea ..	1	1	0
Dr. J. S., Esq., Brighton ..	1	1	0
W. C. S., Esq., M.R.C.S., Tunbridge Wells ..	1	1	0
M. W. S., Esq., ..	1	1	0
H. A. S., Esq., M.B., Guildford ..	1	1	0
J. S., Esq., late Treasurer of the Reigate and Redhill ..	1	1	0
Mr. A. S., Esq., Reigate ..	1	1	0
P. Ricardo, Esq., Guildford ..	1	1	0
J. W. Baxendale, Esq., Guildford ..	1	1	0
Mrs. J. W. Baxendale, Guildford ..	1	1	0
F. Crooke, Esq., Guildford ..	1	1	0

Dr. J. Morton, Guildford ..	1	1	0
Dr. F. J. Corbould, Reigate ..	1	1	0
F. W. Costar, Esq., Redhill ..	1	1	0
Dr. F. Bossey, Redhill ..	1	1	0
J. R. Corbett, Esq., Betchworth, Reigate ..	1	1	0
Mrs. Samuel Bostock, Walton Heath, Surrey ..	1	1	0
Miss Bostock, Walton Heath, Surrey ..	1	1	0
Dr. J. Gardner, Bungay, Suffolk ..	1	1	0
E. Horne, Esq., J.P., Reigate ..	1	1	0
A. O. Wilkinson, Esq., Redhill ..	1	1	0
R. Field, Esq., J.P., Redhill, Mayor of Reigate ..	1	1	0
J. Shaw, Esq., J.P., Redhill ..	1	1	0
Surgeon-Major W. C. Coles, M.D., Bourton ..	1	1	0
The Rev. Canon Cazenove, M.A., Reigate ..	1	1	0
E. Brocklehurst, Esq., J.P., Reigate ..	1	1	0
W. D. Paine, Esq., Cockshot Hill, Reigate ..	1	1	0
J. M. Head, Esq., Hon. Treasurer of Reigate and Redhill Cottage Hospital, Reigate ..	1	1	0
P. L. Pelly, Esq., Mersham ..	1	1	0
E. C. Hulme, Esq., Guildford ..	1	1	0
James Langton, Esq., Reigate ..	1	1	0
T. H. Cheate, Esq., M.R.C.S., Burford ..	1	1	0
J. Moore, Esq., M.R.C.S., Bourton-on-the-Water ..	1	1	0
Dr. T. J. Burroughs, Crondall, Hants ..	1	1	0
Miss Chitty, Guildford ..	1	1	0
Mr. Henry Holden, Guildford ..	1	1	0

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 12th, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, June 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881.

FRANCIS FOWKE, General Secretary.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above districts will be held at Brighton on March 29th, 1882. Dr. Ewart of Brighton will preside. Members desirous of making communications to the meeting are requested to give notice thereof to the Honorary Secretary, West Sussex District, 5, The Steyne, Worthing.

SOUTH-EASTERN BRANCH: EAST AND WEST SURREY DISTRICTS.—A conjoint meeting of the above Districts will be held at the Red Lion Hotel, Dorking, on Thursday, March 9th, at 3 P.M.; C. W. Chaldecott, Esq., of Dorking, in the chair. The following communications have already been promised. 1. Dr. Hughlings Jackson, F.R.S.: Observations on Megrin. 2. Dr. James F. Goodhart: Notes of Cases of Lunacy from Lead-Poisoning. 3. Mr. H. H. Clutton: Notes of a Case of Removal of Lymphadenomatous Glands from the Neck. 4. Mr. Malcolm Morris: Ringworm. 5. Mr. Thomas Hopper: Case of Complete Inversion of Uterus after Parturition. 6. Dr. Stowers will exhibit some Coloured Drawings of Rare Skin Diseases. Dinner will be served at 6 P.M. precisely; charge, seven shillings (exclusive of wine). Members desiring to read communications will oblige by informing the Honorary Secretaries as soon as possible.—A. ARTHUR NAPPER, Cranleigh, Surrey, Honorary Secretary of the West Surrey District; J. HERBERT STOWERS, M.D., 23, Finsbury Circus, E.C., Honorary Secretary of the East Surrey District.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The sixth meeting of the session will be held at the Medical Institute, Birmingham, on Thursday, the 9th instant. The chair will be taken by the President, Mr. Bartleet, at three o'clock P.M. Business: To ballot for members of the Association for their election as members of the Branch. To receive nominations for officers, Council, and representatives of the Branch in the General Council of the Association for the ensuing year. Adjourned discussion on Mr. Gamgee's paper—The Benefits conferred by Vivisection on Human Surgery. The following papers are promised. Mr. Bennett May: A Case of Extirpation of Goitre. Dr. Savage: Abdominal Sections performed during 1881. Members are invited to exhibit patients, pathological specimens, new drugs, instruments, or appliances, at the commencement of the meeting.—E. MALINS, M.B., 8, Old Square; E. RICKARDS, M.B., 14, Newhall Street, Honorary Secretaries.—March 1st, 1882.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, March 30th, at five o'clock. The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner: "What is your Experience of the Complications and Sequelæ of Scarlet Fever?"—W. M. KELLY, M.D., Honorary Secretary.—Taunton, February 28th, 1882.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fourth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday afternoon, February 22nd, 1882; present, D. DAVIES, Esq., President, and 58 members.

New Members.—The following gentlemen were elected members:

—E. C. Bousfield, M.R.C.S., Bristol; J. A. Barton, M.B., C.M., St. George's; W. J. Penny, M.R.C.S., Bristol; A. L. Wade, B.A., M.D., T.C.D., Wells; G. W. H. Cumming, M.R.C.S., Wick; T. D. Ransford, F.R.C.S., Bath.

Homoeopathy.—The secretary read a communication from the secretary of the South Western Branch on the subject of homoeopathy. It was resolved: "That the secretary be requested to acknowledge the receipt of the communication, and to forward a copy of the resolution of the Bath and Bristol Branch passed at their meeting on November 30th, 1881."

Papers.—The following communications were made:

1. A case of Litholapaxy, by Mr. W. H. Harsant. Mr. Greig Smith, Dr. Swayne, and the President made remarks upon the case.
2. A case of Polypus Uteri, by Dr. Steele; which led to comments by Dr. Aust Lawrence and Dr. Swayne.
3. On the co-existence of Pregnancy with Fibroid Tumours of the Uterus, by Dr. Aust Lawrence. Dr. Swayne, Dr. Markham Skerritt, Mr. Cross, and the President joined in the discussion on this paper.
4. On Amputation in Senile Gangrene, by Mr. Dobson. This paper was commented upon by Dr. Swayne and Mr. Coe.
5. Mr. Pickering described a new method of administering cholera-form in operations about the mouth, and exhibited the apparatus which he had invented.

METROPOLITAN COUNTIES BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held at the St. George's Hall, Langham Place, on Wednesday, February 22nd, at 8 P.M.; EDWIN SAUNDERS, Esq., President, in the chair.

Dr. Howard's Ambulance Apparatus.—The ambulance carriage designed by Dr. BENJAMIN HOWARD, and described in the BRITISH MEDICAL JOURNAL of February 4th, had been brought into the room in which the meeting was held, and was inspected by the members present.

The PRESIDENT briefly explained the motives which had led him to invite Dr. Howard to explain to the Branch his views on ambulance conveyance. The Branch was interested in all such subjects as improvements in the means of conveyance of the sick and wounded. Referring to the police, he said that they were not to be blamed if the arrangements under their control were not altogether satisfactory or in consonance with modern requirements. The police did all that could reasonably be expected of them, and perhaps more; their action was especially useful in regard to the prevention of accidents by regulation of the street traffic.

Dr. HOWARD said he had promptly responded to the invitation of the President from considerations of duty, appropriateness, and utility. It was in the BRITISH MEDICAL JOURNAL, the organ of the Association, appeared the earlier articles from him upon this question; and it was from Mr. Ernest Hart, its editor, the movement received its earliest sympathy and encouragement. To avoid repetition of what he had said or written before, he would proceed from a different standpoint, and attempt such an exposition of the question as would properly come under the headings of The Science, Art, and Ethics of Ambulance Conveyance. This line he had adopted chiefly because he had heard that a friendly rivalry in ambulance construction was springing up; and, as the Macedonians taught the Greeks to beat them, he wished to tell all he knew, and so help others to achieve something better than he had himself accomplished. First, as to the science. Given a centre of motion and a radius: in proportion to the length of the radius from the axis, the amount of vibration would be increased. The corollary from this was that, the higher the patient was placed above the axis of motion or the axis of the greater would be the vibration to which he was subjected. As regards wheels, the larger the wheel, the smaller was the amount of shock produced in meeting with an obstacle, such as a stone. A large wheel presented an obstacle as an even inclined plane; a small wheel met it more nearly at right angles, and the shock was increased. Hence, for ambulances, small wheels were bad. Regarding springs, Dr. Howard said that a spring did not of necessity diminish motion, but merely delayed it; and a spring always diminished shock. An excess of springs was a general fault which he had noticed in ambulances brought before him, of which he had seen many in the American war; and he thought it would be better to have a carriage furnished with a single spring, than with a great number of springs; they went very well on ordinary roads, but on the rough ground over which they had to travel over a battle, the patients were often thrown together in consequence of the excess of springs. In an ambulance, the action of the springs should be easy and smooth. In the police stations, there were to be found stretchers, made to be carried on the shoulders of four men by

means of long handles. It was not often that four men of the same height could be brought together for the purpose; and the mode of conveyance on the shoulder produced increased vibration, especially on rough ground. Another form of conveyance, at first sight very captivating, was the wheelbarrow-litter. Here, however, the spring was elliptical, and motion was increased rather than diminished; the wheel also was small, and the means for secluding the patient was not all that could be desired. There was also danger that the patient's head might, as he had seen it, lie lower than his feet. The position and motion by these contrivances were decidedly objectionable. In London a century ago, the principal means of conveying the sick and injured was the common hand-stretcher; and this, though simple, if well constructed and well carried, was, for short distances and rough ground, the easiest means of conveyance yet devised. Respecting the art of ambulance conveyance, Dr. Howard showed how the principles he had demonstrated were illustrated in the hand-stretcher, and in the horse-ambulance before the meeting. The chief points thus referred to were the lowness of the floor, the suspension of the body, the length and semi-elliptical shape of the main springs, the use of interior counterpoise springs, the suspension in the case of the additional stretchers, the rubber tires and rollers, etc., the largeness of the main wheels. As incidental points, were mentioned perfect provision for regulating light and air, and the turning of the entire vehicle on its axis. Respecting the ethics of the question, he said that human helplessness incurred the duty of human help, asking no questions. The possible drunkenness of the patient did not absolve us from that duty. On the contrary, this was the most frequent precursor of injuries to be averted. The help given should be prompt, official, qualified, responsible. While legal qualifications were demanded for trivial maladies, the gravest street accidents were too often allowed to be maltreated by the kindness of the most incompetent first comer. The working committee of the London Ambulance Service was now meeting weekly at Scotland Yard; and he hoped that London, which now had the finest fire-brigade and the best police department in the world, would in its own due time have also the best ambulance service the world could boast.

Dr. HOWARD had seen during a visit to New York, eighteen months ago, two examples of the working of a well organised ambulance system. One day, while he was going over the New York Hospital with the superintendent, a bell rang, which, he was told, was for the ambulance. He went at once with the superintendent to the stable, where they found a horse ready harnessed, which had of itself left its stall and put itself in the shafts of the ambulance-carriage. In the carriage were appliances of all kinds likely to be required. Information had been received by telephone that some one had been run over in the street; and the ambulance-carriage was ready and left the hospital within five or six minutes, with trained assistance. It was important that skilled assistants should be brought as quickly as possible to the scene of injury. He had himself fallen in the street about three weeks ago, and dislocated his shoulder; and the bystanders had attempted to raise him by the injured arm. In the case at New York, the accident was found to be a simple fracture; this was put up by the surgeon, and, when the patient arrived at the hospital, he was at once conveyed to a room where anything that was necessary could be done. He had observed that the driver of the ambulance carried a small flag, and was informed that in New York everything had to give way to the ambulance and the fire-engine. The other case which he saw was at Bellevue Hospital; it proved to be one of drunkenness, with a lacerated wound of scalp. It was surely possible to organise an ambulance system in London; but a very careful organisation would be required. It should be under the management of the police, who ought to know every day what number of beds were available in each hospital for medical and surgical cases. He would say that none stood higher in public estimation, for the display of humanity, than the London police.

Dr. GORDON had seen much of ambulance service. Among other apparatus used in the Franco-German war, he had seen Dr. Howard's military ambulance, and he preferred this even to that before the meeting. It was arranged so that patients could be conveyed either sitting or lying; it could contain several, and was better adapted for going over all kinds of ground. His experience was of a party of six men with a horse over one pair of wheels; there was greater safety. In the present apparatus, there was the danger of dislodgment from the framework under the seat breaking. He placed himself in Howard's ambulance on the field of battle near the front, and had been driven rapidly over fields and rough roads with comfort. He had counted about a dozen forms of ambulance; but Howard's (of 1870) was undoubtedly the best of them all for the purposes of war. He thought that it would be advisable to make the conveyance suitable for country work as well as for the streets of London. As to the administration, if it were undertaken by the

hospitals, an entire change in the management of those institutions, and administration by a central bureau, would be necessary.

Mr. FURLEY wished that the President and Dr. Howard could have witnessed the training of the police in the classes of the St. John's Ambulance Association. He believed that there were now more than a thousand policemen properly instructed and qualified. One of the instructions given to them was, never to carry the stretcher on the shoulders. Great credit was due to the police for the readiness with which they had come forward to be instructed. He disapproved of the military step in carrying a stretcher; the police were always instructed to avoid it, and to use the broken step. He had just built one ambulance carriage and had nearly completed another; and it remained to be proved what form would be adopted in London. He thought that the form of ambulance adapted for the field of battle differed in many respects from that best fitted for city work, and thought Dr. Howard was wise in having adapted his vehicles to that difference. In his ambulance, there were seats for those slightly injured in addition to the means of conveying those who were seriously hurt. In the stretcher shown by Dr. Howard, the loops at the sides were a great improvement.

Dr. R. T. DANIELL said that every policeman had the power of at once informing a medical man of a case of accident in the streets; and when an injured person was brought to a station, the divisional surgeon was summoned. It was quite true that what was best for the field of battle was not best for the streets of London. The volunteer ambulance department had been doing good work in London, in training two thousand volunteers for the service. All were taught to use the broken step in carrying patients. It was now an exception for the police to attempt to distinguish between the drunk and dying.

Dr. HOWARD said his different ambulances had been expressly made conformably to the differences in the conditions of the respective services for which they had been intended. He had fully appreciated and co-operated with the St. John's Ambulance Association, as it had reciprocally done with this movement. However, while the various hand machines for extinguishing fires were of immense value, they were not a substitute for, but only a complement to, the fire brigade. The guarantee of personal security so desirable for the public, could only be assured by an ambulance service for the saving of human suffering and life as official and complete, as is the other for the saving of property.

CORRESPONDENCE.

DEATHS FROM ANÆSTHETICS.

SIR,—The difficulties attending the classification of deaths from anæsthetics are forcibly put by several correspondents in your issue of the 25th, and must have been felt by all who, like myself, have attempted to tabulate these disasters.

The published accounts of most accidents of this kind are so meagre, that it is difficult, in many cases, to know how far to charge the anæsthetic with the fatal result; I have accordingly recorded all cases in which death could have been due to the agent employed, adding such notes as were given of the peculiar circumstances of the case.

I am glad to have elicited further particulars of the case at Addenbrooke's, which must now be classed with No. 4 in my list, in which death occurred through obstruction to the bronchus. This reduces the deaths due directly to ether to two, just one-fourth of the number assignable to chloroform, if the recent case at Pendlebury be excluded from the list.

Although it is impossible to exactly estimate the relative fatality of anæsthetics without a knowledge of the exact number of administrations, I may remind your correspondent, Dr. Sheen, that, according to a report published in your columns a few years ago, ether is in general use at most of our large hospitals; and, excluding cases in private, no fewer than twelve out of the fifteen cases I reported occurred in such institutions. Ether never came into general use at its first introduction. The idea of anæsthetics was new, and there was no good form of inhaler; while the advantages of the newer anæsthetic were pressed by the zeal and energy of Simpson. It was not till years after that some one was found to calmly add up the death-bill, and to recollect that this operation was hardly required when the older anæsthetic was in use.

Within the last few days, I have heard privately of another death from chloroform, occurring in a provincial hospital, of which I hope some account will reach you. This makes the sixth in the past six weeks.

Dr. Hollis refers to the need of more skilled administration of chloroform. It is a melancholy fact that many deaths have occurred in the

practice of the most highly skilled administrators; and, I believe I am right in asserting that nearly all our professional anæsthetists—I refer to Mr. Clover and others, whose experience and skill are beyond all question—are in favour of ether as the most safe and convenient anæsthetic.—I am, sir, yours, etc.,
ERNEST H. JACOB, M.D.
Leeds, February 25th, 1882.

SIR,—Whilst acting as chloroformist to Westminster Hospital, a case occurred to me like the one cited by Mr. Marmaduke Sheild at Addenbrooke's Hospital, with the exception that chloroform was used instead of ether.

The operation was for removal of the right superior maxilla, and had proceeded as far as the removal of the diseased portion, when pulse and respiration suddenly ceased. The usual remedies were applied without avail. As in the case cited by Mr. Sheild, the hæmorrhage was very great—in fact, greater than I had ever seen before. The *post mortem* examination showed the trachea and bronchi filled with coagulated blood.

Should the Committee of Council of the British Medical Association appoint a subcommittee to obtain statistics of the anæsthetics used in hospitals for some time back, as suggested by Mr. Woodman, I shall be most happy to send the results of my cases whilst acting at Westminster Hospital and elsewhere.—Yours truly,

CHAS. H. GLASSINGTON, M.R.C.S. Eng.

105, Fulham Road, South Kensington, Feb. 26th, 1882.

CHLOROFORM AS AN ANÆSTHETIC.

SIR,—The indignation created by Dr. Ormsby's letter, in your JOURNAL of the 18th instant, was inevitable. How can he explain the cause of death in three of the cases mentioned by Dr. Hollis in to-day's JOURNAL? It would appear that each subject was in good general health when the ether was administered, yet all died suddenly during its administration. If Dr. Ormsby believes it to be "criminal and unscientific" to use chloroform, what shall we say of the alternative—ether? Both Dr. Ormsby and the writer whom he quotes would appear to indulge in unscientific reasoning. If I condemn the practice of every surgeon who does not adhere to the principles of Listerism as "criminal and unscientific," what judgment might I expect the profession to pass on such an opinion? The very disciples of Lister would laugh at it. Ringer "has given chloroform in serious heart-disease, in every stage of phthisis, in Bright's disease, cancer, chronic bronchitis, etc., to patients almost dead of exhaustion from loss of blood, to children of a few weeks, and to persons close upon a hundred years old, without any threatening symptoms." The use of chloroform, like the use of other drugs, requires skill and caution; and I hold that, with a due exercise of both, the administration of chloroform is almost absolutely free from danger. In fact, the very small proportion of deaths that do occur from chloroform may, in most instances, be attributed to the surgeon's supreme confidence in its perfect safety; and hence a lack of preliminary investigation and subsequent caution. I have administered chloroform, when in the great iron and coal centre of South Wales, at nearly every hour of the day and night, often in cabins on the hills, with hardly standing room, and the only light for operating, a candle. The patient once anæsthetised, it was our custom to get a collier to keep up anæsthesia; and I have never witnessed alarming symptoms from such practice. I never go to a case of parturition without chloroform, and I certainly never apply forceps without previously administering it; indeed, in those cases where forceps are inadmissible—the head at the perineum; the pains at a climax of severity, with no appreciable intermission; and the perineum, from some anatomical peculiarity, in danger of rupturing—it is our manifest duty to give chloroform; and, by doing so, we not only convert a condition of intensest agony to a perfect elysium of repose, but we also secure time for due structural relaxation of soft parts; and this is effected, too, with a rapidity and certainty to which ether can lay no claim. The man who has the hardihood to suggest the erasure of chloroform from our list of remedies, had better propose a whole burnt offering of the *Pharmacopœia*.—I am, sir, your humble servant,
JOHN LOWE.

Lichfield, February 26th, 1882.

CHLOROFORM OR ETHER?

SIR,—I have read with deep interest the letters upon anæsthetics appearing in the BRITISH MEDICAL JOURNAL, and it seems to me that there are a few questions bearing upon the subject, that may be overlooked or quite forgotten in the present discussion.

One gentleman speaks in the highest terms of chloroform, and another equally praises the virtues of ether as an anæsthetic. I fail to

feeling of regret, and not in a spirit of cavilling that the attention of your readers was directed to the high death-rate of Dublin. We have little doubt that Dr. Cameron's exertions will in time have some effect in diminishing the exceptionally high mortality of the city, even though, in his opinion, none of his published statements warrant such a "roseate anticipation" to be made from them.—I am, sir, your

DUBLIN CORRESPONDENT.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, February 28th.

Shop Hours Regulation Bill.—Lord STANHOPE moved the second reading of the Shop Hours Regulation Bill, the object of which he described to be to protect women and young persons employed in shops and warehouses who could not protect themselves. There was a precedent for the proposed legislation in the factory regulations respecting women and children. The Bill provided that in shops and warehouses women and young persons should not be employed for more than ten hours a day, unless with permission of the Secretary of State. This exception was introduced to meet emergencies which arose at particular periods of the year. The noble lord quoted evidence given before a Royal Commission on factories, warehouses and shops, to prove the necessity of the proposed legislation, which, he said, was recommended by that Commission.—The Duke of SOMERSET thought it would be a very good thing to reduce the hours of labour of women and young persons, without reducing their wages; but he feared that this Bill would have the effect of reducing their wages or of inducing proprietors of warehouses and shops to employ men instead of women. He recommended that if the Bill reached committee the word "women" should be struck out, so as to confine the operation of the measure to young persons.—Lord FORTESCUE, as a consistent free-trader, objected to the Bill.—Lord ABERDEEN, while recognising the force of the Duke of Somerset's observations, was of opinion that legislation was necessary in the direction proposed.—Lord SHAFTESBURY observed that as 200,000 women and young persons were employed in warehouses and shops, he sympathised in the objects of the Bill; but he did not think the measure practicable or that it had a chance of passing through Parliament in its present shape. He pointed out that, as drawn, the Bill would oblige shopkeepers to close their shops after they had been open ten hours each day, but there was nothing in it to prevent them from employing women and children after the shops were closed.—Lord ROSEBURY, for the Government, expressed his concurrence in the remarks of Lord Shaftesbury, and objected to the duty which, by the Bill, would be thrown on the Home Office. If the noble lord in charge of the Bill pressed it, he would not vote against him, but he recommended him to withdraw it.—Lord STANHOPE withdrew his motion and the Bill.

HOUSE OF COMMONS, Tuesday, February 28th.

Mr. Kenny.—Dr. LYONS inquired whether the Government had come to any decision respecting Mr. Kenny's eligibility for the post of medical officer to a board of guardians for which he was a candidate.—Mr. W. E. FORSTER said that, if the board of guardians apply for the assent of the Local Government Board to Mr. Kenny's full nomination, that assent would be given; and should Mr. Kenny be elected no objection would be offered. The sealed order under which Mr. Kenny had been removed from office would not be withdrawn, as that would be an admission, not justified by the circumstances of the case, that it was not within the duty of the Government to issue it. It would not prevent Mr. Kenny's reappointment.

HEALTH OF BERLIN IN 1881.—The mortality returns of Berlin for 1881 show that the total number of deaths was 31,050, or 27.2 per 1,000 of the entire population, estimated at 1,140,000 in the middle of the year. Still-born children are not included. Of the deaths, 12,273, or 39.5 per cent., occurred in infants under one year; of these, 3,627 were breast-fed, 5,284 had artificial food, and 3,362 a mixed diet. Diphtheria and croup caused 1,728 deaths; diarrhoea and cholera 1,718. There were 54 deaths from small-pox; the number in each year from 1873 having been 101, 23, 50, 18, 4, 8, 8, and 9. The death-rate, both in the general population and among infants, was lower than in any of the previous eight years.

MILITARY AND NAVAL MEDICAL SERVICES.

DEPUTY INSPECTOR-GENERAL of Hospitals and Fleets Thomas Colan, M.D., has been appointed to Plymouth Hospital. The appointment is temporary.

At the examination for the Medical Services, which commenced on the 20th ult., thirty-one candidates presented themselves for eight vacancies in the Indian service, twenty-one for six in the naval, and over sixty for the army. The Army Medical Department do not announce the number of vacancies. This is particularly misleading to the candidates, who come up on vague and undetermined reports. The department now being fully organised, and its advantages well known, there can be no reason for withholding information not withheld in the sister services or in any other competitive examination.

THE NETLEY MEMORIAL TO THE LATE SURGEON-MAJOR PORTER, A.M.D.—The Committee appointed to carry out a Memorial to the late Surgeon-Major Porter of the Army Medical Department, to be placed in the Chapel of the Royal Victoria Hospital at Netley, make the following report regarding the work with which they were entrusted. The committee was appointed on January 20th, 1880. After full consideration it was determined that the memorial should have the form of a wall tablet, bearing upon it a medallion portrait. The committee had the advantage of the assistance of Inspector General MacDonald, R.N., F.R.S., who, partly from memory and partly from photographs, moulded a profile portrait of Mr. Porter, which was generally admitted to be an excellent likeness. After obtaining the approval and sanction of the War Department for the erection in the Chapel of the tablet, and of the inscription proposed to be engraved on it, and after consultation regarding an artist competent to carry out the work, an agreement was entered into with Mr. Verheyden, of London, for its execution. The work was completed and placed in the Chapel on the 14th October, 1881. The medallion portrait is of life size, and both it and the other sculptural parts of the monument are of pure white statuary marble, on a back ground of polished black marble. The committee have the satisfaction of being able to state that the resemblance embodied in the medallion, and the artistic execution of the whole tablet have received the warmest approval of all the relatives and friends of the late Surgeon-Major Porter who have seen it. A photograph of the memorial accompanies the report, and a statement of the accounts is also appended.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASES.

In the year 1877, the Corporation of Bolton was the first in the Kingdom to obtain compulsory powers for the notification of infectious diseases, and its example has since been followed by a large number of other towns. We learn, however, from the *Bolton Chronicle* of Saturday last, that an attempt to modify and extend these powers is now greatly agitating the minds of the medical practitioners of the place.

On February 22nd the Sanitary Committee was engaged in listening to the views of two opposite parties of the medical profession on this question. On the one hand a deputation, headed by Mr. Ferguson, represented the views of a large number of medical men in the neighbourhood, and brought forward many objections both to the Act of 1877, and to the New Improvement Bill. These objections were briefly summarised by Mr. Ferguson. Although the gentlemen represented did not object to reporting cases of infection, they decidedly demurred to being forced to do so under pains and penalties. They were of opinion that private medical practitioners should be left to the exercise of their own judgment in such cases. Complaints were made as to the mode in which the Acts had been carried out, and it was considered that the medical reports should be kept private and confidential. On the other hand, Dr. Livy, J.P., and with him several of the most eminent medical practitioners of Bolton, expressed an entire opposite view of the objects of the Bill. He considered the recommendations contained in the sanitary clauses of the Bill in regard to the separation of the sick from the healthy, and the isolation, for a time, of the inmates of an infected house, as absolutely necessary if smallpox and other infectious diseases were to be effectually stamped out. To do this, nothing less than the powers asked for will be sufficient.

At the same time he (Dr. Livy) admitted that the powers granted would have to be exercised with the greatest tact and discretion, if they were to be successful. The sanitary authority ought in the first place to be the teacher of the ratepayers, and to seek to effect more by moral suasion than by force of law. The just susceptibilities of the private medical men in charge of infectious cases must not be needlessly wounded by unnecessary interference; and he respectfully suggested that the medical officer of health be required to give the private practitioner notice of his intended visit to the affected person, in order to secure the co-operation of the medical man in dealing with such outbreaks. In waging war upon infectious diseases, the medical officer of health would find his most powerful allies in the profession, and it should be not one of his least important duties to win their confidence and secure their co-operation. The outcome of the discussion was that the committee, after deliberating upon the representations made to them, unanimously resolved not to make any alterations in the clauses as they at present exist. We commend these remarks of Dr. Livy, not only to the corporation of Bolton, but to the sanitary authorities of every place where similar Acts are in force. It is certain that if this valuable means of coping with epidemic diseases is to be effectually carried out, it can only be by the cordial assistance of the medical profession, and this must be secured rather by a policy of conciliation than by means of force.

THE HONITON GUARDIANS AND THEIR DISTRICT MEDICAL OFFICERS.

ON Monday 24th January the son of one Harriett Williman, deceased, residing at Sidbury, in the Honiton Union, took an order to Dr. Pullin, district medical officer, residing at Sidmouth, worded as follows:—"Please attend to Harriett Williman, living in Lidford parish, on account of illness." The order was not marked urgent, thereupon Dr. Pullin asked what was the matter; to which the son, a young man, replied, "She has been sick, sir, and has got spasms." The woman, it appeared, was well-known to Dr. Pullin, who had frequently attended her, but not recently. On hearing the son's statement, Dr. Pullin prescribed for her, and on giving the medicine said "Give that to your mother and tell her that if she is not better after taking it to let me know and I will go and see her." It did not appear from the report in the *Devon Weekly Times* of the 3rd and 14th February that any further application was made to Dr. Pullin for his attendance. A short time afterwards the woman died. Subsequently an inquest was held, when it appears from the *post mortem* examination that the woman's death arose from a chronic affection of the liver and stomach; and the verdict of the jury was "that blame was attributable to no one." In the course of the inquiry, the coroner observed that it was a pity that Dr. Pullin had not seen the deceased before her death; a very natural remark, seeing that it would have prevented any inquiry, and would have obviated the very considerable prejudice since got up against the doctor. At a meeting of the Honiton Board of Guardians, it was decided that Dr. Pullin should be required to resign. This resolution was only carried by a bare majority of a vote of the Board, many of the members declining to vote at all.

Though agreeing in the opinion of the coroner's jury, as to the merits of the case, an opinion showed by the more intelligent section of the guardians and the local public, we must express our regret that the woman was not seen by Dr. Pullin, though, from the information supplied to us, we hold that he ought to be exonerated from all intentional neglect. We would also point out to district medical officers, the very great importance of giving written instead of verbal instructions, when they are required to attend poor persons; and we would also point out to the medical public, that it was hardly fair to create a prejudice against the doctor in this case. We would also urge on the Board of Guardians the importance of paying to their relieving officers, two forms of general notices, one intimating to the medical officer that personal attendance was necessary; the other that such notice only would be required. This rule, since the introduction of the relieving officers in the Somersetshire Union, has been invariably acted on with advantage to the poor and to the relieving officers.

To the Hon. Board of Guardians how far a district medical officer can be expected to attend a poor person, we would recommend that they should be referred to the Somersetshire Union, where, in the *Year Book of Medicine*, February 1876.

EDINBURGH SANITARY PROTECTION ASSOCIATION.

The first annual meeting of the Association was held at the University of Edinburgh, on Friday, 2nd February 1882. Professor H. C. Macpherson, President of the Association, presided, and

read the annual report. It stated that at the end of 1881 the Association had one hundred and ninety-two members, twenty-two of whom were medical men. The need for attention to the sanitary state of houses was shown by the fact disclosed by Mr. Burton's reports, that six per cent. of the houses inspected during the year were absolutely pestiferous. In more than two-thirds of the cases of inspection, there were, it appeared, general defects in the drainage arrangements, which were very dangerous to children or delicate adults. The Chairman moved the adoption of the report and balance-sheet.

Mr. Timothy Holmes (the Honorary Treasurer), in presenting the balance-sheet, which showed a balance in hand of £74 at the end of 1881, said that in the first two months of 1882 forty-two new members had joined, and only two of the old members had left the Association; so, at the present time, the Association numbered two hundred and thirty-two members, and had a balance of £100 in the bank.

Professor Fleeming Jenkin, one of the Consulting Engineers, said the work of the Association, as carried out by Mr. Burton, the Resident Engineer, had been most satisfactory. He had been surprised at the bad state of London houses, which compared unfavourably with the state of houses in Edinburgh. As a proof of the usefulness of such an Association, he said that during the present typhus fever epidemic in Edinburgh there had only been one case among the houses under the care of a kindred Association, and this had been contracted through visiting some very poor people. In conclusion, he would suggest to the editors of the technical and scientific papers, that they could not better serve their readers than by establishing "test cases", joining the Association themselves, or causing a friend to do so, without letting the officers of the Association know who they were, and, when they obtained their report, telling their readers what they thought of it.

The adoption of the report and balance-sheet was seconded by Sir William Tyrone Power, who called special attention to the advantage to proprietors of hotels and lodging-houses of possessing a certificate from the engineer of the Association framed and hung up in some conspicuous position. Having been supported by Mr. E. C. Robins, Architect, and Dr. Lauder Brunton, both of whom gave practical instances of the usefulness of this Association, it was carried unanimously.

It was announced that, after a ballot among the members present, the whole of the outgoing members of Council were re-elected unanimously, with the addition to their number of Dr. John Macpherson, Surgeon-General Munro, and Dr. Allen Thomson.

A vote of thanks to the President and Council having been moved by the Hon. and Rev. Mr. Fremantle, and seconded by Dr. Pearson of Kensington, and carried unanimously, the meeting adjourned.

We are requested to state that a report of this meeting will be printed *in extenso* as soon as possible, and sent gratis and post-free to any member of the medical profession applying for it to the Secretary of the London Sanitary Protection Association, 7, John Street, Adelphi.

WORKING AND DISPENSARY MEDICAL OFFICERS' MISTAKES IN DIAGNOSIS.

THE following examples appear in the current number of the *British Medical Journal*, and are taken from the reports of the Medical Officers of the Dispensary, who are stated to be "working medical officers" in the sense of the Act of 1875. The reports are taken from the *British Medical Journal*, and are given in full, as they are of interest to the medical public. The first report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The second report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The third report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The fourth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The fifth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The sixth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The seventh report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The eighth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The ninth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The tenth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875.

The following examples appear in the current number of the *British Medical Journal*, and are taken from the reports of the Medical Officers of the Dispensary, who are stated to be "working medical officers" in the sense of the Act of 1875. The reports are taken from the *British Medical Journal*, and are given in full, as they are of interest to the medical public. The first report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The second report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The third report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The fourth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The fifth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The sixth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The seventh report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The eighth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The ninth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875. The tenth report is from the Medical Officer of the Dispensary, who is stated to be "working medical officer" in the sense of the Act of 1875.

and most frequently during the incubation stage of a fever. He finds a quick pulse and high temperature, a furred tongue, all the evidences which tell him that the patient is fevered, and, as he can see, will most likely become a fever. Is he to wait till the disease has fully developed itself, till the simplest old woman can tell what is the matter, before he recommends his patient's removal to hospital? The idea is absurd.

Another and a more unpleasant aspect of the question arises in the fact that there is always a keen rivalry for private practice between the medical officer of a workhouse and the surrounding dispensary medical men. It follows that, if the workhouse doctor choose to say to a board of guardians of his brethren in the dispensaries that they are mistaken in their diagnoses of cases, and that he does this it may be with all honesty of purpose, and in what he considers the discharge of his duty, the end attained is, I say, inevitably this: that he, on his own showing, and by publicly announcing the incompetence of others, gets credit for more skill, and in all human probability gets more private practice, to the exclusion of his discredited confrères.

As I said in the beginning, I am discussing this matter altogether outside Dr. O'Neill, of whom I know nothing; so that if he sees this, he will not consider I am even remotely alluding to him.

My idea is that, in cases where such differences of opinion are frequent, an "observation ward", where cases of a doubtful nature could be put into on admission, would best meet the difficulty. Let the medical officer of the house classify them as he pleased then.

I must apologise for the length of this letter; the importance of the subject, and a hope that it will elicit the views of others more competent to express an opinion thereon, must be my excuse.—I have the honour to remain, your obedient servant,

JOHN L. WALSH, Workhouse and Dispensary Medical Officer.

Kilmacthomas, County Waterford, Ireland, February 23rd, 1882.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates on February 23rd, 1882.

Alderton, Herbert Charles, Dispensary, Stoke Newington, N.
Bevan, Henry Crook, 29, Frederick Street, W.C.
Cooper, George Frederick, St. Thomas's Hospital, S.E.
Day, Thomas Montagu, Harlow.
De Lom, Henry Anthony, 31, Denbigh Street, S.W.
Fell, Walter, 198, Earl's Court Road, S.W.
Harper, Charles John, 2, Station Road, Finchley, N.
Joseph, John Baptiste Edgar, Trinidad.
Parry, Robert, Festiniog.
Prabhakar, Govindrao Bhau, 48, Saltoun Road, S.W.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 23rd, 1882.

Ford, William Henry, Melbourne, Victoria.
Furnival, Francis Henry, Meeston, Nottingham.
Hudson, Ernest, Harleston, Norfolk.
Lewers, Arthur Hamilton N., 55, Torrington Square, W.C.
Stacpoole, Charles, 127, Inverness Terrace, W.

The following gentlemen also on the same day passed their Primary Professional Examination.

Baird, T. Patrick, Aberdeen University.
Williams, Charles, Middlesex Hospital.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on February 23rd, the degree of M.B. was conferred on F. J. Cannon (Trinity), and James Oswald Lane (St. John's).

UNIVERSITY OF DUBLIN.—At the Hilary Term Examination for the Degree of Bachelor in Medicine (M.B.), held on Monday and Tuesday, February 6th and 7th, 1882, the successful candidates passed in the following order of merit.

George B. Russell, Edward F. Pigot, Henry St. J. Brooks and William H. Burke (equal), Travers M. Smith, George F. Dean, James S. Carson and James Gloster (equal), John W. Gowland, Patrick Neary.

At the examination for the Degree of Bachelor of Surgery (B.Ch.), held on Monday and Tuesday, February 13th and 14th, the successful candidates were arranged in the following order of merit.

George B. Russell, Edward F. Pigot, Thomas R. Gillespie, Henry St. J. Brooks, George A. Marshall, James Craig.

MEDICAL VACANCIES.

The following vacancies are announced:—

ASHBOURNE UNION RURAL SANITARY AUTHORITY—Medical Officer of Health for the Southern District. Salary, £25 per annum.

BELMULLET UNION—Medical Officer for Workhouse at a salary of £50 per annum, together with £5 per annum as Superintendent Medical Officer of Health. Election on the 9th instant.

CARNARVONSHIRE AND ANGLESEY INFIRMARY.—House-Surgeon. Salary, £100 per annum. Applications by March 7th.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Assistant Honorary Surgeon. Applications by March 4th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C. Assistant Surgeon. Applications by the 8th March.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Administrator of Anesthetics. Applications by March 15th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by March 15th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Clinical Assistant. Applications by March 23rd.

EPSOM UNION, DISTRICT OF LEATHERHEAD AND FETCHAM.—Medical Officer and Public Vaccinator. Salary, £50 per annum. Applications by March 21st.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Member of Surgical Staff. Applications by the 29th March.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by the 29th March.

GENERAL INFIRMARY, NORTHAMPTON.—Assistant House-Surgeon. Salary, £80 per annum. Applications by the 13th March.

KENT AND CANTERBURY HOSPITAL.—House-Surgeon. Salary, £80 per annum. Applications by April 6th.

KENT COUNTY LUNATIC ASYLUM, Chatham Downs, near Canterbury.—Second Assistant Medical Officer. Salary, £120 per annum. Applications by the 21st instant.

KIDDERMINSTER FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Medical Officer. Applications by the 11th instant.

NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh.—Medical Superintendent. Salary, £450 per annum. Applications by the 29th instant.

PAISLEY INFIRMARY.—House-Surgeon. Salary, £80 per annum. Applications to Francis Martin, County Buildings, Paisley, by the 4th March.

PARISH OF GAIRLOCH, Ross-shire.—Medical Officer. Salary, £100 per annum. Applications to the Chairman, Osgood H. Mackenzie, Esq.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—House-Physician. Salary, £80 per annum, in lieu of Board. Applications by the 9th March.

ST. BARTHOLOMEW'S HOSPITAL.—Assistant Surgeon. Applications by the 7th instant.

ST. GERMAN'S UNION RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary, £100 per annum. Applications, marked "Appointment Medical Officer of Health", by March 9th.

ST. LUKE'S HOSPITAL.—Clinical Assistant. Applications by March 23rd.

WESTERN GENERAL DISPENSARY.—Marylebone Road.—Honorary Physician. Applications by March 6th.

MEDICAL APPOINTMENTS.

BAIN, WM., L.R.C.P., appointed Resident Medical Officer to St. Mary's Hospital, and the Manchester and Salford Lying-in Hospital and Dispensary for Diseases of Women and Children, Quay Street, Manchester.

BAKER, W. M., F.R.C.S., appointed Surgeon to St. Bartholomew's Hospital.

BARTON, J. E., M.R.C.S., appointed Medical Superintendent to the Surrey County Asylum, Brookwood, *vice* T. N. Brushfield, M.D., resigned.

BARTON, W. E., L.R.C.P., appointed Medical Officer and Public Vaccinator to the Burwash District of the Ticehurst Union.

BEATTY, Wm J., L.R.C.P.E., L.F.P.S.G., appointed Surgeon to the Stockton-on-Tees Boiler Makers' and Iron Shipbuilders' Society.

CRIPPS, W. H., F.R.C.S., appointed Assistant Surgeon to St. Bartholomew's Hospital.

GRANT, J. Dundas, M.A., M.D., M.R.C.S., appointed Honorary Surgeon to Out-Patients at Poplar Hospital.

HOLLAND, L., B.M., M.D., L.S.A. Lond., appointed Lecturer on Aural Surgery to the Newcastle-on-Tyne Dispensary.

HUTCHINSON, S. J., L.D.S., appointed Dental Surgeon to the Dental Hospital of London, *vice* A. Coleman, L.D.S., resigned.

JUNE, J. B. T., M.B., appointed Assistant Medical Officer to the Montrose Royal Lunatic Asylum.

KEAY, John, L.R.C.P.Ed. and L.R.C.S.Ed., appointed Junior House-Surgeon to the Stockport Infirmary, *vice* R. A. Murray, M.B.

MARSH, R., M.B., appointed House-Surgeon to the Royal Surrey County Hospital.

MOODY, J. M., M.R.C.S., appointed Senior Assistant Medical Officer to the Surrey County Asylum, Brookwood.

MURRAY, Robert A., M.B.Ed., appointed Senior House-Surgeon to the Stockport Infirmary, *vice* R. E. England, M.D., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

RHODES-NOOTT.—On the 21st February, at St. John's Church, Dudley, by the Revd. John Frederick Noott, M.A., Donative Rector of Blyford, and Vicar of Dunwich, assisted by the Revd. W. H. Crump, Curate of St. John's, Wm. Rhodes, M.R.C.S., L.R.C.P., Bridgnorth, to Ellen Elizabeth, third and youngest daughter of the Revd. E. H. L. Noott, Vicar of St. John's, Dudley.

ROBSON-JAMIESON.—On the 21st instant, at St. Mary-in-the-Boltons, South Kensington, by the Rev. W. T. Du Boulay, Vicar, Edward Shedden Robson, B.A., M.R.C.S., eldest son of Robert Naisbin Robson, Esq., of Durham, to Edith Isabel, youngest daughter of the late James Young Jamieson, Esq., of Gainford House, co. Durham.

DEATH.

JONES.—On February 22nd, at Swan Hill, Shrewsbury, Emma, the beloved wife of James Thoresby Jones, M.R.C.S., L.R.C.P., deeply regretted.

SANITARY ASSURANCE ASSOCIATION.—Dr. Farquharson, M.P., will preside at a meeting of the Sanitary Assurance Association on Friday, March 10th, at 7.30 P.M., when Mr. Henry Rutherford, Barrister-at-Law, will deliver an address on "Sanitary Assurance from a Householder's Point of View." A discussion will follow the address.

[illegible]

MEETINGS OF SOCIETIES DURING THE
NEXT WEEK.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Dr. Walter Edmunds: Case of Suppurative Ophthalmitis after Ligature of Common Carot. I. Mr. Lawford: An Unusual Case of Gun-shot Injury of the Eye. Mr. Warren Fyfe: 1. Case of Optic Neuritis after Concussion of the Brain; 2. Case showing Condition three years after Optic Neuritis from Injury to the Head. Dr. Sidney Coupland: Case of Optic Neuritis following Contusion of the Brain. Mr. McHardy: Case of Extensive Retinitis following Injury to the Head. Mr. Fitzgerald (Dublin): On a Case of Defective Vision in a Seaman. Dr. Brailey: Microscopical Specimens—1. From a Case of Retinal Detachment simulating Sarcoma of Choroid; 2 (for Mr. Mason of Bath). From a Case of Corneo-scleral Tumour. Mr. Snell (Sheffield): Case of Sympathetic Ophthalmitis setting in after Excision. Living specimen, (8 o'clock). Mr. Nettleship: Case of Atrophy of Optic Disc after Orbital Erysipelas.—Aber-ethan Society, St. Bartholomew's Hospital, 8 P.M. Mr. Griffith: The Diagnosis of Syphilis.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. G. Lawson: On a Case of Chimney-sweep's Cancer of the Axilla, treated by Excision of the Growth, Ligation of Axillary Artery, and Amputation at the Shoulder-Joint. Mr. H. Marsh: A Case of Aneurysm of Axillary Artery; Ligature of Subclavian; Rupture of Sac; Amputation at Shoulder-Joint; Recovery (patient to be shown). Dr. Mahomed: Case of Myxoedema improving under Treatment (patient to be shown). Mr. Warrington Haward: Case of Removal of the Hypertrophied Spleen. The following living specimens will be exhibited: A Case of Radical Cure of Congenital Hernia in the Adult, by Mr. C. H. Golding-Bird; A Case of Cured Spina Bifida, by Mr. Pearce Gould; Two Cases of Universal Ichthyosis in Adult Females, by Dr. B. O'Connor.—Royal College of Surgeons of England, 4 P.M. Professor W. H. Flower: On the Anatomy, Physiology, and Zoology of the Edentata.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE SHEFFIELD POISONING CASE.

MR. HARRISON informs us that the facts of the above case, as reported by us, are not quite correct. These facts were given by us as reported in the daily press. We are happy to make the necessary corrections. We should have stated that arsenic was not found in the stuffing of the fowl; we said in the stuffing in the tin. Arsenic was found in the vomit of the deceased, and not in the beer.

KNOCK-KNEES.

SIR,—I am attending a little boy, aged two years, who is slightly knock-kneed, and the parents are very anxious to have the deformity remedied, if possible. Will you kindly inform me, in your next impression, if it is curable, the best kind of splints to use, and also the time usually required in slight cases to get the limbs straight?—I am, faithfully yours,

INGLUVIN.

* Knock-knee in a child of two years of age is certainly curable. If the deformity be slight, straight outside wooden splints, reaching from the pelvis to the ground, will answer the purpose. The splints should be secured at the pelvis and ankles, and the knee drawn out by degrees by means of a webbing strap. The time occupied in cure varies in almost every case; it can never be determined beforehand, but it depends to a great extent upon the care with which the treatment is carried out.

OBSTETRIC PRACTICE IN AUSTRALIA.

SIR,—Can any member afford information as to the chances of success in Sydney, or other large city in Australia, to a man aged 30, who could make gynaecology a speciality, has the best social introductions, possesses £300 a year of private means, and is willing to wait?—I am, etc.,

HOMES FOR INEBRIATES.

SIR,—Can you, through the JOURNAL, inform me of a home for a dipsomaniac whose circumstances are these? She is a middle-aged woman, who is parlourmaid in a gentleman's family, where she has been fourteen years, and where she is much valued. During the last two years, she has given way to intemperance, and drugs have failed to allay the craving for stimulants. She is desirous of being cured from what she feels to be a disease. Is there any home for inebriates where persons from such a position in life as mentioned can be admitted at low rates of payment? If not, is there any opening in a home for inebriates from the upper classes where she could serve as parlourmaid, or so work out the cost of her maintenance and treatment?—I am, sir, yours faithfully,

S. REES-PHILIPS, M.D.

Worford House, Exeter, February 22nd, 1882.

* The weekly charge at the Spellborne Sanatorium for Female Inebriates, Feltham, Middlesex, and the St. James's Home for Female Inebriates, Ebenezer Terrace, Kennington Park, London, is 15s. per week. It is not at all likely that any inebriate institution would employ a female dipsomaniac, as an attendant on rich lady dipsomaniacs, unless there had been a long test of persistent total abstinence; but inquiry might be made of the secretary of the new St. Raphael's Hospital, Woodside, Croydon.

PROFESSOR PARKER'S LECTURES ON THE MAMMALIAN SKULL.

THE following errata occurred in our report of the first lecture of this series. Page 202, second column, lines 25 and 27 from top, for "good yolk" read "food-yolk"; line 26, for "mesoblastic" read "meroblastic"; line 59, for "oval opening" read "oral opening".

TAPWORM IN THE INFANT.

SIR,—Will you kindly allow me to ask my brother practitioners, through the medium of your valuable JOURNAL, what treatment they would recommend with the view of dislodging a tapeworm from the intestines of a child between two and three years of age?—Believe me, yours faithfully,

A MEMBER.

NEW TEST FOR THE PURITY OF CHLOROFORM.

SIR,—In the BRITISH MEDICAL JOURNAL of January 14th an editorial note appears on "Impure Chloroform", an abstract of a paper by M. Lucas-Championnière. As the subject has attracted a good deal of attention in Paris, especially since the further publication by M. Yvon, in the *Journal de Pharmacie et de Clinique*, of his mode of testing and purification, I have examined six different samples, five English and one German (prepared from chloral), and find that all of them quickly decompose permanganate of potash in the presence of caustic alkali, producing first a green colour—manganate of potash—and then a dark-brown—oxide of manganese.

Following the process given by M. Yvon, I have purified some chloroform, and beg to submit a sample to you herewith. I also send you a little of M. Yvon's test solution, of which one cubic centimetre should be added to about five cubic centimetres of the chloroform to be examined, and well shaken; the test solution should remain violet for at least ten minutes. Care must be taken to try the test in a clean bottle—a stoppered one preferably—that has been treated with oil of vitriol, and rinsed afterwards with distilled water.

As you have lately had some discussion in your columns on the subject of anaesthetics, the importance of this new test for chloroform should not be underrated by your readers.—I remain, sir, yours obediently,

W. MARTINDALE.

10, New Cavendish Street, London, W., February 25th, 1882.

OZENA.

SIR,—I have just read, in last week's number, a very interesting letter on the above subject from Mr. Lennox Browne. He alludes to the successful treatment of this troublesome complaint by residence in the Engadine. Permit me to express my entire concurrence in that opinion. Italian and German practitioners have been acquainted with the value of this highly antiseptic air, both for ozæna and hay-fever, for many years, and rarely prescribe sea-voyages when a delightful sojourn in the Alps is generally sufficient to rid the patients of these tiresome ailments.—Yours truly,

J. HOLLAND, M.D.

St. Moritz, February, 1882.

A. M. D., writing from India, asks whether it is true, as reported there, that the ordinary five years' tour of service of British medical officers in India has been changed to six years. We can only say that no rule of the kind has been promulgated, and that, as the whole subject of medical service in India, and especially the mutual relations of the Indian and British medical services, are under anxious consideration, it is not at all likely that any change of the kind feared by our correspondent has been decided upon.

THE ISLE OF MAN.

SIR,—In answer to your correspondent's second query on the above subject, I found the cost of living, about ten years ago, to be not more than two-thirds of that in this country. Many articles of consumption were about half the price. From the difficulty experienced in obtaining the usual medical fees from natives visiting the mainland, I should imagine that fees are proportionately small in the island. It is a favourite resort for people living in the north of England; and in the season the towns are full of visitors. The climate is equable, and warmer in winter than many places in the south of England. According to the guide-books, the mean winter temperature is 42°, and the average range of temperature throughout the year only 20° F.—Yours faithfully,

J. FOSTER PALMER.

King's Road, S.W., February 28th, 1882.

THE FULHAM SMALL-POX HOSPITAL.

SIR,—According to the London Asylums Board's manner of treating the question, as gathered from their reports, we must assume a special providence in their favour, always leading them to plant their hospitals where small-pox was sure to occur, seemingly (as I put it), not as an epidemic, but as an endemic, disease. Sir E. Curry not only did not in any way contradict my quotations from his reported statements in the *Globe*, but, at the next meeting of the Board, he is reported as saying that "it was very unfortunate that the *Atlas* ship was moored where she was. The in and out bound ships must pass within a few yards of it." What is this but a recantation of the theory that small-pox hospitals can inflict no harm on their neighbours. If the ships passing the *Atlas* may, as Sir E. Curry supposes, intake and carry the disease, what can he possibly say about the Metropolitan Railway, which, running under the walls of the Fulham Small-pox hospital, stands no chance of giving it a wide berth.

The present hospitals are "badly" placed, that is, are not sufficiently isolated, as statistical facts of their neighbourhoods undoubtedly show. They are "badly constructed and ventilated"; seeing that the only objects of their construction and ventilation is to throw the infected air, laden with small-pox dust, into the houses and streets of those who surround them, instead of first destroying, as far as possible, its infectious influence, either by combustion or by mixing it with strong germicides. The better an infecting hospital is ventilated in the ordinary way, namely, by opening doors and windows, the better, doubtless, it is for its inmates the worse for its neighbours.

It is strange that the London Asylums Board still remains like the proverbial ostrich in the desert with its head buried in the sand. Will it keep it there, deaf and blind to the fact that the hospitals of Paris, Belfast, Christiania, Stockholm, Fulham, Hampstead, Homerton, and Islington, have one and all proved centres for the atmospheric convection of small-pox germs to their respective neighbourhoods?

That I have written to the public papers on a subject which largely and so materially concerns the public is not to be wondered at, considering that the medical journals have been persistently closed against me. My late father and myself have had but one object in view, notwithstanding your remarks, namely, the good and well-being of those intrusted to our charge. Without our exertions, and the help of the public press, no doubt the Fulham Hospital would still exist as a flourishing centre of infection in our midst.—Your obedient servant,

ALFRED GODRICHS, Medical Officer for South Kensington.

140, Fulham Road, February 28th, 1882.

THE GULSTONIAN LECTURES

PULMONARY CAVITIES: THEIR ORIGIN, GROWTH, AND REPAIR.

By WILLIAM EWART, M.D. Cantab., F.R.C.P.,

Assistant-Physician and Pathologist to the Brompton Hospital for Consumption;
Physician to the Belgrave Hospital for Children; Demonstrator of
Physiological Chemistry at St. George's Hospital.

LECTURE I.—PART I.

MR. PRESIDENT, FELLOWS, AND GENTLEMEN,—The study of disease with the help of anatomy was the special object contemplated by the founder of these lectures, of whom we read that he was yet greater as a theologian than as a man of science. The well known words of his bequest I need not repeat to you; they contain evidence of his scientific insight, and of his belief in the great future reserved for pathological anatomy; they prove also that his was not a theology opposed to the progress of science, but capable of rising above the prejudice of the hour in the practical search for truth. After two centuries, his objects in science are still our objects; and his enlightened theology may be set as an example singularly fitted for our own times.

This brief allusion to Dr. Goulston's original purpose will be my apology for inviting you to a study mainly anatomical and pathological. The pathology of pulmonary cavities has not hitherto been carried beyond an elementary stage; in the large works on phthisis it is treated in general terms, and almost exclusively from a clinical standpoint; and I have sought in vain for any important monograph on this subject. I shall have occasion, however, to refer to some valuable Lectures on Pulmonary Excavation delivered by my colleagues Dr. C. T. Williams (in 1873), Dr. Douglas Powell (in 1877), and Dr. Mitchell Bruce (in 1881). Some attempt at a systematic treatment of this subject is also made by Professor Rindfleisch, in his article on Tuberculosis in von Ziemssen's *Cyclopaedia*; and to the views of this observer I shall specially revert in the course of my lectures. This gap in a somewhat important branch of pathology, which it is my humble ambition to point out rather than to fill, has an explanation in the method usually adopted in the study of phthisis.

The word phthisis has too often been understood to apply to a single affection, rather than to a collection of varying types of disease. I doubt whether the attempt to bind together all forms of pulmonary consumption by the thread of tubercle, so readily traceable in most, if not in all, has assisted the advance of our knowledge. Our notions of tubercle have not gained in definiteness, and we are compelled to admit that the word phthisis has ceased to be free from ambiguity. Since the late Debate on Consumption at Glasgow, we have become conscious of widely divergent meanings attached to this term. "Phthisis," it cannot be too clearly understood, is but a name covering many conditions, in which destruction of lung-tissue is a common feature. Used in this local sense, the term is convenient. But it possesses no place in a strictly pathological nomenclature of disease; and every attempt to study phthisis without due regard to its morphological varieties must end in failure.

The analytical method, which I believe to be indispensable in any investigation on phthisis, is equally required for a fruitful study of the destructive changes in the lung. Too little attention has hitherto been paid to the topography and to the anatomical relations of cavities. The lung has been regarded as an unit, and its excavation as a more or less constant quantity. I will not deny that the most persevering analysis has been carried into the depths of the pulmonary tissue; but too often the tube of the microscope appears to have obstructed the view of the coarser anatomy. My endeavour in these lectures will be to study the pulmonary lesions rather in the light which strikes the naked eye, and to attempt as it were their geography, appealing to the microscope in all matters of detail, but relying mainly on the practical data furnished by the unaided senses.

The tendency to a formation of permanent air-containing cavities is peculiar to the lung, and is obviously connected with the special structure and the ventilating function of the organ. The photograph which I place before you illustrates the production of a cavity from a gunshot-wound. The patient was shot seven years ago through the middle of the left clavicle, and bled profusely from some large vessel. The lung, which was also wounded, became the seat of an aerial fistula and of apex-

excavation. Although of healthy descent, and originally strong, the patient is following the usual declivity of phthisis, showing how much depends upon the position of the cavity, and within given limits how little upon its exact causation. In this case, at least, tubercle does not bear the original blame.

More usually, excavation has its cause in disease. Bronchiectasis and emphysema, anatomically considered, may be said to occupy the border-land between physiological and pathological conditions—both being essentially the outcome of the dilatation of normal structures. The size of the air-spaces in emphysema is often so considerable, and they imply so much destruction of lung-tissue, that they virtually constitute cavities, although we prefer to term them bullae, having regard to the thinness and to the elasticity of their walls. The latter features, together with their position along the fringes and their lung-like aspect, sufficiently warn us against any confusion with cavities of a different origin. However, if the bulla should become surrounded by a thickened pleura, and if obliteration of its bronchus should take place, and the gaseous contents be exchanged for fluid, a cyst-like cavity may result, which differs from the more habitual vomice, mainly in the limpidity of its contents and in the polish of its wall. Lebert, who describes in the lung the occurrence of serous cysts, refers them exclusively to ancient deposits of blood or of pus. Hydatids, which are not unfrequently met with, and the very rare dermoid cysts, of which isolated examples have been recorded by Lebert, Wunderlich, Buchner, Collenberg, etc., also belong to the category of cystic cavities.

More common than the cavities which I have enumerated are those due to bronchiectasis, a disease at first not strictly speaking excavating, but fatally tending to the formation of vomice not distinguishable from those of phthisis. Bearing in mind this tendency, I have preserved, in my tables of pulmonary cavities, a few instances of this affection. But bronchiectasis is too wide a subject to receive in these lectures the discursive treatment it deserves. Abscess followed by cavity-formation may result from a variety of causes, which I will not attempt to enumerate. Sarcomatous and cancerous deposits occasionally give rise to ulcerative excavation in the lung. In gangrene, the most rapidly destructive of our excavating diseases, the stage of excavation is commonly temporary; it is soon followed by a fatal termination, or by closure. When death occurs early, the cavity either presents the character of a putrid mortification, or possesses a secreting pyogenic membrane, which indicates a limitation of the necrotic process, as well as an effort at repair.

I have briefly enumerated the chief kinds of pulmonary excavation occurring from various causes; but the typical cavern which will claim the greater share of our attention is special to phthisis. It bears the impress of chronic inflammation, strikingly evidenced in the zone of condensed tissue by which it is surrounded, and in the pseudo-capsule which defines its outline. This is, however, but one variety of phthisical cavity—not, we must admit, the most common. It differs widely from the excavations of acute phthisis, and scarcely less does it differ from the ordinary pneumonic softening. We are thus made conscious from the onset of the necessity for a preliminary classification of varieties of phthisis if we would thoroughly appreciate the origin of excavation.

The great division between pneumonic and tubercular disease has not yet, to my belief, been superseded. In spite of the tendency of recent years to see in all phthisis the working of tubercle, a distinction is still upheld by some of the greatest authorities, who refuse to subscribe to the revived doctrine of Laennec that caseation is invariably due to a tubercular origin.

1.—Of these two large groups, let us first take the pneumonic, which, clinically speaking, probably comprises the majority of phthisical cases. Its chief subclasses are: (1) alveolar catarrh and bronchopneumonia; (2) catarrhal pneumonia; (3) caseous pneumonia. A glance at the annexed diagrams will show a general agreement between this classification and those of Buhl and of Virchow, the differences being mainly in the terms.

Classification according to Buhl.

Superficial inflammation (in territory of pulmonary artery).	Fibrinous pneumonia.
	Catarrhal pneumonia following upon catarrhal bronchitis.
Deep inflammation in territory of bronchial artery.	Peribronchitis.
	Parenchymatous or Desquamative pneumonia.
	1. Consecutive desquamative pneumonia (induced by general diseases).
	2. Genuine desquamative pneumonia.
	3. Caseous pneumonia.

Classification according to Virchow.

1. Genuine fibrinous pneumonia.
2. Catarrhal pneumonia (subdivision, bronchopneumonia).
3. Caseous pneumonia (catarrhal and fibrinous pneumonia combined).

I have purposely reduced the pneumonic group of phthisical affect-

tions to its simplest factors—alveolar catarrh, catarrhal pneumonia, and caseous pneumonia; not alluding for the present to acute purulent phthisis, to oedematous softening, nor to the important group specially connected with pulmonary hæmorrhage.

1. The affections included in my first sub-class do not require any special comment. They are distinguished from all others by the moderate extent of the inflammation, which usually terminates in recovery; and by the small proportion which the epithelial elements bear to the other cells filling the alveolus.

2. A radical difference, more obvious under the microscope than to the naked eye, exists between catarrhal pneumonia and the former group. Structurally, this is scarcely less marked than the difference between a transient cuticular desquamation and a dermatitis; the former implicating only the epithelial surface; the latter striking its worst blow at the vascular layers, wherefrom the reproduction of healthy epithelium depends. This peculiarity renders catarrhal pneumonia, in a local sense, insusceptible of recovery, and implies softening as its probable termination.

3. The separation of caseous pneumonia into a definite class appears to be thoroughly warranted, not only by its anatomy, but by its clinical bearings; and I am fortified in this view by the example of Virchow and of Buhl. The difference between catarrhal and caseous pneumonia is not alone one of intensity, but of kind. Whereas the morbid deposit in catarrhal pneumonia nearly exclusively consists of alveolar cells and of leucocytes, in caseous pneumonia it is largely made up of fibrin. In addition to this partly fibrinous character of the alveolar contents, it is common for fibrinous pneumonia to supervene independently upon the chronic inflammation; and the extent of the ultimate disorganisation will greatly depend upon the behaviour of this recent fibrin, which is sometimes reabsorbed, but more commonly is involved in the caseous destruction.

II.—Perhaps the most strictly defined of all varieties of phthisis is the tubercular. I am not alluding to acute primary miliary tubercularis; from an anatomical point of view, this is not phthisis, and clinically it also occupies an independent position. I would rather refer to a special class, in which tubercle of tolerably pure type, occurring in groups, is present from an early date, and leads to the common symptoms and termination of phthisis. The arrangement of this grouped tubercle resembles roughly that of grapes hanging from a branch, and explains the term "racemose" and "bunchy", under which it is variously described. Whereas in catarrhal and caseous pneumonia the alveolar structures are primarily involved, in this variety the alveolus is rather encroached upon than originally affected. The bulk of the lung is usually free from disease, and its tissue of good spongy quality. The chest preserves a large size, seldom revealing to auscultation the extent of the mischief; the cavities for a long time are capable of slow development only, and often escape detection. With these anatomical features, the etiology of the affection is in full harmony. The disease is very apt to attack those habitually exposed to irritating atmospheres, and the subjects of chronic or recurrent bronchial disorders.

III.—By far the largest number of fatal cases are attributable to a mixed type of disease, including the pneumonic element by the side of the tubercular. I cannot enter here on the arguments which render it probable that catarrhal pneumonia is the prime factor in the majority of these instances, and that tubercle is superadded as an outcome of the phthisis. According to the proportion and to the distribution of the two elements, varieties ensue, both in respect of the clinical phenomena and of the anatomical appearances, too numerous for description.

It must be felt by this rough nomenclature, we shall be better able to discuss the modes of origin of cavities. To whatever form phthisis may be due, excavation is invariably preceded by softening. The softening is purely a chemical action, over which the living tissue has no control; but, like other chemical processes, it is mainly influenced by the temperature of the experiment. Our observations will not be complete until we have dealt with these circumstances, whereby the nature and extent of the process are so variously determined.

The essential nature of the theory is well shown by the relative action of the two elements in the various forms. In primary catarrhal pneumonia, the tubercular element is the chief cause. In pneumonia, they are combined to be the most independent of association with another with alveolus. Here the primary method of softening and the secondary softening are in perfect accord. In the mixed type, the pneumonic element is the primary cause of softening, and the tubercular element is the secondary cause. In the latter disease, the tubercular element is the primary cause of softening, and the pneumonic element is the secondary cause. In the former disease, the tubercular element is the primary cause of softening, and the pneumonic element is the secondary cause.

Among the circumstances which most modify the march of phthisical

destruction, should be mentioned the varying density of the deposit and the degree of moisture within and around it. The term *caseation*, which has been rather loosely used in connection with a variety of changes, should be restricted to the dry and dense products from which the moistening influence of the atmosphere and blood-irrigation are in a great measure excluded. In this state of dryness, caseous accumulations may long continue unaltered; but with the admission of air the caseum ripens, and the degenerative reactions ensue which within recent years have been chemically studied by Duclaux (*Comptes Rendus*, vol. lxxxv, page 1171, 1877).

We should not, however, imagine that this complete absence of moisture is an early feature of caseous infiltration. The only morphological peculiarity of caseation, which consists in its extremely fine subdivision, is susceptible of being explained on a totally opposite assumption. Alveoli, in the stage of fully developed catarrhal pneumonia, are almost exclusively occupied by spherical cells, which we will admit to be the outcome of alveolar proliferation. I am aware that the epithelial nature of these cells has been denied by many; and that Senfleben professes to have settled all doubts on this point by the artificial production of the same appearance in pieces of lung, hardened in alcohol prior to their insertion into the peritoneal cavity of rabbits; but, with Buhl and with Rindfleisch, I still hold by the alveolar origin of catarrhal products; and the diagram which I have copied from a drawing by Dr. D. J. Hamilton will show that the same view is taken by that distinguished observer. The differences in shape and general aspect between the swollen epithelial elements and the normal epithelium are very striking; most striking, however, are the differences in their relative size. The enormous development which these cells undergo is plainly due to imbibition, and presupposes abundant moisture, probably arising from collateral oedema. As they expand, the cell-walls become thinner; the contained pigment-particles more scattered; and the minute granulation which results in the swollen cellular substance may be compared to the fine chemical precipitates obtainable in diluted solutions. The swelling which I have described, whilst it fills the alveolus, tends ultimately to burst the individual cells, and to weld them into an homogeneous mass, in which the scattered pigment is the only surviving witness to earlier conditions. This explanation of the compactness of the deposit as due to a swelling from endosmosis appears to me more natural than the suggestion made by Dr. Hamilton, that the healthy lung, acting by its respiratory efforts upon the caseous material after the fashion of a cheese-press, expels from it the fluid constituents; and it supplements the statement made by Rindfleisch, that a spontaneous contraction takes place in the alveolar walls after effusion has occurred within them.

In pure caseous pneumonia, the subsequent desiccative changes are carried out to perfection, owing to the complete stoppage of the supply of air and of blood; and the advent of excavation may be long delayed. Not so in many cases of catarrhal pneumonia of a low type, in which imperfect aeration persists side by side with an inveterate oedema. Here, molecular breaking down occurs early, and partakes less of the nature of fatty degeneration than of a maceration, which is alike destructive of the deposit and of the tissue. Thus, contrary to the opinion expressed by Dr. Hamilton, I consider oedema capable of exercising a more dangerous influence on the course of epithelial inflammation. The development of an extensive catarrhal pneumonia occurring in separate foci, with severe oedema, commonly leads to what may be truly termed a "dissecting excavation" of the lung. If the process be tolerably acute, and the softening rapid, the fibro-elastic framework of the lung is completely emptied of its parenchyma, and the lobular septa alone remain.

This condition of excessive moisture need not result from low oedema; it sometimes is produced by a localised congestion. To this class probably belong many of the apex-excavations. The apex-catarrh, which runs a rapid course and breaks down under our observation without passing through a stage of complete caseation, furnishes us with early instances of this mode of termination of cavity, sometimes less frequent than the majority of the softening might lead us to expect. All observers agree in limiting that, under oedema, the process and the more complete softening, the more favourable, also, will be the chance of recovery.

It is especially in these matters, least obvious forms of catarrhal destruction, that the microscope is most abundantly needed. Even true caseation does not completely destroy elastic fibres; I have found them repeatedly in ancient pulaceous deposits, where all other elements were removed to granular matter. The elastic structure, however, does not wholly remove the destructive influence of caseation; occasionally they are found in caseated products as a result of the degeneration rather than of the original intervention; that their recognition may become a matter of difficulty. Grancher, in his valuable article

in the *Revue de Physiologie*, ascribes their fragmentation to a mechanical, rather than to a chemical, agency: the strength of elastic tissue lies in its suppleness; if stretched unfairly, and embedded in a hard and brittle mass, it loses its resisting power together with its pliancy. This fact is demonstrated by Grancher by means of injections of the lung with paraffin. The toughness natural to the pulmonary tissue is, under these circumstances, completely abolished, and the lung becomes capable of fracture. Exactly similar conditions are present in caseous pneumonia, which is characterised by the stretching of the alveolar wall, and by the density of the infiltration; and under the microscope, it is difficult to find in advanced caseation the markings of the alveoli, although the larger elastic tracts remain conspicuous.

These remarks will explain the true significance of a discovery of elastic fibres in the sputum; if present, they constitute proof positive of softening, but their absence does not furnish us with any negative evidence. With regard to fully formed cavities, I may anticipate further details, by stating that we do not habitually find any elastic sediments among their contents.

I propose, after these general observations, to enter upon a short description of the modes of excavation special to the leading varieties of phthisis.

Pulmonary cavities most commonly owe their existence to some form of *catarrhal pneumonia*. The ordinary type of the excavation is lobular. Even in larger cavities, this lobular origin remains for a long time evidenced by the persistence of trabeculae. The softening, which begins at a bronchial termination, gradually proceeds through the consolidated lobule as far as its fibrous boundaries, or it may even extend beyond the latter. But, sooner or later, the excavating process is interrupted by tissue-reaction, and a barrier is formed which resists the further encroachment of the disease. This reactive inflammation is probably due to the irritation set up within the alveolar wall by the pressure of foreign material, and especially of the products of disintegration.

Sections of this zone of irritation exhibit, under the microscope, the appearance of a sarcomatous or of a granulating tissue. Sprouting into the alveolar space, the new growth ultimately obliterates the air-cells, the epithelium of which may, for a time, assume undue activity and a cuboid shape; but all alveolar character is finally lost, except in a few air-sacs which had suffered collapse before they were reached by the infiltration. By degrees, the young connective tissue cells elongate into fibres, or become flattened into laminae, and thus a fibrous zone may be formed, which, for a time, delays the forward march of the softening. Active lymphatic functions also belong to this layer; for, in its fissures, streaks of a finely granular substance, mixed with pigment-particles, indicate the high road followed by absorption. A similar process takes place at the periphery of caseous nodular deposits, and of inflamed bronchioles.

Thus fibrosis, or its first stage, fibroid cell-growth, is inseparable from catarrhal softening; but it does not in every case lead to the formation of a distinct capsule. In a special class of cases, a membrane is developed at the periphery of the deposit prior to excavation. I believe these clean-cut cavities, isolated from healthy lung-tissue by a simple membrane, to be usually the outcome of slow caseation (it will be hereafter shown that they may also originate as a late result of hæmoptysis). Should the bronchus of the district affected be rendered impervious, the degenerative process may ensue without any excavation. Increasing inspissation takes place in the deposit, owing to the gradual absorption of fluids, and to the contraction of the membrane; and the latter becomes thicker and more fibrous, ultimately resembling a stout ring of hyaline cartilage. Such is the history of many an old broncho-pneumonia, which has never culminated in open excavation. The tissue has been destroyed by caseation, but has never been expectorated; and it remains exhibit under the microscope the *debris* of cells and abundant elastic fibres.

This occlusion of the bronchus need not, however, be permanent. From a variety of causes, the slender barrier separating the caseum from the atmosphere may ultimately break down. Rindfleisch ingeniously attributes the laceration to the force of the inspiratory current; but it is referred by Dr. Douglas Powell rather to the expiratory cough-pressure. This is an important, because a very common, mode of excavation. The softening may have progressed slowly, but the cavity is formed *ex abrupto*, the physical signs of an empty space becoming suddenly developed, after the expectoration of the caseous fluid. The rapidity of the process is one of the more favourable features in these cases.

When the healthy tissue-reaction (to which is due the formation of the pseudo-capsules of cavities) is absent or imperfect, as in cases presenting less consolidation than oedema, the invariable result is a wide-

spreading destruction. The same consequence follows even in the presence of moderately firm consolidation, should the oedema happen to be great; of this, we possess an instance in the catarrhal pneumonia of drunkards. But, more commonly, diffuse softening results from a variety of pneumonia, which has never reached consolidation, but remains in a state of congestive oedema. This condition, it will be observed, is but one step removed from alveolar catarrh. In the latter, the slight accumulation of cells within the alveoli, and the moderate oedema of the alveolar wall, may completely disappear under treatment. But, if the oedema should become severe and inveterate, the power of epithelial proliferation, and of vascular reaction, is completely extinguished; and the obliteration of a vessel of moderate size will suffice to establish a progressive softening, for which there is no longer any check.

In *caseous pneumonia* the cavities are influenced by the special character of the inflammation. The consolidation, which I have elsewhere described, rivals in extent that of fibrinous pneumonia, whilst in density it greatly exceeds the latter. As in fibrinous pneumonia, so here, the air-cells are not only filled, but distended, with the products of inflammation. Whereas, however, in fibrinous pneumonia, exudation invades suddenly a tissue structurally healthy, in caseous pneumonia the onset is gradual; numerous lobules have been for varying periods in a state of catarrhal pneumonia, and the intervening tissue deeply altered by chronic irritation, when the finishing stroke is given by the effusion of fibrin into the diseased districts. Our diagnosis between the two affections, when the consolidation occurs at the base, will, therefore, mainly rest upon the history of the case; but its correctness can only be tested by subsequent events. In common fibrinous pneumonia, the exudation, which consists of fibrin, of leucocytes, and of red blood-corpuscles, all readily liquefiable, clears up early and rapidly. The result is widely different in caseous pneumonia. The fibrin may be not inferior in quality, but it is mixed with cells of epithelioid type, the fatty degeneration of which is naturally slow, whilst the channels of absorption are blocked by cell-growth. Yet greater differences are found in the vascular conditions. The circulation in fibrinous pneumonia is, for a while, impaired by lateral pressure on the capillaries; but, in caseous pneumonia, the stoppage is permanent, and due to endothelial growth. This peculiarity is sufficiently well marked to establish a safe distinction between caseous disease, and not only fibrinous pneumonia, but also the ordinary forms of catarrhal inflammation. The obliteration is not restricted to the capillaries, but attacks the larger vascular branches, cutting off all blood-supply to the districts involved. This blocking of the blood-vessels, which has been described by Friedländer, by Grancher, by Hamilton, and others, is well illustrated in the diagram which I submit to you. I cannot agree with the view, that the softening in caseous pneumonia is determined by this obliterative arteritis. I hold that the latter is but an ascending change; that it is altogether secondary to the arrest of the circulation within the capillaries; and that it does not, therefore, possess the ordinary value of an arterial thrombosis.

Equally distinctive of caseous pneumonia is the obliteration of the bronchial tubes, a feature less important anatomically than as a valuable guide to a diagnosis between the two forms of basic pneumonia. Under the influence of the same deep-seated irritation which leads to obliteration of the blood-vessels, the bronchi become permanently plugged by their own secretion and by the irritative proliferation of their epithelium. The practical result of the plugging is a complete stoppage of the air-traffic in the diseased region, and a loss of all auscultatory sounds. Instead of yielding bronchial respiration as in fibrinous consolidation, the lung is silent, whilst giving a percussion-note of absolute dullness. From this combination arises, even for the trained observer, a danger of mistaking caseous pneumonia for a pleurisy. The only physical sign establishing a distinction between these two conditions is the increase of vocal resonance in pneumonia, and its diminution in pleuritic effusion; but if the pneumonia be accompanied with thickening and oedema of the fibrous layers, the physician is deprived of this last diagnostic help. Hérard and Cornil relate cases in which the presence of pneumonia was veiled in the manner I have described; and a striking instance of the confusion to which I have alluded has come under my own notice.

I need not insist at length upon the mechanism of the process of excavation, upon the combination of liquefaction with that "dry crumbling" so characteristic of the disease. From the moment that softening has gained access to it, the entire mass is at the mercy of purely chemical forces. Undermined in various directions, large blocks of dense tissue are loosened and cast into the cavity, where they suffer ultimate disintegration. The lung-tissue is destroyed, as it were, in its integrity; neither interlobular septa, elastic fibres, nor bronchi offer any lasting resistance to the softening; alone, the largest blood-vessels

survive, thanks to their *vasa vasorum*, and to the great thickening of their coats; whilst the diseased tissue falls away from them, as it does from the thickened pleura, much as a ripe fruit is detached from the branch. Thus dissected by the softening, the vessels may long remain sole occupants of the vomica.

From this brief description, it would be easy to recognise the typical case of pneumatic excavation. The main features of these cavities are their size, which is often considerable, the anfractuous condition of their walls, and the persistence within them of large vascular trunks absolutely cleared of all tissue. An arrest of the excavating process short of the boundaries of caseation is absolutely impossible, but in some cases caseation is not stopped, even by the spongy tissue around. In constitutions weakened by intemperance or undermined by kidney-disease, the oedematized alveolar tissue falls an easy prey to the advance of softening, which may end in the transformation of a whole lobe, or even of the lung, into a huge vomica.

I have purposely drawn an extreme picture of this affection. In many instances, however, the extent and the intensity of the lesion are limited, so that it may become quite impossible to draw an absolute distinction between a catarrhal and a caseo-fibrinous consolidation. Again, in the less severe cases, the slowness of the process and the occurrence of tissue-irritation, to which I have already alluded, favour the formation of a limiting membrane, which protects the lung against further damage.

In the common form of phthisis known as *tuberculo pneumatic*, owing to the diversity of the morbid conditions, it is difficult to describe any special type of excavation. The following varieties are included in this group.

1. Limited inflammatory processes leading to a generalised tuberculo-pneumonia.
2. Catarrhal phthisis followed by tubercular infection of a local character.
3. Tubercular phthisis from the first complicated with much inflammation, which often specially affects the peribronchial tissue.

The process of softening may similarly partake of the features of the tubercular, or of the catarrhal, or of the caseous varieties. Many of the excavations which will most engage our attention belong to this class; they need not, therefore, be further described at this stage of my subject.

In the *tubercular* variety of phthisis, characterised by the large size and spongy state of the lung, and by the presence of bunchy masses of pigmented tubercle, yielding a dry surface on section, excavation is a much less prominent feature than in the pneumonic forms. The cavities are often small; their peculiarities are chiefly those of the dense tubercular tissue in which they occur—a tissue where proneness to degenerate is surpassed by the tendency to fibrosis. Their walls are thick, abruptly cut, and usually provided with a pseudo-capsule. Tubercular softening is, under normal circumstances, a very slow process, strictly localised, owing to the perfect isolation of the caseum at the centre of a tubercle capsule. Consequently, the work of repair proceeding at the periphery is allowed time to prevent, or at least to check any great extension of the cavities beyond the original tubercular deposit. These vomicae, however, may occasionally attain a considerable size from a successive implication of neighbouring tubercular masses.

The period of development would be incomplete, were I not to allude to the cavities found in *chronic pneumonia* and in *acute phthisis*. Neither of these forms, strictly speaking, belong to the groups I have hitherto discussed.

In the formation of the bronchi complicated with pleuritic adhesions is another result of the changes known as chronic pneumonia, which generally involve regular dilatation of the bronchi. Bronchiectasis is the result of a disease secondary to the fibrosis; it is especially prone to occur in the terminal excavations. We are familiar, on this subject, with a form of bronchiectasis where the first or supradadded dilatation is the result of the bronchial disease. I believe that these two varieties of bronchiectasis are different both in their origin and in their mode of extension, but have been frequently confounded. In respect of the former, I am of opinion. I have referred to about the side description of this variety by Dr. J. H. Thompson, and to refer the bronchiectasis to the latter, the result of the changes in the interlobular tissue and in the bronchi, from the contraction of moderate bronchiectasis.

The contraction of moderate bronchiectasis is far from complete, but the contraction of the cavity with a purulent bronchitis of virulent type is a process which, by the force of complication, is extremely more extensive and more extensive than pneumonia. The cavities in this case are of the same nature as those of the former, but resemble the latter in the mode of their extension. The features are illustrated in the figures which I have borrowed from Hérard and Cornu's work on phthisis. Softening is invariably accompanied with much redness,

inflammation, and oedema. The excavating process thus derives considerable assistance from the friability of the neighbouring textures, and in the worst cases leads to an extensive tunnelling of the lung. The affection is distinguished by the great rapidity of the softening, by the formation of pus, and by the redness, often erysipelatous, of the bronchial membrane. In this variety of the disease, pneumothorax is often threatened as a consequence of the insidious march of the ulceration, and of the lack of interstitial reaction. Life, however, usually drops before this point is reached, and only at the necropsy do we recognise the multiplicity of the patient's dangers.

The rough sketch which I have endeavoured to give of some of the forms of excavating disease will convince you that, if attempted separately from a description of the respective pulmonary affections, a classification of cavities can possess but a limited value. For practical purposes, some such classification is, however, required; and its most appropriate basis is probably to be found in a description of the cavity-walls.

In whichever process they may have originated, cavities pass through a *period of formation*, during which their walls consist of inflamed or necrosing tissue, incapable of prolonged vitality. Cruveilhier has described this stage under the term "gécide". This, in the typical vomica, is but a state of transition, sooner or later to be succeeded by the development of a lining membrane, for the fibroid material thrown out for the protection of the lung becomes the wall of the cavity when the original consolidation has been softened and removed. The more quickly this change is completed, so much more favourable will be the prospects of the case. Too frequently, however, owing to the progressive crumbling of caseous masses, and to the coalescence of neighbouring caverns or cavernules, a limiting membrane is slow to be developed, or is carried away by the rapidly advancing wave of destruction. This formation of large cavities by a progressive encroachment is clearly to be distinguished from the excavating process in caseous pneumonia, where, large tracts having been simultaneously involved in consolidation and lost from the first for the purposes of respiration, disintegration may proceed to an extraordinary extent without entailing additional strain upon the system.

The absence of a limiting membrane in cavities usually implies that the excavating process is not completed; and that, actively or slowly, decay is progressing, laying bare successive strata of consolidation, and not infrequently exposing the calcified remains of earlier disease. The expectoration of chalky particles gives us a proof of tissue-destruction occurring in a fibrotic district, just as the detection of elastic fibres in the sputum points to the softening of a tissue where pulmonary changes bear a more recent date. In all these cases, in which cavities are formed, the surrounding tissue is caseous, fibrotic, or pneumonic, and is doomed, wholly or in part, to destruction. The line of demarcation has not yet been drawn; and too often, as in surgical gangrene, it fails to be drawn before the powers of life are exhausted.

It is, however, in the *mature* cavities that centre our chief interest and our hopes of successful treatment. I would again refer to the vomicae surrounded by well-defined capsules, and developed in the abrupt manner to which I have alluded. The wall of such a cavity usually presents internally a pyogenic lining, and externally it is provided with a substantial fibroid coat. Owing to the suddenness with which it is relieved from internal pressure, and to the spongy character of its environment, the capsule is placed under extremely favourable conditions for contraction. A large proportion of the healed cavities are to be reckoned to this class. This happy termination does not, however, obtain in every case. The capsule alone may fail to contract, and, after a varying period of suppuration, may assume the character of a chronic abscess.

I agree with Dr. J. H. Thompson in thinking that a large proportion of these well-defined capsules are cavities of the first origin in the morbid process. I shall have occasion to show when I meet you in the reasonable degree of fibrous action set up at the periphery of the deposits of blood in the lung. It may be more fully observed that, in simple bronchiectasis, the "retracted" character of the cavity was the full energy of a tissue thoroughly healthy as yet; hence the sharp transition, in the walls, between the soft, spongy tissue of the cavity and the capsule. The capsule is another representative of the contractility by their pigmentation and by the radiating puckering which invariably occurs at their margins.

Whether originating in a tubercle, or in a bronchus, the cavities of maturity are of a similar wall, and the same process is free from added disease. The following is roughly the aspect presented by a cavity in this stage. Internally, the surface is lined with a granular membrane, often of a purplish thickness, but, in other cases, presenting little more than a redness, the colour of a fresh trout. In either case, it is readily detached, and exposes a red layer, which constitutes

the inner or vascular portion of the capsule, the outer portion of which it purely fibrous. The relative thickness of these three coats varies according to the age of the cavities, and to the degree of irritation under which they may be placed.

1. *False Membrane*.—Most cavities are for a time the seat of a supuration which gradually diminishes, and ultimately ceases, unless called into renewed existence by some fresh irritation. During this suppurative stage, the innermost lining of the cavities presents pyogenic characters; but, at all other periods, it can more aptly be designated as a necrotic layer. If examined under the microscope, it is found to consist mainly of caseous particles and of decaying cells, and to be merely an exfoliation from the inner surface of the cavity wall. In this particular, the wall of a vomica is comparable to the wall of the medullary cavity of bone, for it sheds its waste products internally, and acquires thickness from without.

2. *Fibro-vascular Layer*.—The real gauge for the activity of a cavity is given in the state of the vascular layer, which, in irritative conditions, becomes extremely congested. The remarkable polish of this surface, and its uninterrupted continuity with the surface of the air-tube, have often deluded observers into mistaking the cavity for a bronchial dilatation. The smoothness, the firmness, the bright arterial hue, are the same as naturally belong to the bronchial membrane; and had we trusted to the naked eye alone, we must have concluded, with some eminent observers, that, far from being rare, bronchiectasis is among our most common diseases. But the specific constituents of the bronchial tube are not continued into the cavity. The mucous membrane, with its epithelium and its characteristic limiting structure, is stretched for a short distance over the infundibular entrance into the cavity, but it is ultimately thinned away. Scattered islands of mucous membrane, it is true, may be noticed where outlying bronchi have been intersected by the cavity-wall; and to the continued activity of these bronchial segments is doubtless to be ascribed a great proportion of the secretion commonly referred to the latter; from islands of this nature were probably obtained the cells which have been adduced as evidence of the bronchiectatic nature of cavities formed in tubercular tissue. With the progress of time, the thickness of the vascular layer is gradually lessened, its exposed surface becomes more tolerant of irritation, and the secretion less abundant, whilst the fibrous membrane acquires increasing strength.

In comparatively rare instances, the lining of the cavity becomes purely fibrous, and the space is ultimately encircled by a continuous layer of wavy fibres. The diagram which represents this somewhat unusual condition was taken from a case of chronic apex cavity. More commonly, the fibres are interrupted and intermixed with a varying proportion of vascular tissue; but, in all cases, this layer is in contact with a fibro-nuclear zone, which becomes denser and more fibrous on the cavity side, whilst its outer boundary is lost in the spongy substance. Invariably, also, lymphatic spaces are enclosed in the meshes of the fibrous layer; they are readily identified, owing to the pigment-particles which they usually contain.

I would call attention incidentally to a peculiar appearance, not hitherto described, presented by cavities of old standing, which have reached the pleural boundary. In these I have often noticed a fine fasciculation, closely resembling the muscular coat of an intestine from which the peritoneum has been detached. The fasciculation appears to consist mainly of fibrous tissue; it is striking only in respect to the arrangement of the fibres, which is almost invariably horizontal. Having found the same appearance in the lining membrane of an empyema, I do not look upon this formation as special to pulmonary cavities, but more probably referable to the pleural membrane.

The chief features of the walls of cavities in phthisis are briefly the following:

1. Absence of protecting epithelium.
2. Gradual decay within, leading to the formation of a necrotic layer (pseudo-pyogenic).
3. Gradual fibroid growth from without, constituting the so-called capsule.

I have made it sufficiently clear that, by whichever process produced, the cavity-membrane is never a separable entity, but a surface-induration. Loose capsules have been described by Dr. Reginald E. Thompson as due to the retraction of a layer of blood which originally adhered to the cavity-wall. For such an appearance, I can conceive but two other explanations: either the loose capsules must be due to a pulmonary aneurysm which has expanded into a cavity, and furnished it with an accurate internal lining; or we must imagine the unlikely event of the necrotic zone special to the cavity having been shed in its integrity, and in a layer of considerable thickness.

The eminently practical classification of cavities given by Dr. Douglas Powell in his book *On Consumption* (second edition, page 102), is based upon the pathological states of the cavity-wall. Cavities are divided

into four classes: (1) the recent; (2) the quiescent; (3) the secreting; (4) the active or ulcerous. As expressions of various phases of development and of morbid action, this nomenclature is complete, and it corresponds to equally well defined clinical states.

From a different standpoint, that of anatomical description, I would propose, side by side with this useful division, the following classification of cavities:

1. Cavities devoid of limiting membrane: in these excavation takes place by a crumbling in the dry variety, by a liquefaction in the moist variety. The usual type is the moist. Reaction is at a minimum, and disintegration often overtakes the fibroid zone before it has become a protection to the tissue. *Special subvarieties*: *a*. Suppurative necrotic form, commonly present in acute phthisis, where it is apt to occasion pneumothorax; *b*. Simple liquefaction, apparently from soakage, most frequently witnessed in compressed devitalised tissues when attacked by oedema; *c*. Ichorous ulceration, observed in the rigid and sinuous burrowings of indurative chronic pneumonia.

2. Cavities possessing a distinct capsule in the midst of spongy lung-tissue: excavation is due to limited caseous abscesses, frequently also to the softening of hæmorrhagic foci.

3. Chronic cavities with thick lining, continuous, with more or less induration, partly inflammatory, but chiefly due to collapse.

4. Chronic cavities with thick lining, surrounded by a rim of tubercle.

[To be continued.]

ABSTRACT OF LECTURES

ON THE

MORPHOLOGY OF THE MAMMALIAN SKULL.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,

Hunterian Professor of Anatomy in the College.

LECTURE III.—ON THE SUPERFICIAL CARTILAGINOUS SKELETON:

LABIAL, ORAL, AND PHARYNGEAL; ON THE LIMBS; AND ON THE DERMAL (BONY) SKELETON.

THERE are certain parts of the vertebrate framework which cannot be classed with the endoskeleton; these are both cartilaginous and osseous. The former are usually developed in the lower types, and are manifestly archaic; they seem to represent elements which probably formed the principal part of the skeleton in types which we must suppose to have existed as the precursors of our present vertebrates.

The most simple and primitive of these parts are the barbels or oral palpi. Next to these come the cartilage formed in the substance of the lip, and the separate cartilaginous valves lying around the openings of the nasal capsules. The proper lip-cartilages evidently represent the proximal ends of barbels, which have more or less lost their distal parts. All these cartilages are classed together as labials.

In *Amphioxus*, the main skeletal parts are a fringe of labial palpi which surround the mouth. In the most abortive forms of fishes—*Myxine* and *Bdellostoma*—there is no proper suctorial mouth; but that opening is surrounded by barbels, which have a cartilaginous pith with a broad base. Instead of the detached nasal valves, which we find in *Selachians*, *Anura*, etc., these *Myxinoids* have a long passage leading to their single nasal aperture which is supported by a series of rings of cartilage, imperfect below, forming a structure very much like that of the mammalian trachea.

In the next form above these, the lamprey, in its larval condition as an *Ammocete*, we have a very simple myxinoid condition, there being no suctorial disk; the mouth is surrounded by palpi, but there is no trachea-like prenasal tube. In the adult lamprey, the skeleton—which is composed entirely of cartilage—is mainly superficial. There is a very perfect suctorial mouth, surrounded by one solid ring of cartilage. This latter, which is a lower labial, has another median T-shaped piece behind it, and a styloid cartilage on each side. It is surmounted above by a large median shield-shaped upper labial, and a styloid and a subrescent piece behind this. The visceral arches in this type are only partially differentiated from the basis cranii; there is no proper mandible, but an immense lingual cartilage in the floor of the mouth represents the basi-hyo-branchial. These, and the imperfect neural arches, constitute the whole of the proper endoskeleton; but a large and highly complex basketwork of soft cartilage encloses

once in a hundred times; *d. Siles* in the trachea are but seldom heard; *c.* Instead of six or eight ounces of ether being used in a short operation, and sixteen to twenty in one lasting an hour or an hour and a half, half an ounce or less suffices for a short operation (such as "sphincter-stretching" or "iridectomy"), and two to three ounces for an operation of an hour's duration, such as colotomy or excision of a *carcin.*

10. The administration of ether by inferior methods is still too common, and was until recently prevalent in some of our larger hospitals.

11. Even with Ormsby's or Clover's inhalers, there is an infinite variety of skill in different etherists.

12. In order to become a good etherist, the administrator must *study how* to give ether, must *watch* the patient *attentively* whilst giving it, and during the earlier inhalations must *very carefully and judiciously adjust* the anæsthetic to the sensations of the patient.

13. A careful, attentive student, with tact, and not hard and unfeeling, can easily and in a short time be taught to give ether properly.

Since the adoption of Clover's inhaler, I have had singular freedom from anxiety about my anæsthetics—far greater freedom than in the previous period, when I had to depend upon chloroform.

Finally, I would say that this favourable opinion of ether is based upon my experience of its use by a series of very able administrators—some in the Leeds Infirmary, others whilst acting as my private clinical assistants. Speaking as a looker-on, rather than as an administrator, I should say that the chief points in the right administration of ether are: first, to overcome the nervous dread of the patient by applying the mouthpiece only; then to turn on the ether gently, until the glottis becomes tolerant and the patient is slightly unconscious; lastly, to complete the anæsthesia rapidly. In advising beginners, I compare the regulation of the quantity of ether to the "curve of harmonic progression".

PERCUSSION AS A THERAPEUTIC AGENT IN NERVOUS DISEASES.

By J. MORTIMER GRANVILLE, M.D.

WITH the cognisance of the leading physiologists and neurologists in England and on the Continent, I have for some years past been employing carefully graduated and precisely applied percussion as a therapeutic agent in the treatment of nervous diseases and disturbances, on a principle of which the following statement, published by me in February 1881, may be taken as a brief exposition.

"As far back as 1862-3, I was, in the course of certain clinical studies of mental and sensory phenomena, induced to believe that many forms of the sensation we call "pain" were, in fact, unnecessary, and might be interrupted by appropriate mental and physical methods and appliances. My first observations were made in connection with the paroxysmal or recurrent pains accompanying the uterine contractions in the natural process of parturition. On May 4th, 1864, Dr. Graily Hewitt was good enough to communicate the results of my experiments and to show certain apparatus, to the Obstetrical Society of London. In a paper On the Application of Extreme Cold as an Anodyne in the Pain attendant on Parturition, a short abstract of which will be found in the *Lancet* of July 9th, 1864, I contended that the sensations of pain experienced by the parturient woman were not invariably synchronous with what, for want of a better name, we term the "pains" of her labour; and from this and other premisses—for example, the circumstance that the sensation is commonly "referred" to some region more or less remote from the contracting uterus, or the dilating external passages, in which the real seat of the pain might have been supposed to be located—I deduced that the pain attendant on labour is neuralgic in its character. I had constructed small boxes or chambers of such sizes and shapes as to admit of their being conveniently applied to the supposed seats of the pain. These were filled with freezing mixture, and the effect of sudden contact in some thirty cases was to arrest the sensation of pain without in the least degree lessening the force of the uterine contractions. The experiment was, of course, simply interesting as bearing on the nature of the pain, as this process was too troublesome to admit of its adoption in practice; albeit some of the persons on whom I had the opportunity of trying my method experienced such striking relief that, on subsequent occasions, I believe they asked that the measure might be repeated. Having thus far persuaded myself that this form of pain was neuralgic, and that if the nerve affected could be strongly impressed, so as to change its *state of irritation*, the pain would cease, I proceeded to try the effect of rapidly tapping the skin over the fifth

nerve in ordinary facial neuralgia with a Bennett's percussion hammer, using the ivory pleximeter as a shield. The results obtained by this method were very remarkable. Still, I simply thought of arresting the morbid action by shock. Later on—it is only possible to sketch the outline of the inquiry—I was led, by the light thrown on Newton's doctrine of concords and discords by Grove's generalisation as to the correlation of forces, and, more recently, by Professor Tyndall's beautiful series of experiments with sensitive flames and musical burners, to believe that the results of the tapping were not, like the interruption with shock produced by the sudden application of cold, due to a mere arrest of the painful state of irritation into which the nerve had been thrown, but were, in fact, brought about by the extinguishment of some morbid—that is, either inordinate or disorderly—set of vibrations by the superimposition of another, incompatible or discordant, set of vibrations mechanically produced. With this notion, I set to work to devise an instrument which should give a known number of blows per second, and thus admit of this new phase of the inquiry being pushed further....

"The sensation produced by the application of the instrument over a healthy nerve, so situated as to be readily thrown into mechanical vibration, closely resembles the effect of a weak dose of the interrupted current of electricity, and if it be prolonged the vibration will extend its area, exciting first formication or tingling, then a sensation of numbness, and finally some twitching of the superficial muscles. A nervous headache, and even migraine, may be induced by the application of the percuteur to the frontal ridges or the margins of the orbit. By the interposition of a thin plate of metal, or even stiff paper, the vibration may be readily propagated through a considerable region of the surface of the body, and in time the deeper muscles will frequently begin to act. I have even produced an involuntary movement, not unlike tendon-reflex, by applying the percuteur for some time over the ligamentum patellæ or the margin of the patella. Still more notable has been the fact that, by laying a sheet of paper over the abdomen, and moving the percuteur slowly in large circles round the umbilicus, the intestines have seemed to be excited to vermicular movement, and the bowels commenced to act. These results have not been constant, but have occurred with sufficient frequency to indicate that the experiments already made are worthy to be repeated....

"I will take leave to say that I think these results go to support my theory that it is by the introduction of discord into the rhythm of the morbid vibrations of the painful "state" the change which brings relief in neuralgia is effected. To apply the percuteur with a high rate of blows per second will aggravate the morbid state when that is itself a series of rapid vibrations; and in the same way a low speed of percussion increases, instead of relieving, the pains of a low-pitched and slow "boring" or "grinding" sensation. Acute or sharp pain is, I believe, like a high note in music, produced by rapid vibrations, while a dull, heavy, or aching pain resembles a low note or tone, and is caused by comparatively slow vibrations. A slow rate of mechanical vibration will, therefore, interrupt the rapid nerve-vibration of acute pain, while quick mechanical vibration more readily arrests the slower. The aim—if I am right in my conjecture—should be to set up a new set of vibrations which shall interrupt or change the morbid set by introducing discord. This is the principle. Failure in the application of this principle will, I believe, be found to explain the failure to put an end to the pain; and I have, accordingly, set as much scientific value on my failures as on my successes."

My method is, it will be seen from these extracts, based upon the hypotheses (1) that all nerve action, whether normal or morbid, is vibratile; and (2) that it is possible to influence and control abnormal vibrations—in the manner above described—by mechanical vibrations propagated to the nervous structures, in particular directions and at known rates of speed. It is not my present purpose to discuss these hypotheses, or the method in detail; but I am anxious to re-state, and now affirm, certain propositions, founded on experience, which, in previous intimations of the progress and success of my experiments, I submitted tentatively. They are these.

1. I have rarely failed, in a fairly large number of cases—many of them of several years' standing—to bring the cerebro-spinal and, sometimes directly at others in secondary circuits, the sympathetic, ganglia under control, by the application of my percuteur over, or in mechanical relation through the adjacent tissues with, those ganglia.

2. I have in no instance failed to produce activity of the bowels, even in cases of previously obstinate constipation; and in many instances I have succeeded, within a short period, in restoring the periodic evacuation of their contents without recourse to drugs. This success alone places the method on a footing of value in daily practice.

3. I can now, in result of my more recent experiments, propagate the vibrations I produce along the trunks and into the branches of most

of the principal nerves, from their centres of origin, or call them into action, reflexly, through the afferent nerves connected with those centres. In limited paralyses, and even in circumscribed sclerosis, this power is of the highest therapeutic importance.

4. I can nearly always arouse torpid centres to action, and thus pave the way for their restoration to states of normal activity. Since it is physiologically certain that nutrition depends on exercise, and every part of the organism feeds in proportion as it works *healthily*, it is a great thing to be able to act thus directly on the nerve-centres which are the seats of energy.

5. I can subdue the exaggerated reflex irritability of revolting sub-ordinate centres, and replace them under the control of the higher centres, even in cases of lateral sclerosis.

Applying these facts—for such they undoubtedly are—to the needs of special nervous states, the practitioner will have no difficulty in perceiving that my method has great and obvious uses. I am anxious not to overstate the results I am obtaining, but they are such as to show that the physiological process of mechanical vibration is likely to prove a potent agent in the treatment of a wide range of maladies now the most intractable. It will afford me much pleasure to show the process to any medical man who will call on me. It is impossible at present to describe its details in writing; but I will gladly aid anyone in its application. My method has nothing in common with the "muscle-beating" and shaking to which you directed attention in your last issue. It is a system which must be approved and practised by the profession exclusively. Nothing do I so much dread as its falling into unprofessional hands. I have been engaged upon it since 1862, shortly after which date some of the first results were communicated to the Obstetrical Society.

THE USE OF IODOFORM IN THE TREATMENT OF SOFT SORES.

By WALTER WHITEHEAD, F.R.C.S. Edin., Manchester.

IODOFORM appears to be one of the most efficacious drugs in the treatment of the syphilitic non-infecting soft sore, when not unduly inflamed. It has, however, the unfortunate counterbalancing disadvantage of attaching to the patient the liability of unenviable suspicion, and the significant expressions of his companions—the public having become keenly alive to its distinctive and penetrating odour, and having also acquired an appreciative knowledge of the principal purpose for which the drug is most frequently used.

The various attempts which have been made to disguise or modify this peculiar odour appear hitherto to have failed. Tonquin beans, kept in the same bottle with the iodoform, succeed to a certain extent and for a limited time. The beans, however, possess a smell which is regarded by many with equal objection to that of iodoform.

I have succeeded, I consider, in obviating this objectionable feature, without apparently sacrificing any of the therapeutic advantages of the drug, by using it after the following manner. I first very carefully cleanse and dry the sores by means of little pledgets of bibulous paper, and then, by means of a camel-hair pencil, apply freely over the surface of the sores a solution of iodoform in ether. The ether rapidly evaporates, and leaves the iodoform uniformly spread in an impalpable powder over the sores.

To ensure a free application, the latter part of the process may be repeated and allowed to dry. When perfectly dry, each sore is given a coating of collodion, which is allowed to overlap about a quarter of an inch the area of each sore. Before the collodion has had time to dry, a pinch of absorbent cotton-wool is placed on each patch as a protection against the rough contact of clothing. This dressing is allowed to remain undisturbed for twenty-four hours, when the firm film which forms may be gently removed and a fresh coating applied. This treatment is continued day by day until all the sores have quite healed. I have found, on the same principle, and with equal success, that a piece of gutta serena may be substituted for collodion after the application of the iodoform.

By this means, the patient and his associates are spared the disagreeable consciousness of the remedy being employed, whilst the full benefit of the drug is being preserved. A further advantage gained is the protection afforded by the collodion against auto-inoculation, and also against the risk of contagion from others coming in contact with the sores.

The following solution I am in the habit of using has been made for me by Messrs. Manning, Son, and Co., of Manchester, by dissolving one part of iodoform in two of ether; and, in my Lock Hospital practice, where time and economy are of moment, I have the collodion and iodoform mixed together, the formula being iodoform one part, ether two

parts, collodion to ten parts. In the latter solution, the odour cannot be said to be wholly disguised, but it is sufficiently concealed for all practical purposes.

OBSTETRIC MEMORANDA.

TWO OBSTETRICAL CASES.

I was recently sent for by one of our midwives in attendance on an out-patient who was said to be "bleeding profusely in consequence of placenta prævia. On examination, I found presenting, at the brim, a fleshy mass from which there was considerable hæmorrhage. There were scarcely any labour pains, and I passed my hand into the vagina, which was capacious, and had no difficulty in making out that the mass was not a placenta, but a large hæmatoma growing from the vertex of an acephalous monster. I applied forceps, and delivered a very large fetus.

A case of prolapsus uteri has just left my ward at the Samaritan Hospital with the following curious history. When the woman was last pregnant, the uterus came down between the third and fourth month, and could not be returned. The fetus was carried to full term in the prolapsed uterus, "which reached down to the hamstrings", and was not unlike a cow's udder.

Dr. Lowe of Lynn attended the patient, and saw the fetus and placenta pass straight from the uterus, without, of course, traversing the pelvis. The labour was short, easy, and quick. The case suggests the possibility of producing artificial prolapse in certain cases as an alternative for craniotomy and the opportunity afforded of making accurate and interesting observations with regard to uterine contraction during labour.

PERCY BOULTON, M.D., M.R.C.S. Lond., Physician to Out-patients, Queen Charlotte's Lying-in Hospital.

SURGICAL MEMORANDA.

TREATMENT OF TONGUE-TIE.

VARIOUS and elaborate instruments have been adapted by different surgeons for the treatment of tongue-tie (as it is commonly called by the profession at large), by incision. I think the following method preferable and much safer. I pass my right index-finger into the mouth of the infant to be operated on, under the tongue, and press my nail against the frænum till I rupture it to a sufficient extent. So far my cases have turned out quite a success. The plan, I am sure, will recommend itself to all.

J. BRINDLEY JAMES, M.R.C.S., London.

THERAPEUTIC MEMORANDA.

THE TREATMENT OF DIPHTHERIA.

THE note by Dr. F. P. Atkinson is a valuable addition to the means at present employed for limiting the extension of false membranes in diphtheria.

The following combination of the glycerols of tannin and carbolic acid has proved itself, during a considerable experience of diphtheria and scarlet fever, a highly efficient application in my hands, viz.: R Glycerini acidi tannici ʒviij; Glycerini acidi carbol. ʒj. Misce. In the application of glycerine as an absorbent, it is of practical importance (as pointed out some time since in the *Pharmaceutical Journal*) that a small proportion of water should be added to it. In order to secure this, a sufficiency of the glycerine should be placed in a saucer, and a throat-brush dipped in water should first be stirred into the glycerine before applying it to the tonsils and fauces.

The combination above-mentioned has been found practically the most efficient proportion for securing the necessary astringent and antiseptic results, without irritation. An application twice, or at most three, in the twenty-four hours secures the utmost benefit the remedy affords—a matter of importance both to the patient and practitioner, as the former is not fatigued by frequent applications, and the latter can make these personally at the usual visits.

It is seldom that any additional local remedies are required, but it is wise to precede the application of the glycerols with gargling the fauces and washing out the mouth with a solution of permanganate of potash and water, and to use the sulphuric acid spray; the double advantage which follows being, that the fauces are the better prepared to benefit from the glycerine, and that the safety of the practitioner is increased in the event of the patient expectorating any false membrane during the act of swallowing. To further increase the safety of the medical attendant, a glass screen, placed between him and the patient, will afford protection without limiting the efficiency of the procedure.

H. CRIFFS LAWRENCE, L.R.C.P. Lond., etc.

REPORTS

OF
MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

RICHMOND HOSPITAL, SURREY.

CASE OF LACERATION OF THE INTESTINE INVOLVING ITS WHOLE
CIRCUMFERENCE: DEATH IN TWENTY-TWO HOURS.

(Under the care of Mr. F. CHAPMAN.)

[FOR the report of this case we are indebted to Mr. LEONARD P. MARK, House-Surgeon.]

H. P., aged 21, a slenderly framed youth, was hurrying along in the dark on February 18th, at 8 P.M., when he ran up against an iron post placed in the middle of a narrow alley, and "had his wind knocked out of him".

When admitted soon afterwards, he complained of great pain in the epigastrium. No bruising nor fracture of ribs could be detected. His extremities were cold. Pulse 100, very weak. He vomited several times, but later on was able to keep down some hot milk and brandy-and-water. He passed a very restless night, but in the early morning his condition was somewhat improved. Pulse 90; temperature 97°. He was quite conscious, and able to give an account of himself. He took some beef-tea and milk, and at 11 A.M. passed a little urine for the first time since the accident. It was high-coloured, but normal. At 12 o'clock, he became rapidly collapsed; the abdominal muscles were rigid; and the face and hands livid, but not blanched. He gradually sank, and died at 6 P.M.

Post mortem examination showed that the small intestine had been torn completely through twelve inches below the pylorus, where it crossed in front of the spine. This had apparently been caused by its being violently crushed between the iron post and the vertebral column. There was some bruising, and some slight hæmorrhage into the cellular tissue in front of the spine. Only a few particles of the contents of the intestine had escaped into the peritoneum. It was interesting to notice about the rupture, how the muscular coat of the intestine had retracted, allowing the loose mucous membrane to spread outside it for about half an inch, putting one in mind of the sleeve of a coat over which the shirt-cuff had been turned back. General peritonitis had already set in. The serous coat of the anterior coils of intestine were highly injected, and some of them were slightly adherent. All the other organs were uninjured. There were no external signs of injury.

WESTERN INFIRMARY, GLASGOW.

COMPOUND FRACTURE OF THE TYMPANIC PLATE BY INDIRECT
VIOLENCE.

(Under the care of Professor GEORGE BUCHANAN.)

[Reported by ANSTRUTHER DAVIDSON, M.B., C.M., House-Surgeon.]

MR. JORDAN LLOYD of Birmingham quotes, in the *BRITISH MEDICAL JOURNAL* of February 11th, two cases of this kind. The rarity of this accident induces me to detail a case coming under observation since reading his article.

P. G., aged 14, rivet boy, was admitted on February 14th. He had fallen into the hold of a vessel, a distance of twenty-five feet, his chin in his descent striking a wooden beam placed half-way down the hold. When picked up, he was slightly stunned; he was seen shortly after by a medical man, who, suspecting fracture of the base of the skull, sent him to the Infirmary, where he arrived about one hour after the accident. He was then quite conscious. Across the base of the chin was a wound, two inches long. In front of each ear was a puffy swelling, painful on pressure. From the right ear, bright red blood flowed in considerable quantity. This blood being cleared away, pressure on the swelling over the condyle caused blood to well out of the meatus. A probe passed in plainly revealed, about three-fourths of an inch from the meatus, a bit of bare bone, which was projecting a little way into the middle ear, at its anterior and lower border. A shred of the lining membrane, torn by the broken fragment, could be seen floating on the issuing blood. There was no hæmorrhage from the left ear. Most careful examination revealed no crepitus on the fractured side. The jaws were about three-fourths of an inch apart, and any attempt to approximate them caused great pain; the lower jaw was placed much behind the upper, the recession being most marked on the right side. The blood continued to ooze all night and a little next day. Dr. Barr,

dispensary aural surgeon, examined the ear on the day following. The swelling in the canal, and the pain caused by examination, prevented inspection of the membrana tympani; hearing was dull on the right side.

REMARKS.—The history of this case leaves no doubt as to there being a compound fracture of the tympanic plate; and, in most points, the similarity as to causation and symptoms, between this case and those of Mr. Lloyd, reported in the *BRITISH MEDICAL JOURNAL* of February 11th, 1882 (page 190), is very striking; but, with this important difference: that, besides being compound from the beginning, this lad was unable to close the jaws, probably on account of the impaction of the right condyle against the fractured tympanic plate. There was certainly no dislocation. The fracture was exactly in the situation of the tympanic plate, at the anterior and lower part. A study of the normal parts does not favour the possibility of such a fracture of the articular part of the glenoid fossa, as there intervenes between the condyle and the fossa an articular plate, capable of greatly influencing the force of the shock. To produce this fracture, the posterior part of the condyle must come in contact with the tympanic plate—a condition favoured by the size of the angle of the jaw at this age, which would throw the direction of the force further back than is possible in the adult. The case was evidently not one of fracture of the base, as there were no head symptoms, and the blood was seen to come from the fractured part; further, the blood was bright red, and not of the darker colour seen in fracture of the base.

The profession is indebted to Mr. Lloyd for calling attention to this form of accident, and to the liability of its being mistaken for fracture of the base, as occurred in this case; but he is incorrect in supposing that no such case had been previously recorded, for at page 25 of *Lehrbuch der Ohrenheilkunde*, the occurrence of such accident is commented on by Dr. A. von Troltsch.

ROTUNDA HOSPITAL, DUBLIN.

A CASE OF PARTIAL OCCLUSION OF THE VAGINA.

(Under the care of Dr. LOMBE ATTHILL.)

[Reported by Mr. U. K. DUTT.]

MARY R., aged 24, married, was admitted into the Gynecological Department of the Hospital on January 10th, 1882. She stated that her health had always been good, but that menstruation had been, from the first appearance of the discharge, more or less painful; and it had become much more so since her marriage, five months previously. For the first few hours of each period, the pain was only slight, gradually becoming more and more intense, and lasting not only during the whole time that the flow continued, but also for a day or two subsequently. The pain was most severe on the back and above the pubes. Sexual intercourse had always been painful, and of late could not be borne; and it was for the relief of this condition specially that she sought admission into hospital. The breasts and labia were well formed; but, on making a vaginal examination, the finger penetrated to the depth of only an inch and a half, and neither os nor cervix uteri could be felt; but, through the rectum, the uterus could be distinctly made out. On introducing a speculum, the vagina was seen to terminate in a smooth *cul-de-sac*, in which two small orifices could be detected, one on each side, so minute that the point of a probe was, with difficulty, inserted; the probe passed to the depth of an inch from these orifices, and could be moved freely about. The cause of the dysmenorrhœa was now evident. The vagina was occluded at its upper third, and the menstrual discharge could only pass with great difficulty through the two small openings which existed. But it was still doubtful whether the vagina was closed by a membrane, or atresia of the canal existed in its upper third. The probabilities, however, were in favour of the former.

January 13th. The bladder and the bowels having been thoroughly emptied previously, the patient was brought fully under the influence of chloroform. A duck-bill speculum being introduced, and the perineum drawn back, a probe was now passed by Dr. Atthill through one of the small apertures already mentioned, a sharp-pointed knife introduced alongside it, and the opening cautiously enlarged, the edge of the knife being kept towards the centre of the canal. A finger being now introduced, the vagina was found to exist perfect above the thick and dense septum, and the os uteri could be distinctly felt. The edge of the septum, which was dense and muscular, was seized with a tenaculum, and a considerable portion of it cut out with a pair of blunt-pointed scissors. Very little bleeding followed, any which did occur being checked completely by the introduction of a plug of cotton saturated with glycerine. No constitutional disturbances followed. The only treatment adopted for the next few days was to introduce the finger into the vagina, so as to keep the raw surfaces from uniting. The

time, the shaven hairs never grew, and the alopecia became complete. The eyebrows and eyelashes were also then permanently lost. His daughter, now aged 13, became the subject of the disease eighteen months ago. After nearly the whole of the hairs had disappeared from the scalp, they grew again, but were now white. Recently, the white hairs began to fall out rapidly, and some parts became entirely bald. The disease was, for the present, again arrested, and downy white hairs were coming. A sister, aged 11, has a small patch near the nape; and a brother, aged 7, has two patches on the occiput; in both children, the alopecia being observed early in January of this year. The three children lived together, and used the same towels, combs, and brushes.—Mr. JONATHAN HUTCHINSON thought the cases were of great interest. He had brought forward a similar series of cases many years ago. At that time, he had been convinced, and he thought he had convinced most members, of the existence of a fungus; he had seen many cases apparently due to infection.—Mr. BALMANN SQUIRE had known a public school in which several cases of alopecia areata occurred within a short time, apparently due to contagion transmitted by the caps.—Dr. CROCKER had met with several cases in which there appeared to be a contagious agency; but it was impossible to deny that, in some cases, the cause seemed to be neurotic—so that, if there were a parasitic alopecia areata, it was necessary also to admit a non-parasitic variety.—Dr. CROSBY thought that similarity of occupation might explain some of these cases of apparent contagion.

Case of Radical Cure of Inguinal Hernia.—Mr. DAVIES-COLLEY, who exhibited the specimen, stated that it had been removed from the body of a man who, about eight years before death, had undergone the operation for the radical cure of hernia, by Mr. Wood, at King's College Hospital. For five years the operation was successful, but then the hernia began to give trouble, and finally strangulation occurred; an operation then gave complete relief, but three years later he died of acute peritonitis, due to perforation of the duodenum. The tunica vaginalis was obliterated, and the structures about the inguinal canal were matted together. Mr. Davies-Colley, where feasible, was in the habit of stitching together the two walls of the sac, so as to obtain firm union; this procedure had been quite successful in this case.—Mr. WOOD said that the hernia in this case had originally been very large, and there was a congenital history. The history of the case demonstrated that an effectual fibrous boundary can be formed by his operation. Congenital hernia he had found less susceptible to cure than other kinds, and in these cases he now invariably removed the sac; the use of antiseptic precautions enabled this to be done with little risk. The cure was, he believed, due to the union of the sides of the inguinal canal; it was most important to get the conjoined tendon adherent to Poupart's ligament, otherwise a channel might be left. He found, as a rule, that if the cure remained for two years, it was permanent.

Microscopical Preparations of Alopecia Areata.—Dr. DUCKWORTH described, for himself and Dr. HARRIS, the microscopical sections exhibited. The skin was obtained from the scalp of a boy who had died in St. Bartholomew's Hospital. There had been two recoveries from, and two attacks of, the affection during nine years; the patient had also suffered from chorea. On examination with a low power, there was seen to be atrophy of the hair-follicles, increase of the fibrous tissue in that region, and atrophy of the sebaceous glands. No parasitic elements were discovered; there was a new cell-growth about the hair-follicle, opening up into the papillary elements of the skin.

Card Specimen.—Mr. A. E. BARKER showed a specimen of fracture of the condyle of the femur.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 24TH, 1882.

J. LISTER, D.C.L., F.R.C.S., F.R.S., President, in the Chair.

Aneurysm of the Ascending Aorta.—Dr. COUPLAND read the report of the committee appointed at the last meeting of the Society, from which it appeared that the case was one of sacculated aneurysm, with some regurgitation through the aortic orifice.

Swallowing an Ear of Rye-grass.—Mr. GODLEE read the notes of a case occurring in the practice of Dr. Rudyard of Watford, in which a child, aged 2, had swallowed an ear of rye-grass, which had made its exit through a small opening in the back on the left side, between the sixth and seventh ribs, three inches from the spine. The grass was shown at the meeting. The patient had suffered in the meantime from spasmodic cough; but, as the grass was supposed to have passed by the bowels, the two facts were not connected by the mother. The interval of time between swallowing and the extraction of the piece of grass was altogether forty-three days. Mr. Godlee thought that the grass had

probably entered the oesophagus, and not the trachea, and the cough depended upon some little pleurisy. Reference was also made to a case, the notes of which were supplied by Mr. R. W. Parker, of a child who swallowed a piece of grass, which made its emergence through an abscess, which was set up in the left side, having a distinctly fecal odour. The analogy between these cases and those of needle-swallowing was pointed out; and a case of the latter was referred to, in which a large number of needles had been found by Mr. Godlee *post mortem* in various parts of the body, where they had excited little or no inflammation.—Mr. GOLDING-BIRD related the case of a girl, eight years old, who swallowed an ear of rye-grass, which was discharged, about a year after being swallowed, through an abscess which formed under the left breast. The girl had then recovered.

Acute Perforative Pneumothorax, terminating in Complete Recovery.

—Dr. GEORGE JOHNSON read a paper on this case. A schoolboy, aged 17, ran in a paper chase about twenty miles, and was so fatigued that he fell down exhausted. The two following days, he was quite well; but, on November 5th, after running upstairs, he was suddenly seized with pain in the left side, urgent dyspnoea, and great prostration. He was sent to bed, and in four or five hours the distressing symptoms had ceased; but, on the following day, Mr. Wharton of Gosport found all the physical signs of pneumothorax. On November 14th, his father took him to his home at Woolwich, where, on the 15th, he was seen by Dr. Johnson, in consultation with Surgeon-Major Godwin. He was in bed, but declared himself quite well. Pulse 60, respirations 24, temperature 97°. The left side of the chest was nearly motionless, and over-resonant everywhere except in the interscapular region, where it was slightly duller than at the corresponding point on the right side. Over this space there was a feeble respiratory murmur; but elsewhere, over the whole left side, there was distinct amphoric blowing, with occasional metallic tinkling, and amphoric echo of the voice and cough. There was no evidence of liquid in the pleura; no dullness at the base, nor splashing succussion-sound. The heart was felt and heard distinctly beating to the right of the sternum. With rest in bed and simple diet, the physical signs gradually changed. On November 27th, Dr. Godwin reported more movement on the left side; cessation of amphoric blowing and metallic tinkling; some respiratory murmur on the left side of the spine; the heart's impulse to the left of the sternum; the general health excellent. On December 23rd, Drs. Godwin and Stevenson jointly found vesicular murmur over the whole left side, and the heart in its normal position. On January 4th, he was brought to Dr. Johnson, who found that the only difference between the two sides of the chest was a doubtful flattening and diminished respiratory movement in the left subclavian region. He had since gone back to school; and Mr. Wharton wrote that, "so far as he could determine, he had perfectly recovered of his pneumothorax." In explanation of the perforated pleura, it was stated that, two years ago, he had a chronic cough; and it was suggested that, as a result of some structural change in the apex of the left lung, the pleural surfaces had become adherent, and that the adhesions were stretched and torn by the violent exertion, so as to cause a rent in the texture of the pleura. Then, as there was no purulent or other morbid secretion which, by escaping into the cavity of the pleura, would excite inflammation and suppuration, the ruptured pleura was soon repaired, the air was gradually absorbed, the lung again expanded, and the heart resumed its normal position. Reference was made to a case published by Dr. Stephen Mackenzie (*Lancet*, vol. ii, 1871, page 259). A man, aged 50, had sudden pneumothorax, resulting, as was supposed, from the rupture of an emphysematous air vesicle. The air was drawn off by an aspirator, and the patient made a rapid recovery. Three cases of recovery from simple pneumothorax had also been recorded by Dr. Wilks (*BRITISH MEDICAL JOURNAL*, vol. ii, 1874, page 770). In none of these three cases was any operation performed.—Dr. DOUGLAS POWELL thought the termination was fatal in these cases because they often occurred in advanced stages of phthisis. When pneumothorax occurred in the earlier stages, it often distinctly retarded the advance of the disease; and the occurrence of effusion on the chest, the result of pneumothorax following phthisis, had often distinctly arrested the phthisis on that side.—Dr. F. TAYLOR mentioned a case similar to Dr. Johnson's. A young man had slight pleurisy, with symptoms of hydro-pneumothorax on the left side. The symptoms improved, and the area which had been too resonant came to have the ordinary resonance of lung-tissue. He was perfectly healthy before the attack, as far as could be known. Could acute pneumonia have produced the pneumothorax? It was not stated in the text-books to be capable of doing so.—Mr. PEARCE GOULD spoke of a case of pneumothorax which happened in a boy who had been run over. He had no broken rib. The pleura was tapped; air escaped with a loud noise, followed by a few drops of blood. The lung expanded again, and in a week the thorax had quite recovered (*Lancet*, "Mirror", 1881, vol. ii).

—Mr. HOWARD MARSH mentioned two cases of traumatic pneumothorax. In one case, that of a man run over by some heavy conveyance, who was almost moribund from collapse of the lung and pneumothorax, a hydrocele-trocar was passed into the thorax between the ribs; a puff of air then came out, and the man was relieved, but eventually died, and the lung was then found to be quite torn from the trachea. In a second case, that of a woman who fell on alighting from an omnibus, and died with pneumothorax, only rupture of the pleura was found, without fracture of a rib. A case of the kind had been also mentioned by Dr. A. S. Taylor, in which pneumothorax had been produced by severe direct violence.—Dr. TYSON (Folkestone) mentioned a case of chronic ulcer of the leg, with pyæmia, and pneumothorax of the right lung.—Dr. COUPLAND considered that case might be one of abscess of the lung rupturing into the pleura. He mentioned also the case of a young banker's clerk who had overtaxed himself in walking to the City, and who the same day was found to be suffering from pneumothorax of the right lung. In a fortnight or three weeks, the lung re-expanded. There were, meanwhile, some symptoms of slight effusion into the chest. A young woman had hydro-pneumothorax, which was tapped, and she died. The condition was in that case probably due to early tubercular ulceration. How many of such cases recovered?—The PRESIDENT thought the case suggestive of the trouble often seen from fracture of the rib, in which the pneumothorax might easily be fatal. The mere entrance of air into the pleura was not of itself very serious, unless the pneumothorax became great and bulged the other lung. As an experiment to exemplify this overdistension to a surgical class, a lung from a butcher's shop might be taken, its pleura wounded, and a syringe fitted into the bronchus. If the piston were then forced down, air escaped by the pleural wound; but, upon the drawing-up of the piston, air did not return. The surface of the lung, instead, was sucked inwards; for the wound of the pleura was a valve-wound, letting air pass out, but not in. By ordinary inspiratory efforts in cases of pneumothorax, air was forced into the pleura.—Dr. G. JOHNSON thought the amphoric blowing was due to the passage of air from the lung into the pleura. If the aperture became closed, the amphoric blowing ceased. In a case published by him in the BRITISH MEDICAL JOURNAL in which the amphoric blowing ceased, he had said the aperture would be found covered with lymph, as was discovered to be actually the case after death. In another case in which there was an aperture externally, the amphoric blowing ceased when the opening was covered. His opinion was that, if pneumothorax occurred in a case of phthisis, it rather hastened the case, in consequence of the suppuration set up in the chest. In the conditions of pneumothorax, he thought there must be some air passing out of the pleura; otherwise the distension of the chest would become enormous. In pneumothorax, there was a difference of atmospheric pressure on the two sides of the chest; and the displacement of the mediastinum to the other side was an exact measure of the difference of the pressure.

Case of Aphakia Venien.—Mr. W. SPENCER WATSON read the sequel to such a case. The right eye having been sclerotomised five years ago, the result was reported to the Society in 1880 as being perfectly satisfactory. Premonitory symptoms were then showing themselves in the left eye; and in June 1881 Mr. Watson operated by sclerotomy on this eye also. The result was not so good as in the right eye, but it was tolerably good. The use of eserine before the operation and after it had been very advantageous. There was a slight contraction of the pupil in this patient; and Mr. Watson, having observed the same condition in other glaucomatous cases, was inclined to regard the contraction of the two conditions as throwing some light on the pathology of glaucoma, and as indicating that an atrophic hardening of the sclerotic coat of the same kind as the shrinking of the palmar fascia might be the initial stage of the disorder. Further proof, however, of this was necessary before the theory could be accepted as proved.—Mr. G. LEVISON had tried sclerotomy instead of iridectomy; but in the former there was so often an entanglement of the iris, while the results of sclerotomy were in no respects better than those of iridectomy. In sclerotomy, he knew of no operation in surgery more successful than iridectomy. In chronic glaucoma, he thought the better operation of iridectomy was of much use. Mr. McHardy was about to tell the Society he had entertained of the value of iridectomy as a means of relieving glaucoma, but he had not time. In chronic glaucoma, he thought the best result was reached by submitting the patient to iridectomy as a permanent cure. He mentioned the case of a young man, aged 25, who had been blind for a long time, with chronic glaucoma. At that time, nearly total blindness of the right eye, and much blurred vision of the left eye. The former eye was treated with a sclerotomy, and the result was no anterior chamber, and four hours afterwards the patient was blind, and the eye was enucleated.

Mr. Bowman decided to advise iridectomy instead of sclerotomy in the case of the left eye also. Iridectomy was consequently performed, and the patient went on well for nine days; but the glaucoma returned, the eye bulged, and the eye had been lost.—The PRESIDENT said Mr. Watson's case was a successful one of sclerotomy; and such success was due to the relief of tension. The fluid once let out did not return. Fluid *in situ* in the body kept up nervous excitement; the fluid being let out, the nervous excitement abated.—Mr. WATSON had not brought forward the case as one illustrating the advantages of sclerotomy over iridectomy, but to show that the advantages of sclerotomy were in some cases persistent—in one instance for six years, in another for two years. He thought the reduction of tension in such cases was most useful. Sclerotomy, too, was much less likely to be followed by intra-ocular hæmorrhage than was iridectomy. The aqueous humour escaped very slowly, and the pressure was therefore slowly taken off the parts at the back of the eye. In the second case of Mr. McHardy, he was surprised that sclerotomy was not tried rather than iridectomy, which had been so unsuccessful in the case of the first eye.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 1ST, 1882.

J. MATTHEWS DUNCAN, M.D., President, in the Chair.

Doubtful Case of Double Vagina.—Dr. GALABIN showed a microscopic section of the septum dividing the vagina from a peculiar abnormal passage, in a girl aged 17. She was admitted into a surgical ward in Guy's Hospital for what was thought to be a cystic dilatation of the base of the bladder or urethra, protruding at the vulva. Dr. Galabin recommended it to be cut away, and the edges brought together; but his surgical colleague declined to operate, fearing a permanent fistula. Dr. Galabin subsequently operated himself; but, on cutting across the swelling, he found that he had not opened the bladder, but the lower extremity of a cylindrical passage, like a second vagina, but lying in front of the left half of the main vagina, and ending just to the left of the os uteri in a small opening through which a probe could be passed half an inch only.—Dr. ROUTH asked if the narrow part of the canal had been explored, and what was the condition of the uterus. He thought a second vagina might lie in front of the main passage, instead of at the side.—Dr. CARTER had, on several occasions, met with cysts in the anterior vaginal wall, though none so extended as that described by Dr. Galabin. The cysts were opened, and contained a glairy mucoid fluid.—Dr. ROUTH said that he did not think that the fact that the long cyst was anterior to the vagina was an objection to its being a second vagina. The two halves of a double uterus were sometimes so placed.—Dr. GALABIN said that the uterus could not be detected as abnormal on bimanual examination. He did not think the passage could have been a cyst, for it was cylindrical, and not globular, and the contained fluid was not mucoid.

Retention of Menstrual Fluid in one half of a Double Uterus.—Dr. GALABIN related this case. The patient, aged 15, was brought by her mother for consultation for symptoms resembling those of ordinary severe spasmodic dysmenorrhœa; and no swelling nor tumour had been noticed. Menstruation was fairly regular, and rather profuse. The pain was felt chiefly during the flow, was intermittent, very severe, and led to retching and hysterical manifestations. On examination, a firm globular swelling, without any fluctuation or elasticity, about as large as the uterus at three and a half months' pregnancy, was felt through the anterior vaginal wall. The os was difficult to discover, and was displaced backward and flattened antero-posteriorly. The patient was hysterical, so that it was impossible to attempt to use the sound. The author rejected the hypothesis of fibroid tumour, on account of the patient's youth, and the commencement of the symptoms with puberty; and felt sure that menstrual fluid would not accumulate to any amount in the uterus, if there were any exit whatever through the cervix. He therefore suggested retention in one half of a double uterus. It was agreed, with Dr. Stirling of Glasgow, present, under whose care the patient had been, that an anæsthetic should be given, and the swelling explored. If the finger appeared to be connected on one side of the sound, a finger was then inserted, and it was found that the sound passed easily to the normal length, going rather toward the right side, and the os appeared to be displaced a little to the right. The swelling was then punctured, and the usual treacly fluid, soon in covered and renewed menses, began to escape. The opening was enlarged with a sharp and directed knife, easily penetrated the finger, and about ten ounces of fluid escaped. No more was wanted at the spot, but it was intended to commence antiseptic treatment after allowing a few hours for complete escape of the fluid. The extreme hyperæthæsia and hysterical resistance of the patient, however, made it impossible to do more than syringe the vagina. Discharge of sanguineous fluid was free up to the third day,

but it then almosts topped, and what there was became offensive. Next day febrile symptoms set in, the temperature rising to 104.6°, the pulse to 140. The patient's friends refused to allow an anæsthetic to be given, to wash out the uterus, until the seventh day, when the author saw her again. There was then still high fever, but no sign of peritonitis. An anæsthetic having been given, the opening into the left half of the uterus was again enlarged, and the cavity washed out with solution of absolute phenol, 1 in 40. Considerable improvement followed up to the twelfth day, although it still proved to be impossible to do more than syringe the vagina; and little doubt was felt about the patient's recovery. On the twelfth day, she was suddenly attacked with violent pain in the abdomen and collapse, and died in about twelve hours. The author thought that the symptoms pointed to rupture either of the Fallopian tube, or of some abscess in the neighbourhood.—Dr. GRAILY HEWITT's experience had led him to the conclusion that it was safer, in performing the operation for retained menses, to make a small opening and allow gradual escape of fluid, and gradual contraction of the walls of the cavity, which were often weak and thin. If allowed to discharge itself too quickly, a suction might afterwards be exercised, and septic material drawn in.—Dr. GERVIS thought that Dr. Galabin had himself pointed out what would have been the most useful addition to the conduct of the case, the washing out the uterine cavity with antiseptic fluid. He agreed with Dr. Hewitt as to the importance of moderately slow evacuation, but with antiseptic precautions, thinking that the danger was less through any uterine suction than through decomposition of unremoved fluid.—Dr. WYNN WILLIAMS differed from Dr. Graily Hewitt, in that he made a very free opening to get rid of all the menstrual fluid at once. He would have syringed out the uterus with a solution of iodine, which he believed the safest and best antiseptic. He would also have avoided making a second incision, any septic conditions being present.—Dr. CHAMPNEYS had seen a case of retained menses in one half of a double uterus under Dr. Winckel of Dresden. In this, slow evacuation did not prevent a fatal result, which was caused by the retraction of the uterus from an adhesion, which tore a hole in the thin uterine wall. Death resulted from septic peritonitis.—Dr. CLEVELAND was surprised at the fear expressed as to the use of carbolic acid injections. In chronic inflammation of the bladder, he had used injections of absolute phenol, 1 to 50 or 60 of water, with excellent results.—Dr. CARTER agreed with what had been said as to the dangerous results which had at times followed the injection of a solution of carbolic acid into the uterus. He related the case of a patient who was for some time in a very critical state after washing out the uterus, the third day after a miscarriage, with a solution of the strength of one in eighty.—Dr. MALINS thought there was some doubt about Dr. Galabin's diagnosis in the absence of a necropsy. The symptoms and physical state did not seem inconsistent either with an anterior hæmatocele, or thrombus in the cellular tissue. He had met with similar cases in which the difficulty in ensuring drainage and disinfection had been overcome by using a winged catheter with the end cut off. He thought nothing better than tincture of iodine for disinfection.—Dr. ROUTH did not agree with Dr. Graily Hewitt in his advice to make a small opening. Experience had proved that it was apt to close, and sometimes it had been followed by a fatal result. His plan was to draw off by a large aspirator, and inject iodine solution; and to do this morning and evening, keeping in a drainage-tube.—The PRESIDENT would only remark that, in cases of retained menses, he made a free opening and allowed the fluid to drain away, using no injection of any kind. He had, in a considerable experience, had no fatal case or evil result, and he believed he had observed injurious consequences of the injection of plain warm water, in cases which he had witnessed.—Dr. GALABIN thought that the plan of gradual evacuation was desirable, when the quantity of retained fluid was large, but not when it was small or moderate. He did not think the fatal result in his case could be attributed to the injection of carbolic acid, or even to the second incision, for a marked improvement had followed that proceeding, and continued for at least four days. He did not believe the case could have been one of hæmatocele, for the swelling had been perfectly movable, and he did not think that the contents of a hæmatocele ever so perfectly resembled the uniform treacly fluid seen in cases of retained menses.

THE METEOROLOGICAL SOCIETY.—At the ordinary meeting of the society, to be held by permission of the Council of the Institution of Civil Engineers, at 25, Great George Street, Westminster, on Wednesday, the 15th inst., at 7 P.M., there will be an exhibition of anemometers, and of such new instruments as have been invented and first constructed since the last exhibition. During the evening, the president, Mr. J. K. Laughton, will give a historical sketch of the different classes of anemometers, and will also describe such forms as are exhibited.

REVIEWS AND NOTICES.

SCHEMATIC ANATOMY; or, Diagrams, Tables, and Notes, Treating of the Association and Systematic Arrangement of Structural Details of Human Anatomy. By W. P. MEARS, M.B., Co-Lecturer on Anatomy, Supervisor of Dissections, and Medical Tutor, at the University of Durham College of Medicine, Newcastle-upon-Tyne. London: Baillière, Tindall, and Cox. 1881.

THIS work consists of two hundred pages, filled with notes much resembling the plans of the relations of arteries, so familiar to the student in the pages of Gray; with outlines of bones, bearing lines which represent the attachments of muscles, after the equally familiar system of Holden; and with diagrams, such as the anatomical lecturer would draw with his own hand before his class. Some sketches of the course of the sympathetic and the connections of its ganglia are, in our opinion, the best part of the book. The average student has neither the time nor the opportunity to dissect out the intricacies of this remarkable part of the nervous system; yet it is advisable that he should remember, after a few years of practice, that the solar plexus is not merely "something or other near the abdominal aorta, that one has to get up for the first college"; and a good plan, like that facing page 163, may indelibly impress on the student's mind that the plexus is not a synonym for the semilunar ganglia, as sometimes supposed. The diagrams of the cardiac plexuses are very clear, and the author has evidently expended a vast amount of labour in preparing this "Schematic Anatomy". Mr. MEARS gives, in his preface, some salutary warning, lest his work should be made to entirely usurp the place of an uncondensed text-book; we fear that this advice will not be taken, as abstracts have ever a charm for the student, and this manual is very attractive in style, print, and binding. We more particularly commend this work to lecturers on anatomy at London medical schools, and especially to newly appointed demonstrators, who can make use of the schemes and diagrams, for the benefit of their classes, at a great saving of their own time—taking care that the student does not make a wrong use of education conveyed in this fashion.

SYPHILIS AND LOCAL CONTAGIOUS DISORDERS. By BERKELEY HILL, M.B., F.R.C.S. Second edition, entirely rewritten by Berkeley Hill and Arthur Cooper. London: Smith, Elder, and Co. 1881.

IN spite of the numerous publications that of late years have been issued on this subject, a good treatise on syphilis has remained a decided want; this want, however, the long-expected work of Messrs. Berkeley Hill and Cooper may be said to meet efficiently. What is modestly called a new edition of Mr. HILL's former work is, in reality, an entirely new one, for not only has the whole text been completely rewritten, but a very large amount of new matter has been added.

The authors are evidently well acquainted with the literature of syphilis, and the reader will not fail to notice the array of quotations from writings in every European language; but why do they not give us a complete list of authorities cited? The writers still retain their belief in "dualism", and devote a short chapter to the history of this and the opposite theory. Their views are stated with great clearness, and with that forbearance which is characteristic of the scientific spirit.

One of the longest and most valuable chapters in the book is that on Contagion, in which the important question of vaccino-syphilis is dealt with at some length, as also that of the hereditary transmission of the disease. From an analysis of the instances of contagion by vaccination, the following conclusions are reached. "(a) Syphilis may undoubtedly be propagated by vaccination. (b) Persons vaccinated from a syphilitic vaccinator do not necessarily contract syphilis. (c) Of several persons vaccinated from the same syphilitic vaccinator, some may escape, whilst others become infected; or one of the punctures in the same subject may become the seat of the initial lesion, while the rest remain healthy. (d) Vaccinia and syphilis may be inoculated together, each disease running its own course." The description of the various forms of initial lesion is exact and good, and the distinctions between the so-called local chancre and the true primary sore are made clear by means of a table in which their different characteristics are contrasted.

A chapter is devoted to the subject of the prognosis of syphilis, which will be found to contain many hitherto unrecorded observations. The fact is prominently brought forward that, when the syphilitic virus attacks the skin obstinately, the internal organs more rarely become the seat of severe tertiary lesions, the disease appearing to spend itself on the surface.

Under the head of Prophylaxis, a useful chapter is devoted to dis-

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, 11 High Holborn.

The British Medical Journal.

SATURDAY, MARCH 11TH, 1882.

MORTALITY IN INDIAN PRISONS.

THAT the problem of the sanitation of Indian prisons is still unsolved, may be inferred from a brief analysis of the inspectorial reports for 1880. The death-rate per 1,000 of convicted prisoners during that year amounted to 81.4 in the Punjab, 65.4 in Bengal, 61.2 in the Central Provinces, 53.1 in Assam, 46.9 in Mysore, 44 in Bombay, 43.4 in Madras, 35.2 in the Hyderabad Assigned Districts, 28.5 in the North-Western Provinces, and 23.4 in British Burmah. With such appalling death-rates as these, the sanitarian and statistician will be prepared for considerable fluctuations in some of the gaols. Thus, taking Bengal, for the sake of illustrating this point, we find that the rate of mortality was 10.4, 16.6, 18.1, 23.3, 23.9 and 29 per 1,000 in the Backergunge, Chittagong, Noakhally, Hazareebagh, Pooree, and Presidency (European) gaols respectively; whilst it amounted to 341.2, 193.7, 181.7, 148.4, 142.8, and 120 per 1,000 in the Julpigoree, Lohardugga, Dinapore, Baraset, Mymensing, and Purneah gaols. Although immense reductions have been effected in many gaols, as demonstrated by a comparison of the death-rates of 1880 with those of 1879, the existing mortality is still so excessively high, that it shows how much remains to be accomplished before it can be said that the lowest standard attainable has been established. Only four years ago, the rate of mortality in the Punjab was "a trifle over 140 per 1000"; but, during 1880, it amounted, according to our information, to the still enormously high rate of 81.4. No surprise need, therefore, be felt at the declaration and regrets of the Lieutenant-Governor, "that the rate of mortality has been unduly high." So great, indeed, is the annual death-rate in the majority of Indian gaols, that, in all our experience and reading, we have not succeeded as yet in finding anything elsewhere to approach or parallel it.

Melancholy and sad as are the present mortuary results of Indian gaols generally, there is evidence to show that some improvement has taken place of late years in their hygienic and sanitary condition. Thus in the 51 gaols in the Bengal Presidency, during the year 1843, the average death-rate was 92.8 per 1,000; in 1880, it was 65.4. In Madras, during the ten years ending 1853, the average mortality in thirty-three gaols was 61 per 1,000; in 1880, it was 43.4. In the North-Western Provinces, the mean death-rate in thirty-three gaols, during 1857, was 60.5 per 1,000; it was 28.5 in 1880. The exception is to be discovered in the Punjab, where, in its 29 gaols, in 1857, the average ratio of mortality was 66.7 per 1,000; in 1880, it was 81.4! Whilst there is, therefore, some cause for congratulation, the case of the Punjab gaols being excepted, the existing rates are nevertheless so terribly high in most of the gaols in all the provinces, that great reforms remain to be executed before their sanitary condition can be regarded as satisfactory. A vast amount of avoidable mortality continues from year to year; and we look to the able officers to whom the management of these prisons has been entrusted to persist in their efforts to bring the death-rate down to a standard so as to eliminate all avoidable or preventible sources of sickness and death. As gaol affairs have been in the past, and as they are at this present moment, in a mitigated degree, incarceration in most of the prisons too often means much

more than mere punishment; it means death, in no way contemplated in the sentences inflicted according to the law of the land. This is not only the result to many thousands of those who are convicted and undergoing positive imprisonment for terms varying from a few months to the entire period of life; but, according to the data at our command, it overtakes with remarkable frequency those waiting trial, many of whom would have been proved to be altogether innocent of the crimes of which they stood charged or accused, and all of whom must, under English law, have been viewed as presumably innocent until, by judicial investigation, they had been pronounced guilty. Thus, in 1880, we find that the death-rate of "under trial" prisoners was 34.5, 29.4, 42.6, 47.5, 61.9 and 40.49 per 1,000 in Bengal, North-Western Provinces, Punjab, Central Provinces, British Burmah, and Mysore respectively.

Much more than half the mortality in Indian gaols is caused by fevers, dysentery, diarrhoea, cholera, and phthisis. In 1856, out of every 1,000 deaths, no fewer than 589.25, 647.1, and 639.92 were so caused in Bengal, Bombay, and Madras, and a goodly number of the remainder were doubtless indirectly due to the effects and sequelae of these diseases. There is no reason to suppose that these proportions are materially altered at the present time. That these causes of disease and death are largely preventible will scarcely be denied. Why should the mortality to strength have been 2.14, 14.7, 11.0, 16.6, 4.8, 6.2, and 5.1 times greater from fevers, dysentery, diarrhoea, hepatitis, cholera, phthisis, and "other diseases", among prisoners than their fellow-countrymen, the Sepoys, in Bengal; and 2.3, 6.4, 9, 3, 4.7, 1.5, and 3.9 times greater from the same diseases among prisoners than Sepoys in Bombay? The explanation of this immense discrepancy is, we fear, to be found, not in the punitive treatment ordered by law, or in mere imprisonment, but in a lamentable failure in the practical application of the laws of sanitary science to the special needs of the Indian prisoner. It probably embraces considerations of dietary, drainage, conservancy, drinking water, air-space, and ventilation, etc., all of which have from time to time received the earnest attention of the inspectors of gaols. But it is manifest, from the few facts herein-before recorded, that the officers answerable for the management of Indian gaols are charged with a very grave responsibility in this matter. The hygienic and sanitary measures required to place the Indian prisoners, as regards health and the chances of longevity, at least on a par with the surrounding civil population, as has already been more than accomplished in the prisons of this country, must be urged and reiterated by these officers upon their respective Governments. Most of them are members of the medical profession, and officers of standing and ability, and amply furnished with the special knowledge to enable them to grapple successfully with this subject. Let it not be said that they have been tried and found wanting. Let them have the courage of their opinions, and by the power of their scientific authority enforce the teachings of modern hygiene and sanitation in the systemic management of the gaols under their control, regardless of all considerations opposed to their eradication of the preventible causes of disease and death, in view, we hope, in the no distant future, to the annihilation of a serious and long-standing blot on Indian gaol administration.

A NAVAL COURT-MARTIAL.

A NAVAL surgeon, Mr. J. N. Browning, of H.M.S. *Cambridge*, has been tried by court-martial at Devonport, on the charge of negligent performance of duty. According to the published reports, the statement of the prosecution was that an able seaman, who had been seized with rheumatism whilst ashore at his parents' house, was seen by Mr. Prynne of Plymouth, who certified him to be unfit to be removed; that, nevertheless, the patient was removed by Browning's orders to the Royal Naval Hospital, at the peril of his life. Evidence was given that in the captain's order-book was an instruction that "Persons detained on shore by sickness are to be visited by a medical officer, and sent on board or to the Royal Naval Hospital as soon as practicable; and abuses in such cases shall be immediately reported, especially

when sickness results from intemperance;" also that Mr. Pryne's message was duly given to the accused on the occasion of his first sending for the patient to be brought aboard. Mr. Hawton, of the Royal Naval Hospital, gave evidence that he considered proper precautions were taken for the patient's removal; but it would have been better that a medical man should have directed it. Mr. Pryne thought it unadvisable, but not dangerous, that the patient, who was now convalescent, should have been removed. The accused, in defence, regretted the occurrence, and pleaded ignorance of the captain's orders. He handed in first-class testimonials. The court, however, considered the charge proved, and adjudged Mr. Browning to be severely reprimanded, and dismissed his ship.

This evidence and the verdict cannot be allowed to pass without comment. The medical instruction is, "A medical officer will, when practicable, be sent with the patients to see that they are properly received at the hospital or sick quarters, and that they are conveyed thither with as little inconvenience as possible." The ship's order-book contained a local order: "Persons detained on shore by sickness are to be visited by a medical officer, and sent on board or to the Royal Naval Hospital as soon as practicable." The naval instruction applies to sick men sent from ships, and it admits the question of "practicability". We are informed that it has long been a not uncommon event for sick to be received from harbour ships into the naval hospitals, attended by a sick-bay steward in lieu of a medical officer; and, *à fortiori*, in cases where officers or men are hurt or taken ill on shore, the impracticability of a medical officer attending them thither may be assumed to occur more frequently. In such cases, it may and does happen that the sufferer is brought direct to the hospital by his friends, and the fact is made known by the hospital authorities to the commanding officer of the ship. The ship's order does not direct that a medical officer shall be sent to bring him on board or take him to the hospital; and a reasonable doubt may be entertained that it has ever been the ordinary routine followed, or that it was meant to insure more than medical visitation, with the view of preventing malingering, or inefficiency for duty as a result of drunkenness.

In the case in point, a junior medical officer appears to have been in charge of the ship's duties, there being, at least, no evidence to the contrary; and he was not acquainted with the "ship's order", from which it may be inferred that he had never read the ship's order-book, and that he had received no instruction from the principal medical officer in charge when he might happen to be left in charge. The sick man had been skillfully treated, by a private practitioner, for rheumatism; and, although unfit to be removed when he first certified, yet when he was actually removed he was convalescent, and free from danger in removal; and the medical officer who received him into hospital stated that "proper precautions were taken in the removal": while the sick-berth steward asserted that he was conveyed by him, "partially dressed, and well wrapped up, to the hospital". It is quite clear, from these circumstances, that the grave charge of the removal having been committed, that the peril of his life was entirely unsubstantiated. The more interesting point, although much weight has not been laid on it, is, to our mind, that the sick man should have been visited on three successive days before he was removed, the removal being left to his responsibility, without the intervention of a medical officer of the ship, the removal of which seems to have been unfairly attributed to a junior medical officer, who was not in charge on the day of the removal to the hospital; but it does not appear that he had been in charge on the day previous, although possibly he was so.

The court was divided equally on both charges, and sentenced "to be severely reprimanded and dismissed his ship"—a sentence, we suppose, to be the case of a medical man, an intimation that he might be removed from the service. We are creditably informed that, being the first case of a junior medical officer, it has been made the subject of a special inquiry, of which the Commander-in-Chief, where the medical staff are concerned, are especially on detached duties, to find out whether the performance of such duty, of a secondary nature,

that may take a surgeon away to any part of the extensive three towns, and that a full medical staff would find enough to do. On another point there is an evident laxity of custom, which we would fain hope is limited to H.M.S. *Cambridge*, and not general throughout the Navy; for where local orders—i.e., by-laws—are not made known, attention to them should not be rigidly exacted. Here, not only the accused but another of the medical officers, worked in ignorance of the orders which this officer has been punished for neglecting. We think that negligence elsewhere has been proved, and that every "local order" should be initialed by every officer whom it concerns. In this case that simple precaution had not been attended to, since it was sworn to by one of the surgeons that, "although he was not acquainted with the instructions, if he had been informed that a man was too ill to be removed, or to return on board, he should have considered it his duty to have personally visited that man, if possible." It is fair to observe that this was the generous declaration of the junior medical officer, who had not been long in the ship; but, in the purview of the case, it might be assumed that the court of executive officers relied more on that declaration than on their own reading of the plain facts as stated on oath, or they would never have judged the charges to have been proven—that is, not have inflicted the severe sentence.

This instance adds weight to the opinion we expressed, not long since, on another court-martial, of the necessity of having a civilian of superior rank in the same profession with the accused, as an assessor, together with the executive officers, who now exclusively administer what is termed justice in the Royal Navy.

ON PRIMARY CHRONIC DISEASE OF THE ORGANS OF VOLUNTARY MOTION.

OUR knowledge of many diseases affecting the sphere of the neuromuscular system is still so recent, and our insight into what is essential and adventitious in them so scanty, that an attempt to assign their true place in our pathological system to a certain group of these affections must be welcome, more especially if we consider how greatly at variance the views of the best workers in this department of medicine are at the present day. We therefore notice with pleasure a clever brochure by Dr. Paul Mobius of Leipzig on this subject, as it appears to considerably simplify matters which have until now seemed somewhat confused and perplexing. Thus, to mention only one instance, the views of Friedreich and Charcot on progressive muscular atrophy have hitherto appeared quite incompatible, as the former considered that disease to arise from primary inflammation of the muscles, while the latter thought it due to atrophy of the anterior cornua of the spinal cord.

The organs of voluntary motion, taken from above downwards, consist (a) of the central convolutions (including the paracentral lobule), the subjacent white medullary matter, the motor portion of the corona radiata, internal capsule, pedunculi, and pons; (b) of the pyramids of the medulla oblongata and the pyramidal tract of the spinal cord; (c) of the ganglionic cells of the anterior cornua of the spinal cord and homologous parts of the medulla; (d) of the anterior root-fibres and the motor nerves; and (e) of the voluntary muscles. Dr. Mobius contends that the whole system may become diseased, but that in general only a portion of it is affected: that the lower portion of the system is often diseased; and that the limits of the pathological process vary as we proceed upwards in the motor zone. Thus the muscles are always diseased; and, if no other part suffer, we have to do with simple progressive muscular atrophy. Such are the cases which have been recorded by Friedreich, Lichtheim, and others, in which the nervous system was found healthy throughout its extent; and those of hereditary atrophy with or without hypochondriacal atrophy of the muscles, which have been described by Meryon, Duchenne, Charcot, and others. Whether there are cases in which the peripheral nerves alone participate in the affection, as Charcot has asserted, is still doubtful. The most characteristic cases are in which the muscles, peripheral nerves, and the anterior horns of the grey matter, are de-

generated, as described by Luys, Charcot, Hayem, and others, and in which we now see the type of progressive muscular atrophy. This class comprises three different varieties, according to the localisation of the pathological lesion; viz., the ordinary spinal form, which has a sub-variety where the nerves remain intact; the bulbar or medullary form (progressive bulbar paralysis); and, finally, the bulbo-spinal form, which may be complicated with degeneration of the pyramidal strands, as seen by Leyden, or exist without it, as in the cases of Duval and Raymond. Generally, the disease is arrested in the pons Varolii; in a few cases, however, the external segment of the middle third of the pes pedunculi has been found affected; of the internal capsule, nothing has been noticed; but, in a case of Kahler and Pick, the central convolutions were likewise wasted, so that the whole system of the pyramidal strands has been found affected.

In all these forms of disease, there are simple atony and wasting; but progressive muscular atrophy may be combined with spastic phenomena, assuming a spinal or bulbo-spinal form, the latter being amyotrophic lateral sclerosis. Dr. Möbius doubts the existence of primary lateral sclerosis without affection of the grey matter, as this would be in contradiction with the principle that, in all primary diseases of the motor sphere, the lowest portion, viz., the muscles, is invariably found affected. According to him, the lesions in lateral sclerosis, bulbar paralysis, and progressive muscular atrophy, are identical, consisting of chronic parenchymatous inflammation or sclerosis; the differences which have been noticed being not separate processes, but only varieties, caused most probably by a peculiar predisposition of certain parts, and also by the duration and intensity of the pathological action.

There is probably no systematic disease of the motor sphere strictly so called, as we generally meet with mixed forms of systematic and asystematic degeneration. The essential point is, that the lesions are symmetrical; and this is more particularly the case the higher they proceed upwards towards the centre. Clinically, all these affections are characterised by their being limited to the motor sphere; the intellect and organs of special sense remain intact to the last, the bladder and rectum do not suffer, and, if sensation be affected, this is confined to the muscles, which are tender to pressure and the seat of throbbing pains, arising from their inflammation. Further features common to all of them are atrophy of the muscles, which is the principal symptom, identical electric tests, and a progressive course. Where spasmodic symptoms appear more prominently, the pyramidal strands are affected; yet the latter have been found sclerosed where no spastic signs had been present during life. Kahler and Pick have explained this by assuming that, where the grey matter was wasted previously to the affection of the pyramidal strands, no spastic phenomena could be produced; while Charcot, with more probability, argues that spastic contractions always arise from irritation of the grey matter.

The muscular wasting is uniformly of the same character; viz., there are fibrillary twitches, and the muscle gradually decreases in size until it has quite disappeared; the limb is not affected *in toto*, but single muscles, or portions or sets of muscles, become diseased; and there is no spread by contiguity, but by selection of functionally equivalent muscles. The faradic excitability of the diseased muscle is invariably preserved, and only becomes less in proportion as the wasting progresses. The galvanic excitability of the muscles is in general normal, but occasionally qualitative alterations are discovered, and that in all forms of these affections. The excitability of the nerves to both currents is always normal.

The course of these diseases is always progressive until death. Ordinary muscular atrophy generally lasts from ten to twenty years, while bulbar paralysis generally kills in one or two years. In general, it may be said that the further upwards in the motor sphere the disease is located, the more rapid is its course. Thus the case of Kahler and Pick, in which the central convolutions were affected, proved rapidly fatal; on the other hand, cases in which the muscles alone suffer have an eminently chronic progress.

It will be seen at a glance how essentially these affections differ from

other diseases apparently similar to them, such as poliomyelitis. In the latter, there is first paralysis, and then wasting; the faradic excitability of the muscles is annihilated; there are the appearances of the reaction of degeneration (for which barbarous term we should prefer that of "wasting-test", as proposed by Dr. Althaus); we find stages of invasion and acme, after which, if the patient survive, the affection remains stationary. Similarly, amyotrophic lateral sclerosis differs from chronic myelitis of the cervical portion of the cord; for, in the latter disease, there is atrophic paralysis and wasting-test, and the affection of the lower extremities is a pure spastic paralysis without atrophy. With regard to the mode in which the different forms of progressive muscular atrophy spread in the neuro-muscular sphere, Möbius considers it neither ascending nor descending, but affecting the several portions of the system equally and *in toto*.

SANITARY CONDITION OF THE PRISONS IN IRELAND.

THE questions recently asked, in the House of Commons, by the honourable members for Tyrone, Waterford, and Carlow, in regard to the death of Captain Disney, governor of the gaol at Omagh, show that some investigation into the sanitary condition of the Irish prisons is urgently needed. In the particular instance thus brought under our notice, the facts are as follows. Captain Disney, an active and zealous officer, who was greatly beloved and respected, joined the prison service in 1878, and served successively at Wicklow, Belfast, and Castlebar. From the latter town, he was removed, on promotion, to Omagh; but, on arriving there, he found that the governor's quarters were in such an unsanitary condition as to oblige him to take lodgings in the town for his wife and family, though his duty compelled him to reside himself within the walls of the gaol. For the first few weeks of his residence in Omagh, he lived in a part of the prison which was tolerably healthy; but, on the arrival of a batch of "suspects", he lodged them in the portion which he had himself occupied, and lived for a short time in the governor's quarters. Although it was known that this part of the prison was in an unsatisfactory condition, and due notice had been given of it to the Prison Board, yet so little attention was paid to it, that Captain Disney, writing only a few days before his death, says that he had been five weeks resident in Omagh, and as yet no steps had been taken to put his house into habitable repair, and that tenders had not even been asked for. This appears the more unaccountable, as it was well-known, before Captain Disney's appointment, that the drainage was in bad repair; and that the previous governor had lost, within a comparatively short time, three members of his family, of whom one at least had died of diphtheria. At length, however, an architect was sent down, and certain alterations were made—with such effect that, whilst they were being carried out, Captain Disney succumbed to an attack of typhoid fever, after only a few days' illness—brought on, as the Chief Secretary for Ireland himself stated in the House of Commons, by his sleeping over an open sewer. Mr. Forster lays much stress upon the fact, that Captain Disney in a measure brought his fate upon himself, since he persisted in sleeping within the prison after he had been warned that it was dangerous to do so. The warning, however, came from the architect; and was unaccompanied by any official permission, or, what was equally important, by any offer to defray the extra expense which would have thus been incurred, as the wretched stipend which he received was wholly inadequate to meet it. It thus appears that Government buildings in Ireland may, in some cases, be allowed to fall into a state of the utmost neglect; they may become not only uninhabitable, but even deadly, without attracting any unusual amount of interest from the higher authorities, whose duty it is to look after the welfare of their subordinates. We would, therefore, suggest the advisability of attaching to such bodies as the Prisons Board, with whom in the present case the chief blame appears to rest, a medical officer, to be held responsible for the sanitary condition of the buildings under their control. In the meantime, it would be a graceful act, upon

the part of the Government, as well as a tribute to the zeal of the late governor, to bestow a pension upon his widow, who is at present wholly without resources.

LORD RANDOLPH CHURCHILL, who is, we are glad to learn, rapidly recovering from the troublesome local affection from which he has been suffering, will shortly, by the advice of Mr. Oscar Clayton, proceed to Pau to complete his convalescence.

No fewer than 120 cases of small-pox are said to have occurred at Ampthill, of which sixteen have proved fatal. This serious epidemic is supposed to have originated with a tramp who recently died in the workhouse. The majority of the patients are under the care of experienced nurses from London, in the workhouse hospital.

ARRANGEMENTS have been made for the erection of a Convalescent Hospital at Milford, near Stafford, as a memorial to the late Sister Dora, who was the founder and mainstay of the Walsall Cottage Hospital. The cost is estimated at £2,000, towards which £1,400 have been subscribed, including £1,200 by Miss Lonsdale, being profits on her "Life of Sister Dora."

MR. A. E. CUMBERBATCH has been formally appointed Aural Surgeon to St. Bartholomew's Hospital, where for several years he has had the charge of the patients in the ear department. This gentleman was a member of the Council of the Section of Diseases of the Ear at the recent International Medical Congress, and has written contributions to aural surgery, which are to be found in the *St. Bartholomew's Hospital Reports*.

In consequence of the refusal of the Superior Council of Public Instruction to sanction the translation of M. Hayem from the chair of Therapeutics to that of Pathological Anatomy, the Faculty of Medicine has named three other candidates for the consideration of the Council. M. Cornil is chosen by sixteen votes against fourteen given to M. Hayem, who has since withdrawn his candidature. MM. Grancher and Lancereaux come next. M. Cornil's nomination by the Superior Council and the Minister may be considered as certain.

THE Clitheroe rural sanitary authorities have wisely decided to close all the schools at Chipping and Thornley, in consequence of an extensive epidemic of measles prevailing in the Clitheroe Union. Nearly every house where children are living is said to be infected with the disease. It was imported from Harwood, near Blackburn, about Christmas, and since then it has spread with alarming rapidity. Thirty-seven children who attended one school are afflicted, and at the Catholic schools half the children are absent through illness. A large number who attended the Thornley School are also affected.

TWO Cambridge Local Examinations, by means of which intending medical students may pass the Preliminary Examination required by the Medical Council, and students proposing to enter the University can obtain the certificates which will exempt them from the Preliminary Examination, will be held on Monday, September 4th, in Cambridge and London, and at other places as the Syndicate may determine. Forms of entry may be sent and sent in before August 1st. They can be obtained, for Cambridge, from Rev. G. F. Browne, St. Catherine's College, and, for London, from R. St. L. Corbett, Esq., 10, Portman Street, W.

THE occurrence of severe cases of ophthalmia in the Norwood school, belonging to the Lambeth Union, the guardians are asking the assistance of the Local Government Board in devising means for checking the disease.

A Bill has been introduced to amend the law relating to the sale of beer, with a view to the removal of the public from consideration of them. It proposes to provide that every person who sells or exposes for sale

by wholesale or retail any beer brewed from or containing any ingredients other than hops and malt from barley, shall keep conspicuously posted, at the bar or other place where such beer is sold or exposed for sale, a legible notice stating what other ingredients are contained in such beer. Any person who sells or exposes for sale any such beer without complying with the above enactment, is liable to a fine not exceeding in the case of the first offence £20, and in the case of the second or any subsequent offence £50. Any fine incurred under this section may be recovered summarily by any informer, and one-half of the fine is in every case to be paid to the informer. The term "beer" includes beer (other than black or spruce beer,) ale, and porter. The Act is not to extend to Scotland or Ireland, and is to come into operation on the 1st January, 1883.

MORPHIA-POISONING.

THE death of a medical student from the effects of an overdose of morphia has occurred at West Derby. According to the evidence given at the inquest, the deceased had suffered for a long time from rheumatism and disease of the heart, to relieve which he had taken morphia. He was found lying on the floor breathing heavily, and died half an hour after the discovery.

LABOURERS' DWELLINGS.

A REMARKABLE instance of the overcrowding prevalent in labourers' dwellings in some parts of the country has been afforded at Atherstone. The Nuisance Inspector stated that, at Witherley, he found thirteen persons sleeping in one bedroom, viz., a man, his wife, four daughters (whose ages ranged from eleven to twenty-three years), six sons (from five to seventeen years of age), and a child of one of the daughters.

POISONING BY TINNED MEATS.

A WHOLE family at Northampton, consisting of five persons, have recently had a narrow escape of being fatally poisoned. After partaking of tongue from a hermetically sealed tin, they all suffered from symptoms of irritant poisoning, due to verdigris caused by imperfect sealing.

AN ANTIDOTE FOR STRYCHNINE.

MR. G. G. WILLIAMS and WALTER C. WATKINS, of the *Journal of the Royal Society of Medicine*, (vol. 1, p. 112), have discovered an antidote for strychnine in the organic base first prepared by the former, by distilling cinchona with caustic potash, and to which he assigned the name β lutidine. Having ascertained, by experiments upon frogs, that β lutidine causes a marked increase in the tonicity of both cardiac and voluntary muscles, counteracts the retardation of the heart's beat; that it arrests the inhibitory power of the vagus; and that, by its action upon the nerve-end of the spinal cord, it, in the first place, lengthens the time of reflex action, and then arrests that function; they proceeded to test its direct counter-action to strychnine. The brains of frogs were destroyed in the usual way. An animal was then treated with strychnine till reflex action was arrested; when the subsequent administration of β lutidine was not followed by the usual results. The second frog, strychnine was given till strychnine tetanus was produced, when it was found that the subsequent administration of lutidine caused the tetanus to pass off. The almost simultaneous administration of the two bases was not followed by tetanus. The results of these experiments are most promising; and it is to be hoped that the discovery of the neutralising property of the compound will not be neglected to prevent the use of a valuable practical toxicology. We have not heard that the base has been used for experiments on animals poisoned by strychnine, and whose brains have not been destroyed.

MR. ATKINSON'S REPORT ON THE HEALTH OF THE CROWN.

MR. ATKINSON, in his last annual report on the health of the Crown combined the most interesting and curious instances of the ignorance existing among the population under his charge. In one case, when pointed out the necessity for disinfection, he was told by an old woman that, "Ye mak' a deal o' fuss f' sich like cases, but it's na' good; for

if they'll have it, they'll have it, and if they'll dee, they'll dee." In another, when examining some premises to find a cause for typhoid fever, he was told that he could look if he chose, but it was of no use, for "t' feaver's i' t' family, 'is father 'ed it, and 'is grandfather 'ed it, and na' t' lad's gotten it." Mr. Atkinson adds that, in this last case, the cause was not far distant, since an open rubble sewer was constantly emitting its odours at the back of the premises, and a foul gutter was just below the windows.—Another typical instance of the carelessness of parents in cases of infectious disease recently came before the Exeter School Board. At the last meeting of that body, it was stated that, while one girl was lying at home ill with fever, five other members of the family were being sent to one of the Board schools without the slightest intimation being given to the authorities. The existence of fever only came to the knowledge of the Board on their summoning the parent for the non-attendance of the sufferer. It is not encouraging to reflect that, after so much time, money, and energy have been expended in erecting and maintaining a public health service, such instances of crass ignorance as these should have still to be reported.

THE MEDICAL SOCIETY OF LONDON.

At the general meeting of the Medical Society on Monday last, the following were elected officers for the ensuing year. *President*, Francis Mason. *Vice-Presidents*, Richard Quain, M.D., F.R.S.; R. Brudenell Carter; J. Hughlings Jackson, M.D., F.R.S.; J. C. Wordsworth. *Treasurer*, Alfred Wiltshire, M.D. *Librarian*, W. H. Allchin, M.B. *Honorary Secretaries*, Edmund Owen; Isambard Owen, M.B. *Secretary for Foreign Correspondence*, Sir William Mac Cormac. *Council*, H. F. Baker; R. S. Fancourt Barnes, M.D.; Samuel Benton; William H. Broadbent, M.D.; Sidney Coupland, M.D.; J. Hamilton Craigie; H. Radcliffe Crocker, M.D.; T. Stretch Dowse, M.D.; J. H. Drew; Arthur Durham; F. J. Gant; Heneage Gibbes; D. H. Goodsall; A. Pearce Gould; F. de Havilland Hall, M.D.; W. M. Ord, M.D.; W. Fye; T. Gilbert-Smith, M.D.; W. F. Teevan; C. Theodore Williams, M.D.

BRITISH LYING-IN HOSPITAL.

THE report of the British Lying-in Hospital for the year 1881 contains further testimony to the value of antiseptics in lying-in hospitals. The physicians, Drs. Heywood Smith and Fancourt Barnes, state that, "owing to the care with which the antiseptic precautions ordered have been carried out, there has been far less feverishness among the patients; and recoveries have been, as a rule, unimpeded." There were 160 women delivered in the hospital, of whom 32 were primiparae; among these, one patient died from septicæmia. In the out-patient department, 496 women were delivered, with one maternal death. Among the in-patients, 6 children were still-born, or 3.75 per cent.; and among the out-patients, 14, or 2.82 per cent. The operations in the hospital comprised four forceps cases, one case of version, and one division of the vagina in a case of atresia.

DEATHS UNDER ANÆSTHETICS.

THE following account of a death under the use of chloroform at the General Infirmary at Gloucester has been sent to us by Mr. W. Brown, house-surgeon to the infirmary. It occurred on February 12th. J. C., aged 23, was admitted for excision of the eyeball; the other eye showing symptoms of sympathetic ophthalmia. Chloroform was administered by placing a towel over the face (Edinburgh method). The patient became unconscious in about eight minutes, and the operation commenced. Shortly afterwards, the patient began to struggle, and the towel was replaced. Almost immediately afterwards, the pulse was found to fail. The usual means were at once adopted to restore animation: pulling forward the tongue, artificial respiration, nitrite of amyl applied to the nostril, and the head lowered; the patient at this time made three deep inspirations. The faradic current was applied to the chest and neck, and the external jugular vein was opened, but without avail. With the exception of some cop-

per-stained spots on the legs, the *post mortem* examination revealed no abnormal condition. The heart, lungs, and kidneys were healthy. —On December 20th there was (says the *Detroit Lancet*, February 1882) a death from the administration of chloroform in Chicago. The patient was in a dentist's chair and a physician administered the anæsthetic. One and a half ounces of chloroform were consumed in anæsthetising the patient. After two or three teeth had been extracted, the patient became livid and ceased to breathe. He was a man about forty years of age, and was supposed to be healthy. As usual in such cases, the patient was in a sitting posture. Only a short time previously, another death occurred from chloroform given for the extraction of teeth. We have had notice, also, of another death from chloroform at a hospital, of which particulars will, we believe, be kindly forwarded for our next issue.

EXOPHTHALMIC GOITRE.

IN a short monograph on the pathology and treatment of exophthalmic goitre, M. Noel Guéneau de Mussy describes four cases of this disease, which have recently come under his notice. Two of these occurred in males, and two in females. In all four, the ordinary symptoms were observed, while two were conspicuous for enlargement of the tracheo-bronchial glands; two for distinct choreiform movements, and two for muscular weakness and trembling of the limbs. In two there were cardiac complications, and in one marked pigmentation of the face. M. Guéneau de Mussy is an advocate of the theory of defect of innervation. He lays great stress upon the enlargement of the thoracic glands about the bronchi and trachea, and in the immediate vicinity of the pneumogastric nerve. He lays down a few diagnostic rules for the determination of such enlargements, for he considers that they may give rise to irritation of the pneumogastric nerve by contiguity, and so form the initial factor of the phenomena of this disease. He, however, throws this out only as a hypothesis, but one which is strongly supported by facts. He does not deny that this disease may have other sources of origin, such, for example, as a peripheral one, similar to a sclerosis of the posterior cornua from a lesion of a nerve. In support of the defect of innervation theory, he further adduces the pigmentation of the face, which occurred in one case, and sees in the irritation of the pneumogastric nerve a plausible explanation. He then goes on to strengthen his argument by reference to Dr. Greenhow's remarks on bronzing of the skin in an address on Addison's disease, read before the International Medical Congress; M. de Mussy seems to have faith in the freshly prepared tincture of iodine, and on the natural waters of Dongues and La Bourboule; but it is proper to remark that the treatment is given of only two cases, one of which died, and the other made a brilliant recovery.

ALCOHOLISM.

THE Lower House of Congress at Washington has appointed a committee to inquire into everything relating to alcoholism; and there is a motion pending in the Senate for the appointment by that branch of the legislature of a similar committee. The scope of the inquiry will, it is stated, be the widest ever entered upon.

THE CAUSE OF PELLAGRA.

THE etiology of pellagra is one of the most obscure points concerning that disease. It has been attributed to a great variety of causes—distress of mind, poverty, abuse of salted provisions, impure water, the use of rye-bread, etc. A more satisfactory theory was first enunciated by Thouvenel as far back as 1798, and supported at a later period by Roussel and Costalat in France, and by Balardini in Italy. This theory attributes pellagra to the exclusive use of maize or Indian corn for food, especially where damaged samples of that cereal are consumed. Researches recently undertaken by M. Lambroso, and reported in the *Revue Scientifique*, January 28th, 1882, seem to demonstrate to a certain extent the truth of Roussel's theory. According to Lambroso, pellagra is undoubtedly developed under the influence of a diet of damaged maize, only the poisonous agent is not, as was formerly believed, the fungus found on the altered grain, but a special extractive

substance obtained by a process analogous to the preparation of ergotine, which it also resembles in some physical characteristics. M. Lambroso names it pellagrozeine. In experiments undertaken by that gentleman, the daily consumption of six grammes of tincture of damaged maize produced in twelve workmen feelings of intense hunger, associated with dislike to food, diarrhoea, and enteralgia; there afterwards appeared the most characteristic cutaneous lesions of pellagra, pruritus, stinging pains, epheles, burning sensations, followed by nervous symptoms, mydriasis, ptosis, sleepiness, and pleasure in seeing and touching water, as well as headache and giddiness; other symptoms were sometimes observed, such as palpitations, acceleration or slowing of the pulse, and fainting fits. Grisolle states that a large number of sufferers from pellagra commit suicide. They do not kill themselves in a fit of maniacal excitement, but quietly, as though impelled by a purely automatic impulse. Stambio has noted that the majority of these suicides destroy their lives by drowning. In the workmen subjected to a diet of damaged maize, there was also an increase of the specific gravity, and a decrease in the amount, of the urine, which had a red tinge. It may be noted that these symptoms have the greatest analogy with those of incipient pellagra. These experiments, repeated on various kinds of animals, yield important practical results, both as regards prevention and treatment of pellagra. For the prophylaxis, M. Lambroso recommends various modifications of the cultivation and storage of maize, and of its manufacture into bread. As to treatment, a prolonged series of experiments has demonstrated to him that there is no specific remedy and no special therapeutic treatment for pellagra. It is not the disease which must be treated, but the patients. He has seen good results follow the administration of opium in cases of pellagra complicated by mental fear or stupor. Quinine is valuable when there is prostration; and calomel, arnica, and cold douches in cases of pellagrous diarrhoea. He has obtained cure in desperate cases by varying doses of from one-fourth to two-thirds of a milligramme *per diem* of arsenious acid. In infantile pellagra and in the kind accompanied by an arrest of development, he has had occasion to be satisfied with the use of frictions of chloride of sodium. Pellagrous vertigo has frequently yielded to the administration of *cocculus orientalis*. Medication by chloride of sodium and arsenic has been tried on a somewhat large scale in the localities where pellagra is endemic, and the successful results have been sufficiently numerous and rapid to give reason to hope that it is possible to cure pellagrous patients without attempting the difficult task of changing their usual form of diet.

MEDICAL CONGRESS AT SEVILLE.

THE medical congress to be opened in Seville on the 9th of next month promises to be a success. An organising committee has been at work for some time, and has appointed the necessary subcommittees and decided on the general programme of the congress. Certain subjects have been suggested for general discussion, but it will be open to any private member to bring forward any other matter in which he may be interested. The town selected is one of the oldest and most interesting in Spain, and the season of the year is that in which it can be seen at its best. The President-elect is Dr. Antonio Rivera y Ramos, and the Secretary General Dr. Raphael Tufiño de Lara. All correspondence of matters connected with the congress should be addressed to this latter gentleman, 15, Plaza de la Constitución, Seville. The meetings will be held from April 9th to 15th inclusive. The official language will be Spanish; but Latin or French may be used. The reading of papers will be limited to fifteen minutes, and the subsequent discussion on any paper must not occupy more than three-quarters of an hour. The following are the subjects, with the subjects proposed for discussion on each day:—*Physiology and Pathology of Animal Heat.* The connection of animal heat with the nervous system. The physiology and pathology of animal heat. The function of urea, and its excretion, with special reference to the relation of urea to any pathological conditions which may be produced by the want of harmony in the proportion of urea present. *General Pathology.* An examination of the different methods of

illuminating the cavities of the body. *Pathological Histology:* Genesis and evolution of tubercle. *Hygiene:* The causes of the excessive mortality of young children in large towns, and the best means of reducing it. Prophylaxis of infectious diseases; isolation and disinfecting; best methods of applying these. The most suitable means of checking tuberculosis in barracks and infirmaries. *General Therapeutics:* Atmospheric air as a therapeutic agent. The application of heat in the treatment of disease. *Electro-Therapeutics:* Faradisation and galvanism in the different stages of rheumatic paralysis of the facial nerve. The value of constant and continuous currents in the treatment of parenchymatous congestions. How may these currents be established? *Hydrology:* An inquiry into the comparative merits of natural nitro-genous waters, and their effects on pathogenic processes. The most suitable mineral waters in the treatment of pulmonary tuberculosis. *Medicine:* The pathology and treatment of diabetes mellitus. *Surgery:* The value of antiseptic methods in the treatment of wounds. The best method of treating wounds antiseptically on the battle-field. Tetanus; its pathology and treatment. *Ophthalmology:* The simplest and most precise means of determining the presence of Daltonism. The best method of combating strabismus in children under seven years of age. *Dermatology:* The local treatment of eczema. The etiology of true lepra. *Diseases of the Larynx:* A certain and safe method of producing limited anaesthesia in the larynx. The differential diagnosis of simple, tuberculous, syphilitic, and cancerous ulcers, founded on their objective characters. *Operative Surgery:* An analysis of the various methods of surgical treatment in strangulated hernia. The indications to be followed in orthopaedic appliances in the treatment of coxalgia. *Obstetrics:* The medical and surgical treatment of central placenta prævia. Retro-uterine or peri-uterine hæmatocele. Artificial induction of labour. *Gynaecology:* Lupus of the Vulva; its forms, course, and treatment. *Diseases of Children:* Hæmophilia and purpura hæmorrhagica; and the distinction between these two conditions in newly born infants. Diagnosis and treatment of pulmonary atelectasis in infants. *Forensic Medicine:* Ought the degree of criminality of an accused person to be gauged by the length of time required to repair the wounds or lesions he may have been instrumental in causing? On what scientific grounds should it be estimated?

THE FRENCH HUMANE SOCIETY.

THERE are established at Paris, along the banks of the Seine and Saint Martin's Canal, eight Humane Society houses (*Pavillons de Secours*). A store of blankets, mattresses, and every appliance necessary to restore life to the drowning, is kept at every house. The number of apparatus intended to succour the drowned, deposited at the different police-stations in Paris and its environs, including those of the *garde nationale*, amount to 267; with 210 stretchers at the Prefecture of Police. There are, besides this, ample provision-tents, which are requisitioned by the *service de secours* on the days of public fêtes, and also for reviews. They are pitched where the crowd is the most dense, and are furnished with all the appliances of an ambulance; a medical man is attached to each of these movable ambulances during the duration of the fête. From 1805 to 1877, 11,500 sick and injured persons were relieved. Since 1875, 88 out of 196 apparently drowned persons have been restored to life. This proportion has considerably increased since the creation of these *pavillons de secours*; out of 87 apparently drowned persons, there have been only four deaths.

A NEW STOCK OF VACCINE.

M. HERVIER has sent to the Paris Academy of Medicine an interesting report of a new stock of cow-pox furnished by a heifer sent from Barbours. This heifer had, in the vicinity of the teats, about thirty pustules, which, on the fourth and fifth days of their development, showed the characteristics of true vaccine. The matter obtained from these pustules, either by puncture with the lancet, or by expression, and inoculated either into heifers or children, produced a crop of pustules entirely identical with natural vaccine. With a few exceptions only, the inoculations have produced as many positive results as there

have been children vaccinated, and very nearly as many as there were punctures. The transmission of the vaccine from the Bordeaux heifer to those bought for the purpose by the Paris authorities was completely successful, as they yielded as many pustules as there were incisions made. The Paris animal vaccine service has, therefore, been able to substitute fresh cow-pox from the Gironde for their official stock; and this is held to be the more satisfactory as this particular animal vaccine is considered to be of a first-rate quality.

STATISTICS OF INSANITY.

THE Lower Rhenish Sanitary Association has issued the first number of its *Centralblatt*, or official journal, which will deal with a more extended range of subjects than the organ of the society which is now merged into it. An interesting article deals with the general question of insanity from a statistical and economical point of view. According to the facts quoted by Dr. Pelman, the proportion of persons whose intellects are disordered amounts to 1.37 per 1,000 in North America, 1.46 in Austria, and 1.65 in Italy. On the other hand, Switzerland shows a ratio of 2.91, Norway 3.05, Scotland 3.40, Wurtemberg 4.22, and the Canton of Berne (treated separately from the rest of Switzerland) 5.54. In Prussia, there seems to have been a progressive increase of madness during the last fifteen years. The statistics quoted (which are more detailed than those referring to other countries) show that, in 1867, the proportion was about 1.59, while it had risen in 1871 to 2.23. It is estimated that, at the present time, it is not less than 3 per 1,000, which ratio the author doubtless wishes to put forward in comparison with the approximate proportion quoted with respect to other countries. Some details of interest are cited in reference to the accommodation for insane persons afforded by public institutions in various countries, the increase of which, it is remarked, is in consequence of the growing conviction in the public mind that, in the majority of cases, home-treatment is less desirable for such patients than the experienced care they receive at a properly organised asylum.

THE CONTAGION OF TYPHOID FEVER.

DR. ARNOULD of Lille discusses, in the *Bulletin Médical du Nord*, August 1881, a small epidemic of typhoid fever which broke out in his wards in the military hospital at Lille. He has used the opportunity of studying closely the conditions of transmission of this disease. Medical opinion ranks, he observes, typhoid fever among the infectious diseases, and its development requires the previous existence of a focus. Direct contact with the patient as a cause of contagion is not accepted; and Van Giel has gone so far as to say that "a typhoid patient, naked and washed, would not injure anyone". The facts observed by Dr. Arnould, the rapid diffusion of the disease through a series of patients in the same hospital-ward, without the existence of any epidemic in the town, seem to him to contradict this too positive assertion. He thinks, in certain cases, that typhoid fever may be really contagious. As to the question whether the contagion is lessened or increased, or the soil more or less favourable for its reception, Dr. Arnould does not pronounce a decided opinion. He inclines, however, towards the latter hypothesis, and remarks upon the deplorable sanitary condition of the hospital in question. In such a medium, the creation of a focus of disease may be very rapid, and the apparent contagion may well be only an infection of special activity. To English hygienists, it will seem surprising that, on such slender grounds and under such circumstances, so excellent a sanitary authority as Dr. Arnould had not proceeded to eliminate the ordinary causes of typhoid fever before proceeding to invent new ones. We may remind him that, out of 16,000 or 17,000 cases of typhoid fever admitted into the London Fever Hospital, the disease has never been known to spread from one patient to another; and this is apparently due to the care taken to disinfect and remove the typhoid stools, which are thoroughly recognised as the general seat of infection. In the French hospitals, with the filthy arrangements commonly prevailing with the latrines, the dirty habits of the patients, the want of personal cleanliness on their part, and also on the part of the nurses and assistants, anything is possible in the way of

filthy contamination; and, until these facts are perfectly understood by French hospital authorities, little attention will be paid to the probable fact, that typhoid fever in France is not conveyed by any other form of infection than that by which it is spread in England or other countries. The contagiousness of typhoid fever by other sources, however, is not a thing to be set aside as impossible, or as unworthy of investigation; but it is certainly necessary first to eliminate the ordinary causes of infection.

SCOTLAND.

COMBE LECTURES IN ABERDEEN.

DR. STIRLING delivered the last lecture of the course on Saturday evening. The subject was respiration. The lecturer showed the mode of breathing of a fish on a large screen twenty feet square, so that the audience could see the movements of mouth and the gill-covers. The action of the cilia in the windpipe was also rendered visible by the amount of work these cilia can do in carrying along considerable loads. Numerous experiments were shown with the gases of the air, and also to illustrate the difference between inspired and expired air. At the close, the lecturer intimated the result of the written competitive examination for the prizes presented by the Combe trustees. These lectures have been a complete success. We think the Combe trustees have scored a great success in instituting such courses of lectures; for undoubtedly a properly arranged course of lectures on one subject is far preferable to a mixed course by several lecturers. The former becomes educational in the highest sense. The large audiences which attended nightly testify to the desire of the public for a knowledge of the laws of health; and these Combe Lectures of Dr. Stirling have shown conclusively how successfully large numbers may be instructed in the fundamental laws of health, and that on a thoroughly experimental basis, for the numerous experiments were so arranged as to be visible to every one of the audience. The lithographic syllabus, also, has been found to be invaluable, for each member of the audience holds in his or her hand a copy of every diagram used by the lecturer. The lecturer suggested that policemen and all railway servants ought to receive ambulance instruction, or in "what to do till the doctor comes", in cases of accidents.

EDINBURGH NEW TOWN DISPENSARY.

THE annual meeting of the managers and supporters of the New Town Dispensary, Edinburgh, was held last week, when Professor Douglas Maclagan (one of its bygone officers, and the author of the *Nugæ Canoræ Medicæ*) presided. The medical secretary, Dr. Graham Weir, reported that, during the year, 9,129 patients had been treated by the medical officers of the dispensary, and of that number 1,794 had been visited at their homes. The New Town Dispensary adopted, a year or two ago, the system in vogue at some of the other Edinburgh dispensaries, of causing each prescription dispensed to be charged one penny, except in cases where this was out of the power of the patient; and a sum of £55 had accumulated during the year from this humble source. Unfortunately, the subscriptions have fallen off during the past three years; but, with a balance of £118, a noble past history, and a large sphere of present usefulness, this dispensary must be congratulated on its position.

EDINBURGH INSTITUTION FOR RELIEF OF INCURABLES.

DURING the past year, this unostentatious and very useful charity has been able to give relief to a large number of persons suffering from incurable diseases. It is quite apart from the Longmore Hospital for Incurables, as it has no in-door system, but endeavours to give to persons suitable for its purpose the sum of £4 annually. At present, 200 such are deriving this benefit. Nine deaths had occurred among the pensioners, and ten vacancies had occurred otherwise during the year, leaving nineteen places to fill up. Last year, £5,400 was received from the executors of the late Dr. Vans Dunlop, to be applied to the

relief of patients, and to be managed by Mrs. Keith's trustees and the directors jointly. These co-trustees have agreed to give the sum of £8 annually to incurable patients who have been treated in the Royal Infirmary. During the year, sixteen such patients have received the benefit of this arrangement, and at present there are several vacancies. Those present at the annual meeting were asked to make application for any deserving and suitable patients, especially if suffering from cancerous disease.

SMALL-POX AT BERWICK.

AT a meeting of the urban sanitary authority of Berwick, the medical officer of health, Dr. Fluker, reported this week that there were no new cases of small-pox in Berwick. Of three cases which had occurred, one had died; the other two were progressing favourably. The Works Committee submitted a report on the subject of the outbreak of small-pox, and the necessity that existed for a hospital to receive such cases and other cases of infectious disease. Of two plans submitted to the meeting for such an hospital, one at a proposed cost of £370 was accepted, to be built of brick; the other for an iron building, and to cost £219, not being considered so substantial as the one accepted, which is for a brick building. The new hospital will be situated in Tweedmouth.

DR. MCKENDRICK AND HIS ALMA MATER.

THE many friends, professional and lay, of Professor J. Gray McKendrick, of Glasgow University, will be much pleased with the public announcement that his Alma Mater, the University of Aberdeen, on Saturday conferred on him the honorary degree of LL.D. Dr. McKendrick graduated there with the highest honours in medicine, and since then has had a busy scientific life, which his University has fittingly acknowledged.

IRELAND.

MONKSTOWN HOSPITAL.

DURING the past year, 150 patients were admitted to the wards, and 2,181 treated at the dispensaries. The financial condition of the hospital appears satisfactory; the debt due on the building account has been closed, some debentures paid off, and a sale of work last October realised a sum of £288 15s. 3d.

SMALL-POX IN BELFAST.

DURING the past month, eighty-four persons suffering from small-pox were removed to hospital, every precaution having been taken to prevent the spread of the disorder. It is gratifying to notice that a marked decrease has lately taken place in the number of cases of the disease admitted to hospital; and it is to be hoped that the worst of the epidemic has passed.

FEVER AND SMALL-POX IN WATERFORD.

FEVER and small-pox prevailed to a considerable extent in Waterford during the past six months. From June 1881 to the 28th of last December, there had been 257 cases of fever and 158 cases of small-pox within the city limits. At the present time, there are no cases of fever admitted to the hospital, being an increase of 43 as compared with the number on the 1st January.

THE MEDICAL ASSOCIATION OF IRELAND.

THE Council of the Irish Medical Association, having received a very pressing invitation from the Government of Ireland, urging them, for their own sakes, to exert their influence with their constituents to support the Union Officers' Superannuation Bill, have accordingly addressed the Council of the Association by Mr. Thomas O'Sullivan, a Government member. The object of the case is now complete. In the proposed Bill, as presented, the medical officers' superannuation is to be made a work of the public, and will be subject to the control of the Government. The Government will be bound to accept the proposed Bill, and will be bound to accept the proposed Bill, and will be bound to accept the proposed Bill.

by circular order, No. 339, M., of 25th November last, positively declared it will not sanction any retiring allowance the amount of which exceeds the scales contained in the Bill; whereas, if the Bill be not passed, the medical officers will remain dependent upon the will and caprice of the guardians as at present, and cannot get as much as the maximum which would be sanctioned by the Bill; for at present the salaries of medical officers of health, and the fees received for examining alleged dangerous lunatics, are not allowed to be taken into consideration when computing superannuation allowances; but if the Bill become law, these emoluments must be taken into account. The question, therefore, arises, which is preferable: the obtainable maximum as a certainty; or less, and perhaps nothing, as the boards of guardians may be pleased to decide? The answer to the question can hardly be doubted; but, unfortunately, the majority of the Irish Poor-law medical officers have not in time past exhibited that energy and united action which might at least be expected when their own interests were at stake.

NOTIFICATION OF INFECTIOUS DISEASES.

THE King and Queen's College of Physicians in Ireland have adopted the report of its Parliamentary Bills Committee, recommending the College to support the Infectious Diseases Notification (Ireland) Bill, introduced into Parliament by Mr. Meldon on behalf of the Irish Medical Association and of the Dublin Branch. And the College has further directed the Committee to take steps to oppose or amend, in accordance with the views of the College, the Bill on the same subject introduced by Mr. Gray. The Royal College of Surgeons in Ireland have adopted the following resolution as regards Mr. Meldon's Bill: "That this Bill, being in conformity with views already expressed by the College, and having been considered and adopted by the medical associations specially interested in the matter, be now approved by this College." And the Executive Committee of the Dublin Sanitary Association, "while approving of the principle of direct notification of infectious disease, as contained in Mr. Gray's Bill, finding that the opposition of the medical profession would be probably a fatal obstacle, is disposed to accept Mr. Meldon's Bill as the best compromise under the present circumstances."

THE ROYAL HOSPITAL.

As the working classes in Belfast have not supported the hospital as they ought, early in December a circular was directed to the secretaries of the trade societies, with a view of enlisting a greater interest in the hospital among that portion of the community, and in the hope that it might lead to an increase in the sum annually subscribed. These anticipations have, however, not been fulfilled: and with the exception of one society which promised to subscribe, no response has been made to the circular issued by the board of management.

THE ROYAL HOSPITAL.

DURING the past year, the total number of cases treated amounted to 788. Of typhoid fever, there were 319 cases admitted: typhoid, 42; scarlatina, 24; measles, 13; and of all other classes of disease, 174. Of the two principal contagious diseases, typhus and typhoid fever, the mortality in the former during 1881, deducting cases hopeless on admission, was 8.1 per cent; and in typhoid, 7 per cent; while the entire mortality for all diseases treated came to 8.3 per cent. Several necessary improvements in the hospital have been delayed in consequence of the non-receipt of the funds. The medical officers, in their report, referred to the lamented death of Dr. Budds, extraordinary physician, who, they state, was ever regarded with esteem and respect by his associates, and earned the gratitude of the patients by his unselfish manner, his unselfish care, and the sympathy which he showed to the poorest patient, turning his attention. Dr. T. J. Budds, M.D., the eminent medical officer, was during the year a member of the Council of the hospital, and was elected by the Council, on the 1st of January, to the office of President, and was elected to the duty for three months, during which time Dr. Budds died in his office. The year was commenced with a deficit of £754, and closed with a deficit of £445.

PREPARATIONS FOR THE QUEEN AT MENTONE.

THE municipal authorities at Mentone are, we are informed, energetically striving to prepare their town for Her Majesty's visit. Some time ago, a series of main sewers were constructed, intended to carry the sewage of the town into the sea, in deep water, at the fortification called "The Chinese Fort," at the base of the jetty. These sewers, however, have hitherto been inefficient, on account of the scanty supply of water. A water-company discovered, this summer, an abundant supply at the mouth of the principal mountain valley (the Carra), has made a large reservoir at a considerable elevation, into which the water is pumped, and is now laying pipes all over the town. It is anticipated that all the preparations for freely and regularly flushing the sewers will be completed in the course of a few days. What man, however, has not yet accomplished, nature has just done. In the night, from the 3rd to the 4th, two inches of tropical rain fell, with a south wind; following, as is usually the case, a strong north-west wind, which had lasted forty-eight hours. All the drains, ditches, gutters, etc., have thus been thoroughly washed and flushed. In these southern regions, as in more northern ones, this is nature's mode of purifying town and country. The public health is always improved, even in the tropics, by hurricanes of wind and rain.

On Friday, the 3rd, the Society of Medical Men Practising at Mentone met at the Hotel Victoria, under the presidency of Dr. Henry Bennet, to consider in what way the hygienic state of Mentone could be improved, with a view to the Queen's visit. The Mayor had previously signified his hearty readiness to adopt any suggestion the Society or its members might suggest. Various questions connected with the public health were discussed; and a report was drawn up, and presented at once to the Mayor. No doubt is entertained that he will act upon it.

The gale of wind of the 1st and 2nd March, and the tropical rain of the 3rd, terminated, on the Riviera, we are informed, a period of two months' all but uninterrupted sunshine and fine weather. Both the north-west wind and the south-west rain have, no doubt, been general on the Riviera, from Hyères to Genoa, as was the previous sunny winter season.

It has been stated that Sir William Jenner is going to Mentone, in attendance on the Queen; there has, however, been no question of Sir William Jenner going abroad. Dr. Reid, the resident physician, will attend Her Majesty on this occasion, as Dr. Marshall did on the last.

RODERICK MACLEAN AT WELLS ASYLUM.

THE antecedents of Roderick Edward Maclean, whose attempt upon the life of Her Majesty has providentially failed, are, of course, undergoing investigation by the police. He is said to have taken up his temporary residence at Weston-super-Mare in 1880, from which place he was removed to the Somerset and Bath Lunatic Asylum, Wells. The medical officer who was at the time in charge of the male wards is not now at the asylum; but it has been thus far ascertained that Maclean, when admitted, had delusions of persecution; believed the world to be at enmity with him; and felt a strong impulse to kill some one. Two letters were written by him, a week before admission, to his sister, in which he stated that he was determined to commit murder. He was admitted on June 2nd, 1880, and appears to have lost the above delusions in August. He is reported to have been well for some months before discharge; but his discharge was delayed, as he appeared to be destitute. He is said to have been of intemperate habits. He was finally discharged July 21st, 1881. Those who worked with him state that he was rather weak-minded, even when he appeared free from delusions; also, that he was fond of talking about the Queen and royal family, although he never gave expression to any desire to injure them. The present superintendent, Dr. Law Wade, did not enter on his office till three months after Maclean was discharged.

THE WORK OF THE COLLECTIVE INVESTIGATION COMMITTEE.

THE members of the Association will probably be interested to know what progress has been made by this Committee in the important work they have undertaken. During the past month, much has been accomplished. An Honorary Secretary having been appointed on February 1st, it was next decided to form an active and powerful "General Committee," who will "determine the subjects for investigation, and the manner in which such investigations shall be conducted" (see Report of the Collective Investigation Committee, *BRITISH MEDICAL JOURNAL*, December 17th, 1881). It was felt that upon this Committee

experience and knowledge of various kinds must be represented; while its influence must be as far-reaching and diffused as possible, as it would require to be in communication with every district in which the work is being carried on—in other words, it is hoped, with every Branch of the Association in the United Kingdom. Hitherto, our knowledge of medicine has been derived chiefly from the experience of our hospitalists; no attempt having been made to utilise that great mass of experience to gather that harvest of facts constantly being reaped by the whole body of the profession throughout the kingdom. Our Association has decided that this shall no longer be so, but that every man shall be invited to contribute his share for the common good and for the advancement of medicine. Such being the case, it was evident that they who had to teach medicine, and this chiefly from their hospital experience, could best tell us what information about disease this experience fails to afford them, and therefore in what direction our science can be most advanced by the facts which come to the knowledge of the ordinary practitioner of medicine. It was, therefore, decided to obtain the assistance of one or more representatives from every medical school, both metropolitan and provincial. These members, moreover, will know where to find the ablest and best of those who have been trained at their respective schools, and will add the influence of the medical schools, to that of the Association, in promoting the work. The Committee have been fortunate in already obtaining thoroughly representative men from many of the schools—men whose names are well known as among the most active of our scientific workers. They have also sought the help of those Secretaries of Branches, who are also representatives of provincial schools. Lastly, they invited the assistance of some of the most active and energetic members of the Association in various districts; and the number of these they hope to see further increased hereafter by representatives from subcommittees in each Branch. The work they had immediately in view being rather of a medical nature, very few surgeons have yet been added to the General Committee; but, as subjects of surgical interest, more especially in connection with syphilis and cancer, are likely to come under discussion shortly, they have determined to ask the assistance of some surgical colleagues; some most distinguished surgeons have already consented to join the Committee.

The enthusiastic and earnest manner in which the work has been taken up, not only in London, but in many parts of the kingdom, wherever application has been made for help, is most encouraging. It is proposed to form subcommittees in connection with each Branch of the Association, to carry on the work in their own districts; already, in many of our largest Branches, able and energetic men have expressed their willingness to join in the work, and to give it their active support. It is hoped that these subcommittees will not only bring the matter before their own district meetings, and encourage their friends to give them aid, but will also bring forward valuable and interesting local material in connection with the inquiry in hand; that they will suggest subjects of local interest for combined observation, and coordinate the members of their districts for this purpose. The subcommittee of each Branch will be represented by one of its members on the General Committee, who will bring his own local committee into direct relation with the central organisation. Although the Committee is already in communication with the Secretaries of most of our largest Branches, no official action has yet been taken in the Branches generally, as it is hoped that shortly a complete scheme, thoroughly worked out, will be ready to be laid before them.

The selection of subjects, when so many present themselves, has been by no means an easy task; but still more difficult is it to contrive the best method of obtaining the desired information. The Committee has first to determine the exact objects of its inquiry, and then to frame questions which will give the required information in the most exact and definite manner possible. In doing so, it is necessary to remember that we are dealing with the time of a most overworked and busy class of men; if anything be asked from them, it must be only such things as will prove no appreciable addition to their labours. It has been accepted as a principle, that no written answers to questions beyond a single stroke of the pen, a figure, a date, or occasionally a few words, must be asked for. To contrive questions that can be answered in this manner, that will give exactly the information required and no more, and to arrange these on convenient cards, which can be carried in the pocket and filled up in a spare minute at any time or place, has been a work requiring no small amount of patience, thought, and ingenuity. This work, however, is nearly completed; and there is little doubt that the pains bestowed upon it will be generally appreciated. At a meeting of the General Committee on Friday, February 24th, it was resolved to take up the following subjects for investigation.

1. Acute rheumatism: with regard to (1) its immediate and remote

INHALATION OF CHLOROFORM.

SIR,—The last paragraph in Mr. Joseph Sarjant's letter to the JOURNAL of March 4th suggests the question, How should an anæsthetic be administered? As there is a correspondence on chloroform *versus* ether at present going on in the JOURNAL, and much anxiety is evinced relative to their comparative freedom from risk of fatality, it may be acceptable to give a mode of administering chloroform which has hitherto proved safe during the twenty-seven years I have used it, both in my own practice and with surgeons in nearly every kind of operation, including ovariotomy.

Premising an empty stomach—patient in bed until arrival of surgeon—about six minutes before the inhalation of chloroform I give one drachm of spirit of chloroform in an ounce of whiskey with some water, more or less, according to age and habits. This makes the patient less averse to the chloroform, keeps up the heart's action, and prevents pulmonary asphyxia and venous engorgement. It also makes the patient succumb more speedily to the anæsthetic; indeed, it is rare that anyone treated in this way struggles, sings, or tells secrets, as is apt to be the case.

I have often used a mixture of ether and chloroform, but have rarely found it satisfactory. It seemed to me slower in producing narcosis, which, beside, did not continue so long or deep as is generally required.

In administering chloroform, I simply use a folded napkin, on which I sprinkle about sixty minims. One end of the napkin is held close to the nasal bones with the left hand; and with the right I regulate the quantity of chloroform and atmospheric air by holding the lower part of the napkin near or away from the mouth, according to the depth of anæsthesia, as indicated by raising an arm and observing if it falls involuntarily. The eyes being uncovered, observation may also be made of them, as generally recommended.

In giving chloroform to parturient women, it has been my practice to give as little at a time as possible, inasmuch as it has to be continued for a longer period than in operations; and, although the patient will shout that she has not had enough, when the case is terminated she can remember nothing from the time of inhaling the first whiff, which should always be a full one.—I am, yours faithfully,

J. CARRICK MURRAY, M.D.

44, Newgate Street, Newcastle-on-Tyne, March 1882.

ANÆSTHETICS.

SIR,—From paragraphs and correspondence in your JOURNAL during the last few weeks on the subject of chloroform, it appears that that anæsthetic is still largely used; and there seems to be every probability of a renewal of the controversy as to the relative safety of that anæsthetic and ether.

In the JOURNAL of February 25th, Mr. Woodman asks you to use your influence to get a committee appointed to inquire into the matter; and he suggests that that committee should collect statistics of the anæsthetics used for some time back in all the hospitals in England, with the mortality of each, etc. Now, sir, I question the practicability of obtaining the statistics he suggests: firstly, because hospital anæsthetists do not confine themselves to the use of one anæsthetic; secondly, because, to estimate the mortality from an anæsthetic, the number of administrations must be known, and also the number of deaths which are due to the anæsthetic of those which occur during its use.

I venture to think that more valuable information would be obtained from statistics of the opinions of anæsthetists; and I know of no better mode of collecting them than through the columns of your JOURNAL. I feel sure that anyone who has had special experience would be pleased to copy, fill up, and forward any form you might propose in your JOURNAL. I think such a form should give information as to the nature of the experience of the person filling it in, and the anæsthetic he now prefers. In the provinces, as in the metropolis, the anæsthetising of "bad cases" chiefly devolves upon a few, who generally have been, but may not now be, hospital anæsthetists. The opinion of these would be valuable, inasmuch as an estimate as to the relative safety of an anæsthetic may be made not only by the death-rate, but by the condition of patients under its influence, especially if these patients are unfavourable subjects.—I am, sir, faithfully yours,

EDWIN RICKARDS,

Physician to the General Hospital, Birmingham.

14, Newhall Street, Birmingham, March 5th.

OVIOTOMY IN SWITZERLAND.

SIR,—I read with great interest Mr. Alban Doran's article on "Ovariectomy in Switzerland," which appeared in your JOURNAL 28th January last. This work seems to me to be, generally speaking, very complete; and if I take the liberty of sending you some rectifications,

it is in order to contribute to your statistics an exactitude which is their principal merit. I do not desire to wrong in the least the renown of your illustrious Spencer Wells, the greatest ovariectomist of this century, by modifying the account of the origin of ovariectomy in Switzerland.

Among the documents that I have in hand, this is the history of the operation from the commencement. In 1863, Professor Breslau, of Zürich, was at the baths of Baden (Argovie), at the same time as Dr. de Montet, of Vevey. He told our friend that he proposed shortly to perform an ovariectomy, and invited him to assist him. Dr. de Montet, delighted to have an opportunity of being an eye-witness of an operation that he had never seen, went to Zürich a month later. The operation was skillfully performed; unhappily, acute peritonitis set in two days later, and the patient died.

The following year, Dr. de Montet had charge of the medical and surgical service of the little infirmary, the Samaritan, at Vevey. An unmarried woman, Marie C., aged 26, was admitted into this hospital. She was suffering from a voluminous cyst, and had been tapped three times. Dr. de Montet operated upon her December 8th, 1864; the operation was successful; no complication took place, and the patient was soon cured. A sentiment of gratitude induced this person to become a Sister of Charity, and she is known throughout the country as an excellent nurse. I believe this case to have been the first successful operation obtained in Switzerland. That of Mr. Wells took place immediately afterwards (in 1865).

Among the cases in which antiseptic precautions are not specified, you cite the twelve cases of Dr. Dupont. In sending the result of his practice to Professor Kocher, he has neglected to mention the antiseptic precautions; but the fact is, that he did not think it to be necessary. During the seven years since he has succeeded Dr. Rouge, he has been one of the warmest advocates of the Listerian dressing; he has often insisted upon its advantages in the meetings of the Medical Society of the Canton of Vaud; and his twelve operations were performed under rigorous antiseptic precautions, comprising the spray. Thus, Dr. Dupont's cases ought to be put in Table I, No. 3, instead of Table III. You mention a successful case of ovariectomy at Nyon, but the name of the qualified practitioner who has obtained this success is de Miéville, and not Michaille. He also is a decided partisan of Listerian dressing. In this particular case he made a careful antiseptic dressing, but without spray. It was a voluminous multilocular cyst. He used the clamp.

I think that some cases may have escaped the conscientious research of the author of the statistics. For instance, I find among my notes an ovariectomy performed at Fribourg by Dr. Schaller. He is now dead; and I am ignorant of the result.

Before I close, pray allow me, sir, to make a last observation. Mr. Alban Doran appears to consider that the expressions "rigoureux," "strengste," "Listerian," have a less serious meaning when used by surgeons of less experience than Professor Kocher. I believe this to be an error; and that on the contrary, the Swiss operators merit an entire confidence. A great number of our medical students have followed the lessons of the illustrious professor at the university of Berne. A great many medical men, especially in French Switzerland, have completed their medical studies by a visit to London; and all have made a pilgrimage to King's College Hospital. Therefore I think that there are few countries where the majority of practitioners are as familiar with the Listerian dressing as in Switzerland.—I am, Sir, yours truly,

DR. JOËL, Swiss Delegate to the Congress of London.

LADIES' WAISTS.

SIR,—The profession will be grateful to the National Health Society for endeavouring to demonstrate the evils of tight lacing to popular audiences. I fear, however, that Mr. Treves, in his recent lecture at Kensington, treated the subject a little too confidently from a sanitary, and a little too cavalierly from an æsthetic, point of view. I should be very sorry if anything I said could be looked on as an encouragement to tight lacing by ladies; but still I think we should take them into our councils, and discuss the subject in all its bearings with moderation. I think that Mr. Treves fell into an important error when he assumed that the primary use of dressing was to cover the body and maintain an equable temperature; and again, when he asserted that a small waist in a draped figure is ugly, and offends our sense of the beautiful in the human form. Now, all anthropologists agree that the primary object of dress was decoration, and this is still the only object of dress in probably a third of the human race. It is an instinct of which the physiologist takes no note, but nevertheless is as potent in High Street, Kensington, as in the centre of Africa or the provinces of North America. The decorative use of dress is not only a fact, but

the first fact to be taken into consideration by reformers of the dress of the period. Again, it is idle to attempt to convince women that small waists are ugly, by comparing them with casts of nude figures of ideal proportions. Comparisons are odious, and this is a supremely odious one to women, and, moreover, a very unfair one; drape the figure, and see what becomes of its grand proportions. A custom which is so general must have some *raison d'être*, although women cannot explain it. Some women think that men admire small waists; and, until the question is decided by a vote by ballot, they will not believe otherwise. In truth, small waists in draped figures are the result of the law of proportion, which is at the bottom of our sense of the beautiful, not only in the human form, but in all other objects. Professor Zeising, to whom we owe the discovery of this law, states it thus: "If the divisions of a whole (made up of unequal parts) appear proportional, the smaller part will bear the same relation to the larger that the larger does to the whole." Now the waist forms the division of the body which gives these proportions. Thus, if we take a well proportioned figure, and represent its total height by 1,000, we shall find the portion below the waist is represented by 618, and the portion above it by 382 parts; and 382 is to 618 what 618 is to 1,000. Zeising's law applies equally well to the hand, the head, the arm, and the leg; and, indeed, to all animate and inanimate objects which appear proportional to us. But in some nude figures, the proportional division is not at the waist, but at the knees. In the *Venus de Medici*, where the arms are folded across the body, this is the case; hence the charm of young girls with short skirts and no waists (and perhaps of men in frock coats). The shorter the skirts in children, the better the proportion appears; but as they grow up, and their skirts are lengthened, a new division line becomes necessary, and the waist is constricted accordingly. The dress reformers should, therefore, bear in mind that dressing is the instinct of decorating the body, and that a small waist is the result of a law of nature; but within these limits there is ample room for their efforts for improvement; many dresses are fantastic and in bad taste, and most waists are constricted too much even from an æsthetical point of view.—Your obedient servant,

C. ROBERTS.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLASGOW ROYAL INFIRMARY.

AT the annual meeting of the contributors to the above institution, held on January 30th, the medical report was considered and approved. From this report, we learn that, during the year, 5,107 patients were admitted into the hospital, being 10 fewer than during the previous year. Of these, 2,388 were medical cases, and 2,719 surgical. Taking in the patients who remained in hospital at the end of last year, the mortality in the medical wards was 11.1 per cent., against 12.7 in 1880; and in the surgical wards 6.5, against 6.4 in 1880. In the whole institution, the number remaining at the end of December 1880 was 509, which, with the 5,107 admitted, makes a total of 5,616. Deducting 486 remaining on December 31st, 1881, we have a total number treated of 5,130, of whom 4,685 were dismissed, and 445 died, giving a mortality over all of 8.6, against 9.3 in 1880; but, if there be deducted, as in previous years, the number who died within forty-eight hours of admission, the mortality is reduced from 8.6 to 6.5 per cent. The number of out-patients treated at the dispensary was 20,629. Of these, 9,370 were medical, and 11,259 surgical. The number who received special treatment for diseases of the throat was 630, for diseases of the ear 846, and 179 for diseases peculiar to women. The above figures include some who obtained advice on more than one occasion. Grouping together the patients from every department, we find that the grand total of those who received the benefits of the hospital during the year is 31,603.

LEITH HOSPITAL.

AT the annual meeting of the supporters of Leith Hospital and Dispensary, held lately, it was reported that the number of patients admitted to the hospital during the year was 558, the largest number yet recorded. In the previous year, 80 patients had been admitted to the fever-wards, while last year the number was actually 235, and of these a great many were suffering from typhus, which was very prevalent in Leith. The total number treated in the in-door and out-door departments was 3,156, while 2,460 were visited at their homes, and 415 were attended by the district nurses. The average cost of each bed for the year was £3 17s 3d, while the average mortality was 8½. The income for the year was £2,100, and the expenditure £2,334. It is most gratifying to notice that a lady, who withheld her

name from publication, handed over to trustees the sum of £16,000, stipulating that two-thirds of the free income from it was to be paid to the directors, to be by them used in maintaining a ward to be called the "Stead Medical Ward". Legacies of £1,000 and £200, and a donation of £300, were also received during the year.

EDINBURGH DENTAL HOSPITAL.

THIS institution continues to increase in usefulness. During 1881, 2,503 female patients, and 2,140 male ones, were treated at it; of course, the majority of these cases were for extraction of teeth; but, as evidence of the other work done at the institution, no fewer than 425 teeth had been stopped, while 151 cases were receiving other treatment. The income of the institution showed a very creditable balance over the expenditure, and it is worth noticing that £10 9s. had been voluntarily contributed by the patients.

THE GENERAL HOSPITAL, BIRMINGHAM.

THE Committee of the General Hospital have issued the 102nd Report of the Institution. The total of in- and out-patients treated was 32,995 last year, as compared with 30,785 in 1880, and 27,105 in 1879. The teeth extractions were 3,808, against 4,876 in the previous year, and 3,009 in 1879.

The total expenditure during the year has been £21,739, as compared with £18,419 in the previous year, and £14,779 in 1879. The ordinary expenditure being £13,160 in 1881, £12,727 in 1880, and £12,993 in 1879. The work of this institution continues steadily to increase year by year, chiefly in the free department. This appears to be due to the great increase in the population of the town and neighbourhood; and also, to a considerable extent, to the popularity of the hospital among the sick poor. Last year there was an excess of patients over the previous year of 2,210 (excluding teeth cases), and of these 1,444 were admitted without tickets. The large number of 36,803 persons received treatment during 1881 within the walls of the hospital, either as in-or-out-patients; and of these, on account of the urgency of the cases, 23,172 were attended to without tickets, being nearly two-thirds of the total number. The great pressure on the space and resources of the hospital referred to in the report of last year continues; and the committee trust that with the revival of trade they may shortly feel justified in appealing to the public for funds, to enable them to make the much-needed addition of a suburban chronic hospital, the necessity for which is daily becoming more urgent. The ordinary income shows an increase of £733, on the year immediately preceding. Of this amount, £122 is due to increased subscriptions, and £697 to donations, both of which classes of income indicate the public appreciation of the work of the hospital. Under the head of "Miscellaneous," and "Income-tax returned," there is an increase of £135, in dividends and ground rents. And in consequence of the funds on deposit being withdrawn for payment of the new buildings and furniture, a decrease of £66 in the interest from the bankers. Of the extraordinary income, amounting to £5,516, the large sum of £4,238 is due to the proceeds of the periodical Hospital Sunday collections. The extraordinary expenditure is again very large, being £7,294, on account of new buildings, and £1,285 for furniture, bedding and linen, etc., for the burn wards, nurses' home, etc. This expenditure has absorbed the accumulated savings of the hospital, and has resulted in a deficiency of £2,000 at the end of the year. During the past year the additions, on the present site, of a nurses' home, burn wards, and new mortuary, with jury-room, have been completed; and alterations to the main building, so as to provide small wards for noisy patients, have been carried out. The quadrangle at the back of the hospital, which is used as a recreation ground, has also been enlarged, levelled, and gravelled, at considerable expense. These necessary and important works have greatly improved the institution and completed the arrangements on the present site, but the cost has far exceeded the amount originally intended to be spent, and has caused a deficit in the general funds of the charity.

OFFICIAL RESEARCH IN AUSTRALIA.—The Royal Society of New South Wales offers the following, among other prizes, for the best essays containing the results of original researches or observations on the Aborigines of New South Wales, (1) the Treatment of Australian Typhus, (2) the Chemistry of the Australian Gums and Resins; (3) the Embryology and Evolution of the Marsupials; and (4) the Influence of the Climate of Australia. The prizes are thrown open to general competition, without any restriction whatever. The essays should be sent in not later than August 31st, 1883.

MILITARY AND NAVAL MEDICAL SERVICES.

A GREAT boon has been conferred upon the medical officers of field rank by the provision contained in the newly-published edition of the Queen's Regulations, that they, in common with all staff officers, are allowed to have a soldier groom to attend upon their horses, without in any way trenching upon the shilling per day allowed to pay for a personal servant.

MAJOR-GENERAL C. C. FRASER, V.C., C.B., commanding Curragh Brigade, has found it necessary, in consequence of the unhealthy condition of the troops stationed in camp, to issue an order "requesting commanding officers to prevent their men from going out in shirt-sleeves, open coats, etc., and from exposing themselves in any way to the chances of sudden chills, naturally produced by passing out from warm huts into the cold air of the Curragh."

NAVAL MEDICAL DEPARTMENT.

We have received the following satisfactory official announcement.

The following is a list of the successful candidates for six vacancies as surgeons in the Royal Navy, at the competitive examination at Burlington Gardens, on the 20th February and following days.

Barnes, W. G. K.	2,260 marks.
McCormack, R. J.	2,075 "
Smith, W. G. C.	1,965 "
Farmer, S.	1,925 "
Peyton, A. D.	1,875 "
Wray, J. S.	1,875 "

Twenty-eight, out of thirty-one accepted candidates, presented themselves at the Admiralty for the physical examination; five failed to pass owing to defective vision, etc. Of the twenty-three who appeared at Burlington Gardens, two retired, and twenty-one qualified. Seventeen of the latter did so well, that the examiners suggested to their lordships that all should be admitted into the service.

* * It is highly satisfactory to find that this important department of the public service has, by just concessions to the reasonable requirements of the profession, been restored to a position of popularity, and consequent increasing efficiency. Upon this result, which we did not hesitate to anticipate and predict when formulating these requirements, and submitting them for the assent and support of the profession and the service, we may venture to congratulate the naval authorities, the heads of the medical service, who acted with so much vigour and ability in the inquiry conducted by the Admiralty; and, in some measure we hope, the Association and ourselves, who undertook the responsibility of a minute and extended investigation of the grievances, and of defining the requirements of the service, in a series of propositions which were ultimately accepted as the bases of that reform which has proved so satisfactory in its results.

ARMY MEDICAL SERVICE.—The following is a list of candidates who were successful for appointments as surgeons in Her Majesty's British Medical Service at the competitive examination in London on the 20th of February, 1882.

Marks.	Marks.
1. S. Westcott 2295	9. H. S. McGill 2065
2. H. R. Whitehead 2280	10. A. A. Pechell 2060
3. B. M. Skinner 2200	11. C. R. Tyrrell 2050
4. C. R. Bartlett 2195	12. J. Hickman 1980
5. J. D. T. Reckitt 2175	13. W. B. Thomson 1975
6. T. A. P. Marsh 2150	14. H. E. Deane 1945
7. R. Kirkpatrick 2140	15. S. O. Stuart 1940
8. A. C. A. Alexander 2095	

INDIAN MEDICAL SERVICE.—The following is a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination held at Burlington House on the 20th February, 1882, and following days. Thirty-one candidates competed for eight appointments. Twenty-seven were reported qualified; four retired from the examination.

Marks.	Marks.
1. H. H. R. Charles 2495	5. G. Duncan 2245
2. J. P. Barry 2452	6. A. V. Anderson 2020
3. R. W. S. Lyons 2385	7. E. W. Reilly 1945
4. W. A. Sykes 2325	8. J. Scott 1900

REMARKS ON THE MOVEMENTS OF TROOPS.

SIR.—The JOURNAL of January 7th, 1882, having just reached me, I have had the opportunity of reading the very interesting and suggestive paper of Surgeon-Major Boileau on "Yellow Fever in relation to the Movement of Troops." I am not only prepared to accept Dr. Boileau's views as being correct, but I am inclined to extend his position a little, by suggesting that "an immediate previous residence in Malta is no less a bad preparation for service in some portions of the East Indies than Dr. Boileau has shown it to be for service in the West Indies under certain circum-

stances." The portions of the East Indies to which I here allude are those possessing a hot, moist, and enervating climate, with little, if any, cold weather; such a climate, for example, as is that of Bombay city, or Karachi. In relation to, and in some support of, this view, I will mention a few facts in connection with the medical history of the 98th and 61st Regiments. Before doing so, I am desirous of stating that, owing to my being, at the moment of writing, on the line of march from Karachi to Nussacerabad, I have no means of access to returns of any description, and hence am unable to add to the general statements I am obliged to make any figures in support of them.

On news being received of Brigadier-General Burrows's disaster in Southern Afghanistan, reinforcements were called for from Europe; among the regiments despatched in compliance with this demand were the 98th and 61st Regiments, both happening at the time to be stationed at Malta, where they had been for several years previously.

I may here say that the 98th Regiment was specially selected to be sent to India owing to its strength and exceptionally healthy condition; and I understand that the 61st were equally fit for immediate active service.

To resume: the 98th were sent direct to Karachi from Malta, and there they remained; for, by the time of their arrival in India, Kandahar had happily been relieved by General Sir F. Roberts, and, in consequence, all necessity for fresh reinforcements to Southern Afghanistan had subsided. Now, mark the sequel. After a very few months' residence in Karachi, this exceptionally healthy regiment had become so weakened and so fever-stricken that, had the necessity again arisen for reinforcements being sent to Afghanistan, I think I may safely say that the 98th could not possibly have gone.

This prevalence of fever in the 98th could not be accounted for on the plea that the regiment had happened to arrive in India during an exceptionally unhealthy year; for the battery of artillery of which I was in medical charge, and which was stationed in Karachi with the 98th, were in better health at the time of the great unhealthiness of the 98th than they had for several years previously been.

Now, to refer to the 61st regiment. This regiment was stationed in Bombay (city) on their arrival from Malta. In a very short time, they (like the 98th) began to suffer severely from fever, until at last not more than half the regiment, as it landed from Malta, were fit in all respects for duty. Under these circumstances, they were ordered to Quetta; and there, in the fine bracing climate of that station, they rapidly assumed their previously healthy condition. In relation to the 61st regiment, I wish to say that I have had no personal knowledge of the health of the regiment during its residence in Bombay; all that I have said is simply hearsay, and, therefore, cannot be vouched for by me as being in all respects correct.

I would not have it inferred from the above remarks, that I hold it to be highly impolitic to bring troops from the Mediterranean to the Indian command. By no means. In India, during the cold season, there are many stations the climate of which is at that time bracing and invigorating. To such stations as these, I see no reason for thinking that a transference to them of a regiment which had been previously stationed in Malta would have an untoward influence on that regiment's health. But I certainly think that previous residence in a climate like Malta, which in no sense of the word can be considered as one calculated to brace and invigorate, is, to say the least of it, unsuitable for a subsequent residence in any Indian climate similar to that of Bombay (city) or Karachi. —Your obedient servant,

RICHARD H. QUILL, M.D. Dub., Surgeon A. M. D.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

THE outbreak of small-pox at Bolton still continues, unhappily, to spread. At present, there are thirteen cases under treatment in the borough, and thirty-five in the workhouse hospital. Since the outbreak in November last, no fewer than thirteen deaths have happened from the disease.

A DISCUSSION has arisen on the proposal of the authorities of the Highgate Small-pox Hospital to divert their drainage into a pipe-sewer recently constructed, and which passes through a thickly populated neighbourhood. The vestry of St. Pancras have expressed themselves in direct opposition to the scheme, but the Islington Committee think that, while it would be more desirable that the present drainage into the old sewer should be reconstructed and improved, they do not think that the vestry could legally refuse permission to divert the drainage into a public sewer within their district.

VACCINATION PROSECUTIONS.

AN important prosecution, under the Vaccination Acts, was recently held at Nottingham, before a special meeting of the magistrates. The vaccination officer stated that he had served the usual notices by post on the defendant, and that he had not received either a certificate of postponement or of successful vaccination. The defendant argued that the officer could not possibly know whether the child was properly vaccinated or not. He contended, moreover, that the summons was not properly laid; and that he ought to have been charged, under the section, for not having sent in a certificate of successful vaccination. By Section 2 of the Act of 1871, it is enacted, that, where a person is charged with the offence of neglecting to take any child to be vaccinated, and, on the defence made by such person, it appears to the justices that such person is not guilty of such offence; but has been guilty of not transmitting any certificate with respect to the vaccination of such child, the justices may convict such person of the last-mentioned offence, in like manner as if he had been charged thereunder. Defeated

in this plea, the defendant raised another—to the effect that the proceedings should have been taken earlier, viz., within twelve months of the notice of requirement to vaccinate given him by the registrar of births. The Court of Queen's Bench have, however, ruled that the twelve months must date from the time when the notice to vaccinate, sent by the vaccination officer, and not the registrar's notice of requirement, has been disregarded. Moreover, by Section 13 of the Act of 1867, it is stipulated that the parent of any child, under the age of fourteen years, can be proceeded against. The defendant's last objection was, therefore, overruled by the bench, who imposed a fine of ten shillings upon him for neglect to comply with the law.

THE SWAFFHAM BOARD OF GUARDIANS AND POOR-LAW MEDICAL RELIEF.

ABOUT five years ago, Dr. I. K. Milne, of Shipdham, bought the practice there. It carried with it the appointment to one of the districts of the Swaffham Union, to which he succeeded on the same terms as his predecessor, which was stated to him, at the time of purchase, to be after the rate of 7s. 6d. a case and the ordinary mode of attendance. There was only a verbal agreement. On the receipt of his first quarter's salary, he found he had been misinformed as to the remuneration; and, as overseer's orders came very frequently, he went to Swaffham, and asked the clerk to let him know definitely what his engagement was. The clerk naively stated that it was difficult to explain it; but ultimately promised to write and let him know. After waiting a twelve-month, Dr. Milne wrote and reminded the clerk of his promise; but neither this letter, nor another, written six months afterwards, elicited any reply. Last Michaelmas, although much sickness had been attended to during the quarter, Dr. Milne received no salary at all. After waiting two months, he went to the village of Bradenham to see the relieving officer; he did not, however, see him, but saw the sanitary inspector, who was doing duty for him, to whom he stated that he had received no salary, and who promised to ask for the money for him. Two days later, he saw him again, when the inspector said "that they thought in the office that they had sent some money", but, as they could not find any receipt, they supposed it had been overlooked, and that they would send him some in a day or two. A few days afterwards, he received £3 16s. This amount, having regard to the services rendered, was so utterly inadequate, and the procedure appeared to be so extraordinary, that Dr. Milne wrote a letter, giving all the facts, to the chairman of the board, but this gentleman did not trouble himself to send any reply. About this time, a widow woman, by name Darkins, aged 76, feeble and wandering, became worse, and her son got a medical order for Dr. Milne's attendance. This order was issued by the assistant overseer. As it was not marked "urgent", and as the bearer did not consider immediate attendance necessary, and Dr. Milne had made arrangements to go elsewhere, he told him to take the order back and get it marked "immediate" if it were necessary, and he would then call that day, and if not that day, on the following morning. It would appear that there was no necessity for his services, as the old lady died before he could be again summoned. Subsequently, an inquest was held, at which it was stated by Dr. Milne that all orders to see patients should reach him, except in urgent cases, before 9 A.M.; that he had often received orders from overseers for cases which were not urgent, and, in many instances, where no sickness existed at all. The jury returned a verdict, that the woman had died from natural causes, and added a rider to the effect, "that the method of doing business by the Swaffham Board of Guardians required revision," in which opinion the coroner heartily concurred. It would also appear that, the local reporter not being in time for the inquest, Dr. Milne furnished him with a copy of the depositions. This coming to the knowledge of the board, Dr. Milne was summoned to attend their next meeting, when, after hearing his explanation, the guardians passed the following resolution: "Having heard Mr. Milne's explanation, the board considers it did not justify him in not obeying the coroner's order in the case of Darkins, especially as he was in the parish the same day; and desires him to be more careful in future. The board considers it a great act of ingratitude for one of their officers to cause reports to be published in the newspapers reflecting on the character of the guardians, whether true or not."

It will be seen from the above that, as in the case of Dr. Pullin in the Honiton Union, referred to by us recently, the guardians have thought fit to ignore the verdict of the coroner's jury, and come to a decision of their own. Dr. Milne, we learn, is much dissatisfied with the action of the board, and is desirous of obtaining an official inquiry. We heartily support him in this desire, and feel, after the statement we have laid before our readers of the mode in which the Swaffham Board of Guardians provide for the necessities of the sick

poor in their union, that such inquiry is loudly called for; for what prospect can there possibly be of any efficient treatment under the system which prevails in the Swaffham Union? Indeed, one can only suppose that a medical officer can retain his position upon the plea that "his poverty but not his will consents"; and that the guardians "pay his poverty, and not his will."

PROTECTION OF THE MILK-SUPPLY.

THE following memorial has been presented by the Manchester and Salford Sanitary Association to the president of the Local Government Board.

To the Right Honourable J. G. Dodson, M.P., etc., President of the Local Government Board.

The memorial of the Manchester and Salford Sanitary Association, respectfully sheweth. That your memorialists are a body consisting of medical men, chemists, architects, engineers, bankers, merchants, etc., associated for the purpose of promoting measures calculated to improve the public health. That they have had under consideration the question of the milk-supply of large towns, and submit the following conclusions. 1. That severe and fatal epidemics of scarlet fever and typhoid fever have undoubtedly been caused by impure milk; 2. That it is probable that other diseases, such as diphtheria and cholera, may be conveyed in a similar manner; 3. That certain other serious maladies affecting human beings have been traced to the use of milk of cows affected by disease or kept under unhealthy conditions; 4. That adulterated milk is also frequently a cause of disease, and especially diarrhoea, amongst children; 5. That the only means at present existing of effectually protecting the milk-supply consists in the formation of voluntary associations (like the Aylesbury Dairy Company), and that this method can be applied only by a limited number of milk consumers. That on these grounds your memorialists deem it important that an efficient inspection of dairy farms and control of milk-supply should be carried out, and they, therefore, venture to suggest to your honourable Board the desirability of taking steps to provide local authorities with additional powers: a. To enable local authorities to require every licensed milk-seller to give due notice of the appearance of any infectious disease among his dairy stock, in his family, or in the house in which his premises are situated; b. That on such notice being received by the sanitary authority it should be empowered to close the said premises until the removal of the infected animal or person, and the thorough disinfection of the house or portion of the house infected; c. To enable local authorities to veto the sale of milk by vendors coming from without such authorities' boundaries. Your memorialists would also urge: 1. That inspectors should be appointed by the sanitary authorities whose whole time should be employed in inspecting milkshops, dairies, etc.; 2. That no person be allowed to sell milk in towns who is not licensed to do so by the local sanitary authority; 3. That the fitness of premises for the sale of milk for dairy purposes, and for housing milch-cows, should be decided upon by the local medical officer of health; 4. That samples of milk for analysis should be collected from time to time by the inspector or his agents from every licensed milkshop or dairy, and not merely from those against whom special complaint has been made. Your Memorialists deem the importance of this subject so great that they venture to suggest that a general Inspector of milk-supply should be appointed by the Local Government Board, whose sole duty it should be to superintend the duties of milk inspectors and medical officers of health in this department of their work. Your memorialists trust the foregoing proposals may receive your favourable consideration. And your memorialists will ever pray, etc.—(Signed on behalf of the Manchester and Salford Sanitary Association.) ALFRED RANSOME, M.A., M.D., Chairman; HENRY ASHBY, M.D., Honorary Secretary; FRED SOUL, Secretary.

THE REGISTRATION OF INFECTIOUS DISEASES IN NEW SOUTH WALES.

FROM the report of a recent meeting of the New South Wales Branch of our Association, it would seem that the question of the compulsory notification of infectious diseases has advanced considerably further in the antipodes than in the mother country, just as America is already considerably a head of us in this matter. At the meeting in question, held on the 2nd of December last, the Vice-President (Dr. Fortescue) took occasion to refer, in terms of surprise, and with "general demonstrations of approval" at his language, to the fact, which "had unfortunately been established beyond doubt", that one member of their body had neglected to immediately report to the Board of Health a case of small pox that had occurred in his practice. Dr. Fortescue said he was sure he was but expressing the opinion of every member present,

when he affirmed that no sentiment from the individual, nor personal interest, could absolve any practitioner, in the present emergency, from the duty of immediately reporting to the authority appointed by the Government any fresh case of small-pox he might become acquainted with.—Dr. BELGRAVE considered that, if the Government had paid that deference to the representations the Association had made to it, touching the compulsory registration of cases, to which their importance entitled them, it was probable the disease would not nearly have attained the development it had. Moreover, he thought the constitution and proceedings of the Board of Health left much to be desired. Temporary accommodation ought to have been long ago provided in an isolated situation for cases, pending the construction of the permanent infectious hospital. The board also ought to express itself less ambiguously when it condemned, so that it might be made clear whether the doctor or the patient's friends had failed to report in proper time. For his part, though he believed the duty properly devolved on the latter, he had not hesitated to report without the least delay the cases he had met with. He thought it was a fundamental mistake to limit the function of the board to merely advising. It ought to be reconstituted, have legal power to enforce registration, and the usual scientific elements of all such boards should be equitably represented on it.—Dr. MACKELLAR, as a member of the Board of Health, assured the meeting that the board entertained the most anxious solicitude in reference to the whole subject; and that their executive officer neglected nothing that could contribute to stamp out the disease. The board had sent for an abundance of bovine lymph from Europe and America, and had nearly established a vaccine calf farm; had built a magnificent hospital; and had shown the utmost activity in detail.—Dr. O'REILLY thought that a law to compel the immediate registration of cases applicable to landlords, if not to the attending medical men, was urgently required by the Government to stamp out the disease. The Association desired to co-operate with the Board of Health, and were adopting the best course to that end.—Dr. MILFORD said medical men might consider it a breach of honour to report cases without consent. The question was not so simple, though important. It was obvious, however, that, if the law did not step in, the disease would extend, and the most dreadful consequences must follow. Only that afternoon, they had heard of a milkman, with four or five secret cases in his house, plying his trade as usual. He moved: "That this meeting deems it the duty of medical men to at once report all cases of small-pox that may come under their observation to the board appointed to suppress the outbreak."—This, and a further motion, proposed by Dr. BELGRAVE and seconded by Dr. MARANO, to the effect, that "the immediate introduction of a Bill to render the notification of cases of small-pox compulsory is a matter of necessity", are reported as having been passed "with much eagerness", and after considerable discussion. It is to be hoped that the representations of the Branch will meet with due consideration at the hands of the colonial authorities. Doubtless, the excitement caused by the present prevalence of small-pox at Sydney has given prominence to that disease in the discussions and resolutions of the Branch; but compulsory notification may, with equal propriety and necessity, be demanded for other infectious diseases also; and, if legislation on the subject be attempted by the local authorities, it will be well to make the scope of the Bill as wide as possible.

REPORTS OF MEDICAL OFFICERS OF THE LOCAL GOVERNMENT BOARD.

AN outbreak of diphtheria occurred in Llanwddyn, a village situated in the Llanfyllin rural district, in 1880, when eight persons were attacked and four died. There was no evidence to show that the disease was spread by direct infection, and the sanitary condition of some of the houses was good, but in others bad, being close, damp, and ill-ventilated. The district is divided into four, and a Poor-law medical officer is appointed to each. The district generally is ill-drained, no proper provision being made for carrying off the slops, faecal matter, or surface-water. The mean death-rate was 19.1 for the ten years 1871-80, which is high for a rural district. Dr. Parsons recommends that the cottages should be better drained and ventilated; that the common lodging-houses should be carefully looked after; that sewers should be provided for the villages, proper privy accommodation for the houses not having it at present, and a sufficient supply of wholesome water. He also advises the sanitary authority to arrange with the adjoining districts in employing a single medical officer of health, who should devote his whole time to the work.

Dr. Parsons also reports on the sanitary condition of Walton-on-the-Naze urban district, which contains 2,600 acres, and includes the watering-place of this name. The resident population was 1,376 at the last census (1881), but about 4,000 to 5,000 visitors are added

during the height of the season. The want of potable water is a great drawback, as that supplied by the water-company contains 182 grains of common salt per gallon, and drinking-water has to be brought into the town by water-carts. The drainage is indifferent, as the penstock to the reservoir has to be closed to keep out the sea-water, and is opened by hand instead of being self-acting, and sewer-gas was driven back into the houses; but this has been partially remedied. Many of the larger houses have their scullery sinks connected with the sewers, and only protected by a bell-trap; and the water-closets and drains are often insufficiently flushed for want of water. There were about forty cases of typhoid fever in 1880. The first occurred at an hotel which was badly drained, and the other inmates suffered from the same disease, but in a mild form. The other cases also occurred in defectively drained houses.

Dr. Ballard has made a report on an epidemic of scarlatina in Hali-fax, which was attributed by the medical officer of health, Mr. Ainley, to infected milk. The total number of reported cases amounted to 510, occurring in 281 separate families; but it is probable that the number was much larger. The deaths were 86 in number. The disease was chiefly confined to the west and south wards, and increased suddenly and rapidly during the last week of December and the first and second weeks in January 1881, 78 per cent. of the household invasions occurring between the 29th of December and the 8th of January. The evidence that the milk was the primary cause in certain cases was that, out of 135 households supplied by one milkman, 53 were invaded, 72 escaped, and no facts were ascertained as regards 10. As regards the 72 families, 22 had suffered from the disease previously, in 29 there were no children, and in 2 others the milk was boiled. A man who milked the cows and took out the milk slept in the same bed with his children, who were attacked with scarlet fever on December 31st, January 1st and 5th. As twenty-four families had suffered from the disease before this date, and as isolation of the sick and disinfection of the beds, bedding, clothing, and houses were not carried out, Dr. Ballard attributes much of the disease to its spreading in the ordinary way from person to person.

There is, in addition, a report from Dr. Blaxall on the prevalence of enteric fever in the urban sanitary district of Ilkeston. Dr. Blaxall says that rather more than half the houses are supplied from public sources, the remainder deriving their supply from private wells and rain-water tanks, the wells being sunk in a soil befouled with filth from privy-pits, etc., and the tanks exposed to contamination from surface, soakage and sewer-gas. The privy-pits are a great nuisance, many being left open and rarely emptied; and even when emptied, they become partly filled with subsoil water. The sewers are also very imperfect and defective, being made in most cases of brick. The outfall is into an open ditch from the north part of the town; but there are three or four separate sewers and outlets for the remainder. The house-drains are badly trapped, and the sink-pipes in direct communication with the sewers. There were 191 cases of enteric fever during the year 1880; and from January to June the greatest number of these occurred in houses situated on separate lines of sewers.

RETURNS OF VACCINATION-OFFICERS.

IN his last annual report on Bethnal Green, Dr. G. P. Bate gives certain figures with regard to the vaccination-results of the parish, which appear to cast a somewhat lurid light upon the returns periodically sent by vaccination-officers to Whitehall. Dr. Bate states that, according to recent returns, little more than six per cent. of the children in his parish escape successful vaccination; and yet it appears, from a report based upon a house-to-house visitation made by order of the guardians, that, out of a total of 6,018 children under fourteen respecting whom inquiries had been made, no fewer than 828, or 13.8 per cent., were unvaccinated. Such a failure of the machinery of our compulsory vaccination calls for explanation, and throws some light, Dr. Bate thinks, on the causation of the present fatal epidemic. A considerable part of the divergence between the percentage of unvaccinated cases as returned to the Local Government Board and as actually discovered, may very possibly be accounted for by the immigration of parents with young unvaccinated children. This immigration, in a parish like Bethnal Green, would doubtless be considerable in amount, but it can hardly bridge over the difference between 6 per cent. and 13.8 per cent. The suspicion is forced upon the mind, that the returns periodically furnished by vaccination-officers are not always strictly accurate. We believe there is no system of auditing their books beyond an occasional glance at them by a Government inspector once every two or three years; and the discrepancy discovered at Bethnal Green furnishes another argument for the adoption of the system of payment of vaccination-officers by means of a fee for each case of successful vaccination registered. By

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the Council of the College was held on Thursday, the 9th March. The minutes of the previous meeting of Council were read and confirmed.

It was decided to send an address of congratulation and sympathy to the Queen, in reference to the late dastardly attempt on Her Majesty's life.

The formula for the necessary alteration of the standing rule relating to the further study of rejected candidates for the primary membership examination was approved. Rejected candidates will in future be required to give evidence of three months' anatomical and physiological study before again presenting themselves for examination, instead of three months' dissection as heretofore.

Messrs. W. M. Coates of Salisbury and Alexander Harkin of Belfast were elected Fellows.

Mr. Christopher Heath's motion, that no candidate be allowed to present himself for the pass membership examination until a period of two years has elapsed since the date of passing the primary examination, was referred to a Committee to report thereon to the Council.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 2nd, 1882.

Atkinson, Thomas Reuel, West Park, Clifton, Bristol.
Key, David Thomas, The Oval, Brixton, S.W.
Pringle, Henry John, West Cowes, Isle of Wight.
Williams, Charles, Llangelech, Carmarthen.

MEDICAL VACANCIES.

The following vacancies are announced:—

- DENTAL HOSPITAL OF LONDON**, Leicester Square.—Administrator of Anesthetics. Applications by March 13th.
- DENTAL HOSPITAL OF LONDON**, Leicester Square.—Assistant Dental Surgeon. Applications by March 13th.
- EAST LONDON HOSPITAL FOR CHILDREN**, Shadwell, E. — Clinical Assistant. Applications by March 23rd.
- EPSOM UNION, DISTRICT OF LEATHERHEAD AND FETCHAM.**—Medical Officer and Public Vaccinator. Salary, £50 per annum. Applications by March 21st.
- ESSEX AND COLCHESTER GENERAL HOSPITAL.**—Member of Surgical Staff. Applications by the 29th March.
- ESSEX AND COLCHESTER GENERAL HOSPITAL.**—Physician. Applications by the 29th March.
- GENERAL HOSPITAL FOR SICK CHILDREN**, Pendlebury, Manchester.—Resident Medical Officer. Salary, £80 per annum. Applications by March 22nd.
- GENERAL INFIRMARY, NORTHAMPTON.**—Assistant House-Surgeon. Salary, £80 per annum. Applications by the 23th March.
- GREAT NORTHERN HOSPITAL**, Caledonian Road, N.—Obstetric Physician. Applications to the Secretary by March 31st.
- GREAT NORTHERN HOSPITAL**, Caledonian Road, N.—Surgeon. Applications to the Secretary by March 31st.
- HARTLEPOOL UNION**—Medical Officer and Public Vaccinator. Salary, £50 per annum. Applications by the 17th instant.
- HARTLEPOOL UNION WORKHOUSE**—Medical Officer. Salary, £65 per annum. Applications by the 17th instant.
- KENT AND CANTERBURY HOSPITAL**—House-Surgeon. Salary, £80 per annum. Applications by April 6th.
- KENT COUNTY LUNATIC ASYLUM**, Chartham Downs, near Canterbury.—Second Assistant Medical Officer. Salary, £120 per annum. Applications by the 21st instant.
- KIDDERMINSTER FRIENDLY SOCIETIES' MEDICAL ASSOCIATION**—Medical Officer. Applications by the 11th instant.
- KNIGHTON UNION**—District Medical Officer. Salary, £40 per annum. Applications by 29th instant.
- MOUNTMELICK UNION**—Medical Officer for Maryborough Dispensary District. Salary, £100 per annum, with £20 yearly as Medical Officer of Health, registration, and vaccination fees. Election on the 17th instant.
- NORTH WALES COUNTIES LUNATIC ASYLUM**, Denbigh. — Medical Superintendent. Salary, £450 per annum. Applications by the 29th instant.
- NOTTINGHAM DISPENSARY**—Resident Surgeon. Salary, £200 per annum. Applications by March 25th.
- PARISH OF GAIKLOCH**, Ross-shire.—Medical Officer. Salary, £100 per annum. Applications to the Chairman, Osgood H. Mackenzie, Esq.
- RICARTSBAR ASYLUM**, Paisley.—Superintendent. Salary, £100 per annum. Applications to R. Rowand, Inspector of Poor, Paisley.
- ROCHESTER AND DISTRICT FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATION**—Assistant Medical Officer. Salary, £120 per annum. Applications to H. T. Kybett, 43, High Street, Strand, Kent, by March 14th.
- ST. LUKE'S HOSPITAL**—Clinical Assistant. Applications by March 23rd.
- TAUNTON UNION**—Medical Officer. Salary, £52 per annum. Applications by March 18th.
- TOWCESTER UNION**—Medical Officer. Salary, £60 per annum. Applications by March 20th.

MEDICAL APPOINTMENTS.

- ELLIOTT, J. Trimble, M.D.**, elected Medical Officer of the Kilmore Dispensary, co. Monaghan.
- FIRTH, Eustace, M.B., C.M.**, appointed Medical Officer of the Rishangles District of the Hartismere Union.
- HARRISON, W. A., M.B.**, appointed Medical Officer of Health for Pontefract Borough.
- LIMONT, James, M.A., B.Sc., M.R.C.S.**, appointed Senior House-Surgeon to the Newcastle Infirmary.
- NICOLL, T. V., M.R.C.S.**, appointed Honorary Medical Officer to the British Asylum for Deaf and Dumb Females at Clapton, *vice* A. Boswell, M.B., resigned.
- OWEN, J. W., M.R.C.S.**, appointed Medical Officer to the St. Asaph Union.
- POPHAM, S. L., M.D.**, appointed Resident Physician to the Craiglockhart Hydro-pathic Establishment, *vice* T. D. Wilson, M.D., resigned.
- PUDDICOMBE, F. M., L.R.C.P.**, appointed House-Surgeon to the Teignmouth, Dawlish, and Newton Infirmary and Convalescent Home, Teignmouth, *vice* F. W. H. D. Harris, M.R.C.S., resigned.
- ROBINSON, J. J., M.B.**, appointed House-Surgeon to the St. Mark's Ophthalmic Hospital, Dublin, *vice* S. Davis, M.B., resigned.
- SMYTH, A. C. B., L.R.C.P.**, appointed Assistant Medical Officer and Chloroformist to the Hospital for Women and Children.
- STAMFORD, Wm., L.R.C.P.Lond., M.R.C.S.Eng., and L.S.A.**, appointed Medical Officer of Health for Tunbridge Wells, *vice* W. H. Rix, M.R.C.S. and L.S.A., resigned.
- STREET, A. F., M.B.**, appointed Junior Resident Medical Officer to the Radcliffe Infirmary, Oxford.
- THOMAS, J. H., L.R.C.P.**, appointed Medical Officer of Health to the Wellingborough Rural Sanitary Authority.
- TUKE, J. B., jun., M.B.**, appointed Assistant Medical Officer to the Montrose Royal Lunatic Asylum, *vice* A. Thomson, M.B., resigned.
- VENN, A., M.D.**, appointed Honorary Physician to the British Lying-in Hospital, *vice* Arthur Edis, M.D.
- WALSH, W. A. S., M.R.C.S.Eng., L.S.A.**, appointed one of the Medical Officers to the Worcester Dispensary and Provident Medical Institution, *vice* J. D. Jeffery, M.R.C.S.Eng., deceased.
- WELCH, Geo., M.R.C.S.**, appointed Assistant House-Surgeon to the St. Bartholomew's Hospital, Chatham, *vice* G. H. Patterson, M.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGE.

MOFFAT-ADIE.—At 2, St. Colme Street, Edinburgh, on the 2nd instant, by the Rev. John A. Cooke Auchtergaven and the Rev. T. S. Anderson Crailing, Robert Moffat, M.D., Falkirk, to Martha, eldest daughter of the late James Gray, of Kalemouth, Roxburghshire, and widow of the late James Arthur Adie, Voe, Shetland.

LADY HARRIET BENTINCK, who gave a donation of £4000 sterling to purchase new premises for the International Hospital at Naples, has added a new gift of £500 sterling to the former sum.

TEN thousand tons of ice, gathered from a river which contained sewage, we hear, have been condemned by the Newhaven Board of Health.

THE Brighton Town Council have decided to purchase Preston Park from Mr. Bennett-Stanford, at the price of £50,000, for the purpose of converting it into a public recreation-ground.

AN effort is being made to organise a branch of the British Medical Association at Allahabad, the capital of the North-Western Provinces.

THE death of Elenor, Lady Burrows, the wife of Sir George Burrows, M.D., F.R.S., late President of the Royal College of Physicians, occurred a few days ago. Her ladyship was the youngest daughter of the late Mr. John Abernethy, F.R.S., formerly President of the Royal College of Surgeons.

THE managers of the Royal Infirmary of Edinburgh have received from Messrs. J. C. Brodie and Sons, W. S. Edinburgh, the sum of £13,500 for the funds of the Institution from the estate of the late Dr. Thomas Hunter, Deputy Inspector-General of Hospitals.

CHOLERA AT TRICHINOPOLY.—There has been a serious outbreak of Cholera at Trichinopoly, and 2,457 persons are reported to have suffered from it since the 24th of October, when it first made its appearance.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The sixth meeting of the twenty-sixth session was held at the Royal Kent Dispensary, Greenwich Road, on Friday evening, March 3rd, when the following papers were read: Remarks on Succussion within the Abdomen, by J. Braxton Hicks, M.D., F.R.S.; a Case of Intestinal Obstruction which Recovered under the Use of Belladonna, by R. Carrington, M.D., physician to the Seaman's Hospital.

ANTISEPTIC SOLUTIONS OF ATROPINE AND ESERINE.—Kraemer believes (*Corr-Blatt für Schweizer Aerzte*, 1881, No. 19) that the solutions of atropine and eserine used in eye-diseases are not unfrequently the cause of irritation, and even catarrh, through their containing fungi—e.g., leptothrix, etc. He recommends the addition to the solutions of 4 per cent. of boracic acid, or 0.1 per cent. of carbolic acid. He has found, from numerous experiments, that not only do these solutions then remain longer clear, but there is much less frequently irritation or inflammation during their use.

HEALTH OF FOREIGN CITIES.—The following figures are deduced from a table in the Registrar-General's last weekly return, and afford trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities. According to the most recently received official weekly returns, the annual death-rate in the three principal Indian cities averaged 34.9 per 1000, and was equal to 29.3 in Calcutta, 34.0 in Bombay, and 42.4 in Madras. Cholera caused 12 deaths in Bombay, 24 in Calcutta, and 26 in Madras; 42 deaths from measles were returned in Bombay, and 6 from small-pox in Madras. The death-rate in Alexandria was 34.7, scarcely differing from the rate in the previous week; 8 fatal cases of typhoid fever were reported. In twenty European cities, the death-rate averaged 32.4, and exceeded by no less than 7.9 the mean rate prevailing last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 49.0, but showed a further slight decline from the still higher rates in previous weeks; 46 deaths resulted from typhus and typhoid fevers, and 18 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 30.2, measles causing 22 deaths in Copenhagen and 6 in Christiania. In Paris, the death-rate was 31.7, and scarcely differed from that which prevailed in the previous week; 64 deaths were referred to diphtheria and croup, 36 to typhoid fever, and 11 to small-pox. The rate in Geneva was equal to 30.1. In Brussels, the rate fell again to 26.2, although the deaths included 2 from small-pox and 3 from measles. In the three principal Dutch cities, the death-rate did not average more than 25.6, and was equal to 24.0 in the Hague, 25.7 in Amsterdam, and 26.4 in Rotterdam. Small-pox caused one death in Rotterdam. The Registrar-General's table includes returns from nine German and Austrian cities, in which the death-rate averaged 32.0; it ranged from 25.3 and 25.9 in Berlin and Dresden, to 40.1 and 47.1 in Munich and Buda-Pesth. Small-pox caused 19 deaths in Vienna, 9 in Prague, and 8 in Buda-Pesth; and diphtheria 69 deaths in Berlin. The death-rate was equal to 37.4 in Venice, where 2 deaths were referred to diphtheria and croup. No returns were received from any other Italian city. The average death-rate in four of the principal American cities was equal to 29.2; the rates in these cities ranged from 25.6 in Philadelphia to 34.5 in New York. Small-pox caused 20 deaths in New York, 15 in Philadelphia, and 2 in Baltimore; and diphtheria was more or less fatally prevalent in each of these American cities.

BEQUESTS AND DONATIONS.—Mr. Osgood Torkington, of Holly Lodge, Clapham Park, bequeathed £1,000 Consols, each, to the East London Hospital for Children, the Royal Hospital for Children and Women, the Hospital for Epilepsy and Paralysis and other Diseases of the Nervous System, the Evelina Hospital for Sick Children, the Samaritan Free Hospital for Women and Children, the West London Hospital, the Victoria Hospital for Sick Children, the North Eastern Hospital for Children, the Hospital for Women, and the Royal Hospital for Diseases of the Chest; and £50 to the Clapham Dispensary; and £20,000 10s. 4d. Consols to be divided between the Metropolitan Hospital, the Cancer Hospital, the Royal Free Hospital, and the Westminster Hospital, upon the death of his niece Emma Clayton; £20,000 10s. 4d. Consols to be divided between the Charing Cross Hospital, the Metrop. Hospital, St. Mary's Hospital, and the Great Northern Hospital, upon the death of his niece Clara Wengert; £20,000 10s. 4d. Consols to be divided between University College Hospital and St. Mark's Hospital, upon the death of his niece Edith Dinah Torkington; £20,000 10s. 4d. Consols to be divided between King's College Hospital and the Royal Hospital, upon the death of his niece Hannah Frances Torkington; and £20,000 10s. 4d. Consols to be divided between the Royal Westminster Ophthalmic Hospital, the Royal Orthopaedic Hospital, and the Hospital for Sick Children, upon the death of Selina Torkington. Colonel Cecil William Forester, of Abingdon, Salop, bequeathed £2,500 to the Westminster Hospital, £2,000 to the County of London Dispensary, £1,000 to the Brompton Hospital for Consumption, £1,000 to the Royal Hospital for Invalids, and £1,000 to the Westminster Dispensary, Brompton, Westminster. Sir John Colman, Bart., bequeathed £1,000 to the Royal Free Hospital, and Lady Colman £1,000 to the Royal Free Hospital.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY..... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Eye, M. Th., 1.30; Ear, M. Th., 2; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M.—The President (Mr. F. Jones), Mr. F. Jones, Mr. A. Jones, Mr. B. Jones, A Case of Medical Jurisprudence, by Mr. C. Jones, President. Mr. B. Jones, Honorary Secretary, Mr. F. Jones, Treasurer, Mr. C. Jones, Librarian, Mr. D. Jones, Secretary, Mr. E. Jones, Secretary, Mr. F. Jones, Secretary, Mr. G. Jones, Secretary, Mr. H. Jones, Secretary, Mr. I. Jones, Secretary, Mr. J. Jones, Secretary, Mr. K. Jones, Secretary, Mr. L. Jones, Secretary, Mr. M. Jones, Secretary, Mr. N. Jones, Secretary, Mr. O. Jones, Secretary, Mr. P. Jones, Secretary, Mr. Q. Jones, Secretary, Mr. R. Jones, Secretary, Mr. S. Jones, Secretary, Mr. T. Jones, Secretary, Mr. U. Jones, Secretary, Mr. V. Jones, Secretary, Mr. W. Jones, Secretary, Mr. X. Jones, Secretary, Mr. Y. Jones, Secretary, Mr. Z. Jones, Secretary.

TUESDAY. Royal Medical and Chirurgical Society, 8 P.M.—The President (Mr. F. Jones), Mr. F. Jones, Mr. A. Jones, Mr. B. Jones, A Case of Medical Jurisprudence, by Mr. C. Jones, President. Mr. B. Jones, Honorary Secretary, Mr. F. Jones, Treasurer, Mr. C. Jones, Librarian, Mr. D. Jones, Secretary, Mr. E. Jones, Secretary, Mr. F. Jones, Secretary, Mr. G. Jones, Secretary, Mr. H. Jones, Secretary, Mr. I. Jones, Secretary, Mr. J. Jones, Secretary, Mr. K. Jones, Secretary, Mr. L. Jones, Secretary, Mr. M. Jones, Secretary, Mr. N. Jones, Secretary, Mr. O. Jones, Secretary, Mr. P. Jones, Secretary, Mr. Q. Jones, Secretary, Mr. R. Jones, Secretary, Mr. S. Jones, Secretary, Mr. T. Jones, Secretary, Mr. U. Jones, Secretary, Mr. V. Jones, Secretary, Mr. W. Jones, Secretary, Mr. X. Jones, Secretary, Mr. Y. Jones, Secretary, Mr. Z. Jones, Secretary.

WEDNESDAY. Royal Medical and Chirurgical Society, 8 P.M.—The President (Mr. F. Jones), Mr. F. Jones, Mr. A. Jones, Mr. B. Jones, A Case of Medical Jurisprudence, by Mr. C. Jones, President. Mr. B. Jones, Honorary Secretary, Mr. F. Jones, Treasurer, Mr. C. Jones, Librarian, Mr. D. Jones, Secretary, Mr. E. Jones, Secretary, Mr. F. Jones, Secretary, Mr. G. Jones, Secretary, Mr. H. Jones, Secretary, Mr. I. Jones, Secretary, Mr. J. Jones, Secretary, Mr. K. Jones, Secretary, Mr. L. Jones, Secretary, Mr. M. Jones, Secretary, Mr. N. Jones, Secretary, Mr. O. Jones, Secretary, Mr. P. Jones, Secretary, Mr. Q. Jones, Secretary, Mr. R. Jones, Secretary, Mr. S. Jones, Secretary, Mr. T. Jones, Secretary, Mr. U. Jones, Secretary, Mr. V. Jones, Secretary, Mr. W. Jones, Secretary, Mr. X. Jones, Secretary, Mr. Y. Jones, Secretary, Mr. Z. Jones, Secretary.

THURSDAY. Royal Medical and Chirurgical Society, 8 P.M.—The President (Mr. F. Jones), Mr. F. Jones, Mr. A. Jones, Mr. B. Jones, A Case of Medical Jurisprudence, by Mr. C. Jones, President. Mr. B. Jones, Honorary Secretary, Mr. F. Jones, Treasurer, Mr. C. Jones, Librarian, Mr. D. Jones, Secretary, Mr. E. Jones, Secretary, Mr. F. Jones, Secretary, Mr. G. Jones, Secretary, Mr. H. Jones, Secretary, Mr. I. Jones, Secretary, Mr. J. Jones, Secretary, Mr. K. Jones, Secretary, Mr. L. Jones, Secretary, Mr. M. Jones, Secretary, Mr. N. Jones, Secretary, Mr. O. Jones, Secretary, Mr. P. Jones, Secretary, Mr. Q. Jones, Secretary, Mr. R. Jones, Secretary, Mr. S. Jones, Secretary, Mr. T. Jones, Secretary, Mr. U. Jones, Secretary, Mr. V. Jones, Secretary, Mr. W. Jones, Secretary, Mr. X. Jones, Secretary, Mr. Y. Jones, Secretary, Mr. Z. Jones, Secretary.

FRIDAY. Royal Medical and Chirurgical Society, 8 P.M.—The President (Mr. F. Jones), Mr. F. Jones, Mr. A. Jones, Mr. B. Jones, A Case of Medical Jurisprudence, by Mr. C. Jones, President. Mr. B. Jones, Honorary Secretary, Mr. F. Jones, Treasurer, Mr. C. Jones, Librarian, Mr. D. Jones, Secretary, Mr. E. Jones, Secretary, Mr. F. Jones, Secretary, Mr. G. Jones, Secretary, Mr. H. Jones, Secretary, Mr. I. Jones, Secretary, Mr. J. Jones, Secretary, Mr. K. Jones, Secretary, Mr. L. Jones, Secretary, Mr. M. Jones, Secretary, Mr. N. Jones, Secretary, Mr. O. Jones, Secretary, Mr. P. Jones, Secretary, Mr. Q. Jones, Secretary, Mr. R. Jones, Secretary, Mr. S. Jones, Secretary, Mr. T. Jones, Secretary, Mr. U. Jones, Secretary, Mr. V. Jones, Secretary, Mr. W. Jones, Secretary, Mr. X. Jones, Secretary, Mr. Y. Jones, Secretary, Mr. Z. Jones, Secretary.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

USE OF STEAM FOR HEATING HOSPITAL WARDS.

IR,—May I ask, through you, if any of your readers will be good enough to supply me with information as to the desirability, or otherwise, of using steam for the purpose of heating hospital wards? If it be desirable, please state the advantages, and, if undesirable, the disadvantages, of the system; or if you will kindly refer me to any reliable sources from which I may gather knowledge on the subject, I shall feel equally obliged.—I am, sir, yours faithfully, GEO. LONGBOTHAM.

*. We have referred this question to Mr. W. Eassie, C.E., author of *Healthy Houses*, who has favoured us with the following reply. Heating by steam is rarely adopted in England, except for workshops in connection with the steam boiler, where the exhaust steam is economically used for the purpose. In America, however, steam is largely used for heating purposes; and a very comprehensive description of the value of steam for heating purposes will be found in a paper read by Captain Douglas Galton, F.R.S., in the *Society of Arts Journal*, in the latter months of the year 1881. The most comprehensive works on the subject are those written by Buchanan in 1815, and by Tredgold in 1836, which can be seen in most public libraries. The drawbacks of ordinary steam-heating are the constant attendance necessary to secure a continuance of heating power, the necessity of keeping the fire in full action, and some little danger of a possible explosion unless the whole is under the control of proper workmen. In this respect, steam cannot be placed on the same level as heating by hot water circulation; and in point of expense, also, except under rare conditions, steam-heating must give way to hot-water pipes heated from a boiler, which, in the case of a hospital, would preferably take the form of a slow combustion separate boiler placed in the basement of the building.

Heating by steam, however, has its advantages, the chief of which is that the pipes can be conveyed in any direction, and to any extent, whether above or below the boiler, provided that the condensed water be properly carried away from the lowest part; failing which, the pipes will fill with water, and the heating power become destroyed. The disadvantages of heating by steam are its greater danger, the necessity for constant attention, the non-permanency of an equal temperature except under circumstances of extreme care, and the enhanced cost for fuel over and above that of a hot water circulating system. This last objection, however, may be overruled under conditions where waste steam can be employed. Owing to the higher temperature which obtains with steam heating, which, compared with hot water heating, is as 120° to 165°, or more, depending upon the pressure, it is of the utmost importance to keep the surface of the steam pipes free from dust and waste-drips, which affect the purity of the room. And, whether steam or hot water be circulated through coils—especially when enveloped in cases—the latter should be placed upon castors, so that the pipes can be regularly cleansed from dust and fluff. Taking everything into consideration, we certainly should not advise steam heating for hospital wards, when so much more cleanly, safe, and economical system can be obtained by low-pressure hot water circulation. Our correspondent could, with advantage, consult Mr. Dyer, of 66, High Street, Camden Town, whose excellent method of heating has received great commendation.

TREATMENT OF DIPHTHERIA.

SIR,—During a rather severe epidemic of diphtheria which occurred here some short time since, I found a plan somewhat similar to the one adopted by Dr. Kennedy, as described in your Memoranda of February 25th, most successful. After the first case, which died, in none did I employ a caustic; and though a considerable number were very severe, all except my last case improved rapidly under the treatment adopted. A saturated solution of permanganate of potash was injected well into the throat, and a gargle of it used freely. The first two or three times it made the patients very sick, which, if the membranes were loose, caused them to be detached and expelled at once. It invariably prevented the formation of fresh membranous patches, and if the treatment was adopted before the grey specks coalesced, no membranous patches were formed, and the patient was soon well. The general treatment, of course, was directed in all cases towards the keeping up of the general health, so as to prevent the frequent subsequent debility.

The last case which I attended terminated unfavourably. It was that of a young lady who had been suffering from anæmia for some time previously. The lips and conjunctivæ were extremely pale from want of blood. The gargle within twenty-four hours quite cleared the throat, leaving it very red and tender-looking, but the difficulty of breathing gradually increased, and she had a constant cough. On the second day, she coughed up a hard round mass, which from its size one would have thought would with difficulty have been expelled. Upon opening it out, I found a complete lining of a bronchial tube extending to six ramifications. She breathed better for a few hours, then gradually sank exhausted.—I am, etc., A. HIRST, M.R.C.P.Ed.

SCARLATINA PATIENTS.

SIR,—Would any of your readers kindly inform me at what time, from the commencement, are scarlatinal patients free from infection? Having a patient with gouty eczema who has been desquamating for nearly four weeks, I am in difficulty as to whether he would be a source of contagion, and he is anxious to resume his usual duties.—I am, sir, yours faithfully, M.R.C.S.ENG.

BARON LIEBIG.

OUR attention has been called to the fact that a cocoa is now being advertised as Baron Liebig's cocoa, which has, in various places, naturally led to the conclusion that the Baron Liebig whose name is thus used is the celebrated Justus Von Liebig, who allowed his name to be attached to the well known Liebig's extract of meat. This, however, we are informed, is not the case, and that Liebig's cocoa is prepared under the directions of a son of Baron Liebig, who, we have good reasons for saying, would be the last person to wish that confusion should arise.

WANTED A MODEL HOSPITAL.

SIR,—Would any of your readers kindly refer me to a hospital with all the latest improvements, that might be taken as a model for one about to be erected to contain thirty beds.—I am, yours obediently, R. H. WOOD. Rugby, March 4th, 1882.

MEDICAL ATTENDANCE ON THE ARTISAN CLASSES.

SIR,—The rapid development in provincial towns of systems of medical relief on provident principles threatens to form a very serious item in the train of calculations of those practitioners whose income is mainly derived from the class inhabiting houses of less than £20 rental. The question presents itself under two aspects: firstly, how can they continue to retain this source of income without stooping to unworthy methods of obtaining patients, such as advertising? and secondly, how can they best uphold, whilst doing this, that character for philanthropy with which the profession of medicine has so long been accredited? It appears to me that the means to be employed are two: Firstly, the establishment, in opposition to the new "medical aid associations", of real "provident dispensaries", the staffs of which should be composed of any practitioners who chose to join them, instead of resident medical officers devoting their whole time to the work, and receiving in return very paltry salaries; and fixing a wage-limit, say, at forty shillings per week. Secondly, a little moderation in the matters of charges to the poorer class of private patients. Many young practitioners commence with the idea that there is something degrading in taking a half-guinea midwifery fee. I did so myself. But one thing has struck me forcibly during my two years' practice, namely, the very little comparative trouble of attending midwifery cases amongst the poor. They very seldom send for one unless the case is pretty well advanced; even if they do, they are content to let one leave, and be sent for again when the case becomes more urgent. They are generally willing to have the forceps used when it is necessary; and they are by no means exacting as regards after-attendance. At the same time, it is wise to let it be understood that the fee must be paid at the time of attendance. As regards other fees, I think the ordinary charge per visit should be 2s. 6d., including medicine, which, by-the-by, they are always willing to send for themselves; and if the attendance is very long, even this may be made less—for example, a bill of £4 17s. 6d. may be made into four guineas.

It certainly appears to me a very mistaken idea, and yet it is a very prevalent one, that the dignity of the profession is dependent on the magnitude of the fees. Of course, in saying this, I studiously avoid encouraging any direct or indirect advertising.—I am, sir, yours obediently, A YOUNG PRACTITIONER.

BUCHU.—There is no objection to either of the forms to which you refer, for a professional card.

CHLOROFORM AS AN ANÆSTHETIC.

SIR,—Permit me to call the attention of the medical profession to a point which, until lately, we were bound to leave entirely in the hands of manufacturers, and to the reputation of those drug-houses from whom our supplies of chloroform are obtained. It is the purity of chloroform. The dichromate of potash test, the specific gravity and evaporation tests, and absolute neutrality test, were all that most of us cared to trouble ourselves about. M. Yvon, however, has found that all these fail, and that it is necessary to test the boiling point, or the point at which distillation takes place; but, moreover, that absolutely pure chloroform should not give a greenish colour when shaken up with permanganate of potash in caustic potash solution. Of all tests yet applied, this is the most crucial. It may seem unjust to condemn all chloroform that will not answer to this test, and also that of the distillation, as unfit for administration; yet I hold that so long as one of our principal anæsthetics fails to come up to this absolute standard, we are bound to pause.

I have the subject in hand, and I shall give you my testings of various samples. In the meantime, I may say that M. Yvon's solution is thus prepared: Permanganate of potash, 1 part; caustic potash, 10 parts; distilled water, 250 parts. I need not say that the utmost cleanliness must be observed in testing with this solution any specimen of chloroform. I carefully wash out the tube two or three times, and wait for a few seconds to see if any change from the deep violet occurs in the solution before adding the chloroform. I have not examined a single specimen of chloroform that does not, in ten or fifteen seconds, give the greenish or condemnatory tint. The proportion of solution to chloroform may be one of the former to five of the latter; but this is quite arbitrary.

I may point out that nothing but recently prepared and absolutely pure chloroform can conform to this test, so far as I have been able to judge. Now, all acquainted with the decomposition of chloroform when above specific gravity 1.43 know how unstable it is; sunlight, air, and water favouring decomposition in the purest samples. To avoid this, one per cent. of alcohol is added, or allowed to distil over, and the product is then a most stable compound. To condemn all chloroform having a preservative added to it, and which preservative gives the green tint, as unfit for inhalation, is pushing matters too far. No doubt, in a lawsuit, a clever lawyer could make a good point out of M. Yvon's tests; but how far any slight addition of alcohol, or decomposition of the purest chloroform by being kept, has had to do with any death, I am not prepared to say. For the present, at least, we must not place absolute confidence in M. Yvon's fears as to the administration of our pure samples, but which contain a little alcohol. The subject, from more points than one, is deserving of every consideration.—I am, etc., Northallerton. HENRY BROWN.

MR. E. S. PAGE (Solihull).—The disease described in the pamphlet as "Swat", "New Acquaintance", alias "Stoupe Knave and Know thy Master", etc., was the sweating sickness, which prevailed as an epidemic over a great part of Europe at various times from 1483 to 1551. Five visitations of the disease are recorded in England: 1, in 1485; 2, in 1506; 3, in 1517; 4, in 1528; 5, in 1551, from 15th April to 30th September. Our correspondent should read the excellent history of the disease in Professor Hecker's *Epidemics of the Middle Ages*, translated in 1844 for the Sydenham Society by Dr. E. G. Babington. The "new sickness" which prevailed in 1557 and 1558 was probably the plague—not the sweating sickness, of which there is no record later than 1551.

CROONIAN LECTURES ON THE CLIMATE AND FEVERS OF INDIA.

Delivered before the Royal College of Physicians of London.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE I.—PART I.

MR. PRESIDENT, Fellows of the College, and Gentlemen,—In conformity with the custom of others who have been honoured with the duty of delivering these lectures, I have selected a subject in practical medicine which will prove, I hope, of sufficient interest to merit your attention, not only because it is the origin of much sickness and mortality among the European and native people of India, and is the cause, directly or indirectly, of much Indian disease met with here, but on account of its relation generally to the cognate subject in Europe. I trust, therefore, that I shall give effect to the purpose of the founder of these lectures by selecting as my theme certain "Types and Forms of Indian Fever", premising with a brief sketch of the physical characters of the country, climate, and people among whom they occur. I venture to think that the time is not inopportune; for it is thought by some of considerable experience, that the nosological arrangement of fevers needs some modification as regards their etiological relations in India and the tropics, and that sufficient importance has hardly been attached to the effects of geographical position, climate, and endemic influences in determining and modifying their characters.

The following is the plan I intend to adopt. After giving a brief outline of the physical characters of the climate and people, and of the prevalence of fever in India, I propose, under the head of Malaria and Malarial Fevers, to describe the various remittent and intermittent forms it assumes, from the jungle-fever of the primeval forests and swamps, to the simplest ague or *malaise* of the plains; and also some of those morbid conditions which are so closely related to malarial fevers that they are naturally considered with them.

Under Continued Fevers, I shall include febricular, enteric, ardent, and other forms; comparing them with continued fever in temperate climates, noting their relations to climatic influences. I do not pretend to have much that is new to say, for fevers have been described by numerous writers, from the earliest periods down to the present day. But in giving my own impressions, it is expedient that I should refer to and acknowledge those of others. The subject is so extensive, that I can only hope to touch on the salient points of interest.

Let me remind you of some of the physical characters of the country and climate in which the fevers occur. Health and disease are so much influenced by the locality, nature of the soil and its vegetation, the temperature and its fluctuations, the quantity and seasonal distribution of the rainfall, atmospheric and other meteorological changes, that some reference to them seems a fitting introduction to the study of the fevers. You will, I trust, pardon me for inflicting on you some geographical and statistical details, which I will make as brief as possible; they relate to a country and people whose extent and magnitude are but imperfectly appreciated, and have an important bearing on the subject.

Climate.—As regards climate, India may be divided into three regions: 1. The Himalayan, which includes Bhotan, Nepal, Gurhwal, Cashmere, and Cabul; 2. Hindostan, which extends along the foot of the Himalayan range, and includes the alluvial plains of the great rivers Ganges and Indus, with their numerous tributaries, as far south as the Vindiyah mountains; 3. Tropical India, or the Deccan, which consists of elevated table-lands, littoral plains intersected by numerous rivers, mountain ranges, extensive forests, and isolated hills.

There are three distinct seasons in India—the hot, the rainy, and the cold—which vary in duration and times of setting in; the cold season extends from November to March, the hot from March to June or July, and the rainy season from that to October or November, these seasons being greatly influenced by the monsoons or periodic seasonal winds. The south-west monsoon commences in May with storms, soon followed by the bursting of the rain on the Malabar coast, but does not reach regions further north till later in the year; its force and influence are wellnigh spent ere it passes the twenty-fifth parallel of

north latitude. The Carnatic and Coromandel coasts, being sheltered by the Western Ghâts, are dry when the west coast is deluged with rain.

In the north-west, the rains begin towards the end of June, and fall in diminished quantity. Near the hills, the rainfall increases; but in the Southern Punjab there is very little rain, in some parts none. There are tracts of country commencing in Sind which are almost rainless, or with a fall as low as two inches; whilst in the Khasia hills, on the north-east frontier, six hundred inches fall in the year. Next to this, the Western Ghâts and coast of Tenasserim have the greatest fall; at Mahabeshwar, two hundred and fifty to three hundred inches, and on the Tenasserim coast one hundred and eighty inches, fall yearly.

The amount of atmospheric humidity also varies greatly. Hot plains, like Sind, where there is little or no rain, have an atmosphere almost saturated with moisture; whilst on some of the lower mountain ranges, in Bengal, and in many districts near the coast in Southern India, the air is very damp. But on the elevated table-lands of the Deccan and Central India, and on the hot sandy plains of North-West India, a dry air blows like a furnace blast during the months of May and June.

The north-east monsoon commences in October, and is dry, except on the Coromandel coast, where it brings rain between October and December. Variable winds last till about June. About the end of May, the south-west monsoon again sets in, bringing a few showers, known as the lesser rains, which precede the greater rains. In the hill stations, and generally in the elevated provinces of the lower ranges of the Himalayas, the Neilgherries and Ghâts—stations at elevations of 5,000 to 7,000 feet—the climate is genial, the rainfall in most is moderate, it is cool and healthy in summer, and almost as bracing in winter as Europe. These may perhaps become the sites of future colonisation, for it seems probable that there the European may thrive and continue to reproduce his race, which, it is said, would cease to exist in the plains after the third generation.

Rainfall.—The rain-map of India shows areas of rainfall of various degrees of irregular form and extent.

In the north-west corner of India there are arid regions, which have a fall of less than fifteen inches; in many parts, much less; whilst the desert is to some extent rainless. This area includes Sind, part of the Punjab and of Rajputana. There is a northern dry zone, with an annual fall of between fifteen and thirty inches, surrounding the arid region on the north and east, in a belt of one hundred to two hundred miles wide. The upper parts of the valley of the Ganges, Central India, and the coast of the Madras Presidency, have a fall of between thirty and sixty inches.

There is also a southern dry region, which extends from Nassick to Cape Comorin; whilst the deltas of the Mahanuddi and Ganges, and the lower part of the Gangetic valley, have a fall of between sixty and seventy-five inches. There are two belts of excessive rainfall; one extending along the Aracan coast, from the mouth of the Irrawaddy up the valley of the Brahamapootra; the other, on the west coast of India, from Cape Comorin to the Tapti—from the seashore to the summit of the Ghâts. In these regions, the most remarkable falls occur, as they are placed in the direct course of the south-west monsoon, and catch its first impact at heights where vapour is most readily condensed. Cherra Poonjee, in the Khasia hills, at 4,500 feet above the sea, has six hundred inches of rain in six months on the edge of an abrupt mountain plateau situated about two hundred miles from the Bay of Bengal. The intervening country is alluvium, covered with rivers and swamps. Over this the south-west monsoon blows, laden with moisture, which is increased by the wet country over which it passes.

At Mahabeshwar, in the Western Ghâts, the conditions are somewhat similar, the fall amounting to about three hundred inches; but these excessive rainfalls in certain elevated regions are quite local, no more representing the average rainfall of all India than the heavy fall on the hills on the west coast represents the average rainfall of Great Britain.

Irrigation.—Though great part of India is amply supplied with rain, there are regions where the normal quantity is so small that it is insufficient to produce the crops necessary for the support of the population, and where, without the aid of artificial irrigation, the land would be sterile. The Government of India has given much attention to artificial irrigation, and many gigantic works have been completed for this purpose. Some are new; others are reconstructions of works of the Hindoo and Mahomedan periods; and the importance it attached to irrigation is manifested in the canals, anicuts or dams of rivers and reservoirs, many in ruins, left by these people. The area now irrigated is nearly six and a half millions of acres. The area irrigable by

canals is capable of extension. The agricultural benefit derived from this system of irrigation is, no doubt, great; but with the water there is generation of malaria and fever, to what extent I shall presently show.

Another point to which I would refer very briefly is the influence of the rainfall on the growth of forests, and their effects on climate. There is reason to believe that some of the desert plains of India were at one time covered with trees; when they were so, the climate was cooler than it is now. The desert regions in the north-west having once been the seat of early Hindoo civilisation and population, it is obvious that the physical conditions of the country must have once been very different from what they are now, and it seems probable that the change is due to destruction of trees. The cultivation and protection of forests, therefore, is a matter of the greatest importance; for they temper the climate by the moisture they exhale, and tend to cause rain where there would be none.

Population.—The population of India, according to the census of February 1881, is 252,541,210; the males exceeding the females by about one-fiftieth. It has increased about 12¼ millions since 1872, at the rate of 6½ per cent., except in British territory in Bombay, in Mysore and Madras, where there is a decrease of from 20 to 2 per cent., owing to famine and its consequences. The census of 1872 was about 239,750,000.

The average of the whole population gives about 162 persons per square mile; but in the British it is twice as dense as in the feudatory States, the number per square mile varying considerably in different provinces.

This vast mass of human beings, double the number of the population of the Roman Empire in the zenith of its power, and larger than the population of all Europe (excluding that of Russia), is composed of many races. They inhabit a continent presenting every variety of climate, and almost every physical condition on which health may depend, or by which disease may be originated and propagated.

The people of India represent four elements: 1. The non-Aryan, composed of Turanian and Dravidian or Scythic stocks, the aborigines so called, and their descendants; 2. The Aryan, represented by the high caste Hindoos, Brahmins, and Rajpoots; 3. The great mixed population, commonly known as Hindoos, grown out of admixture of Aryan and non-Aryan elements; 4. The Mahomedan, who invaded India from the north and north-west; and to these must be added the Eurasians, 108,402, and the European races who now rule India, 121,148. The Himalayas are occupied chiefly by the Turanian stock, the plains of Hindustan by the Aryan race, the table-land of the Deccan by a mixture of Aryan and Scythic or Dravidian races. The Europeans and Eurasians are distributed over the whole continent.

Habits and Food. Among this diversity of races, there is equal diversity in physical characters. A Norwegian does not differ more widely from a Neapolitan than a Sikh or Pathan from a Bengali, or the powerful warlike Rajpoot of the North from the peasant of Southern India. In mental and physical attributes there is close analogy; and, corresponding with the difference of climate, locality, and habits, they evince different capacities for enduring or resisting disease.

With regard to their habits and food: the Mahomedans, Sikhs, some of the lower castes of Hindoos, and the aboriginal races, eat a mixed diet, including animal food, and are often robust, powerful people; many are in military service. The higher caste Hindoos subsist mainly on farinaceous food, such as wheat, rice, millet, and other grains, supplemented by pulse, with milk, ghee, vegetables, and fish occasionally. The food of the poor or peasant. Those who inhabit Northern India are mostly Hindus, and from them the army is largely recruited.

Among the Europeans and Eurasians there is, I think, a tendency to eat more animal food, and to drink more alcohol than are absolutely required for their health; and they are more judicious than in past years. The natives of all classes are, as a general rule, temperate as regards stimulants; though some races, such as the Sikhs, the low-caste Hindoos, and the aboriginal races, drink freely. The use of tobacco, in any form, is not common; the latter especially in Indian districts is prohibited. Opium, however, is less used than by the Chinese.

On the whole, the natives of India are moderate and abstemious as regards food, and temperate in their habits, and are well adapted to the local climate, and to the more temperate than the European is the atmosphere of the country. The cause for the most part of disease, which is common to all, is not due to any peculiarity of climate, but to the habits of the people, and to the influence of the weather on the body.

that miasmata play a great part as a cause of death. The lodging of the European is, as a general rule, good; sanitary precautions are duly observed; and the houses, barracks, clothing, food, and occupations of the British resident and soldier are so well ordered and carefully supervised as to leave little to desire.

The habits and social conditions of a large proportion of the native people are prejudicial; early marriages and sexual excesses sap the vital force; whilst the effects of impoverished health and vitality, and of the diseases that result from imperfect nutrition, have been painfully manifested in the results of the famines that of late years have ravaged large districts and checked population; and the prevalence of malaria is shown in the character of the fevers and bowel-complaints which destroy or deteriorate millions. It is satisfactory to know that, under the fostering care of the British Government, the intensity and mortality of disease is diminishing, and the mode of living is being improved.

Prevalence of Fever, and Causes.—Let me now speak of the extent to which fever prevails, and some of the reasons why it does so. Official records prove that it causes sickness and mortality which, in some years, almost challenges comparison with the Black Death which ravaged Europe in the fourteenth century. The registered deaths from all causes in India, in the year 1879, were: 4,975,042; Cholera accounting for 270,552; small-pox for 194,708; bowel-complaints for 250,173; fevers for (out of a population of 187,105,833) 3,564,035; or thirteen times as much as cholera; though it may probably be fairly estimated that not more than 50 per cent. of these deaths are due to endemic fevers.

The mortality from "fevers" in Calcutta was, in 1880, 3,797; whilst Clarke says that, in 1770, 80,000 natives and 1500 Europeans died from fever in the city of Calcutta.

The British army in India, in 1879, numbered 57,810 men; of these, 51,959 suffered from fever, with a mortality of 357. The native army, of 130,011 men, had 122,375 cases of fever, with 756 deaths. The jail population, of 117,680, had 73,484 cases of fever, with 1306 deaths. The year 1879 was unusually unhealthy—epidemic fevers of a malarial type being prevalent and fatal. In some districts, the mortality was very high. In Bolundshur and Allyghur, the deaths rose to about 113 per 1000 of the population.

In the Bombay Presidency, in 1880, the annual mortality from fevers averaged 193,508 during a period of fourteen years; but, in 1880, the deaths were 246,779, or 15.21 per 1000 of the population; *i.e.*, for every fatal case of cholera, there were 260 deaths from fever. The deaths for each month were: January 24,080; February 22,625; March 23,021; April 19,901; May 18,579; June 16,572; July 18,922; August 19,850; September 18,396; October 18,406; November 22,350; December 22,505.

The seasonal prevalence shows how cold and variable temperatures affect the etiology of these fevers. The contrasted mortality of the hot and dry, and the rainy and damp seasons, shows the effects of added moisture on the amount of fatality—fever types comprehended being the malarial and continued. Among them, no doubt, are included deaths due to inflammatory disorders—such as pneumonia; whilst, on the other hand, not a few of the deaths from dysentery and diarrhoea belong more properly to malarial fevers.

The thirteenth annual report of the Sanitary Commissioner of the North-West Provinces, for 1880, contains much information in respect of the prevalence of fever, the causes of malaria, and the influence of irrigation on fevers. This province includes the pestilential Terai, the low, and irrigated area, which was scarcely less unhealthy. The chief causes of death in 1880 were: Cholera 71,546 deaths, or 1.07 per 1000; small-pox 8240 deaths, or 0.10 per 1,000; fevers 987,220 deaths, or 2.11 per 1000; bowel-complaints 80,312 deaths, or 1.88 per 1000. Injuries 20,584 deaths, or 0.48 per 1000; all other causes 113,284 deaths, or 2.65 per 1000. About twenty-three out of every twenty-nine deaths were due to fever. Nearly a million of people 987,220 died in 1880 of malarial diseases. The liability to fever seems to have been increased by underfeeding; but, as this was not the case with the entire population, and as they were not all badly clothed and housed, though all suffered, it is evident that there were other causes in operation. The total annual deaths from fever taken through the sanitary period were: in 1877, 571,732; in 1878, 682,117; in 1879, 1,016,188; and in 1880, 987,220. The principal cause of the great loss of life from fever, was in respect of population from sanitary point of view. Cold, damp, and alternations of temperature in the latter half of the year, and dampness of soil, the result of irrigation throwing more water into the subsoil than was needed by growing crops. The most likely cause of a serious predisposing cause.

The chief officer was of opinion that the fever is not due to irrigation, but to the general range of temperature, chill, and imperfect feeding; and thinks that better clothing and food would protect the

people. But we know that these fevers occur irrespective of changes of temperature, though they have much influence in re-exciting it in those who have previously suffered, but not *de novo*. The remedy for all this is better drainage, whilst no more water should be used than is required for the crops.

(To be continued.)

THE GULSTONIAN LECTURES ON PULMONARY CAVITIES: THEIR ORIGIN, GROWTH, AND REPAIR.

By WILLIAM EWART, M.D. Cantab., F.R.C.P.,

Assistant Physician and Pathologist to the Brompton Hospital for Consumption;
Physician to the Belgrave Hospital for Children; Demonstrator of
Physiological Chemistry at St. George's Hospital.

LECTURE I. PART II.—[Concluded.]

I HAVE attempted roughly to describe the leading varieties of disease in which cavities originate. I would invite you now to a review of the situations which they affect. The practical importance of this topographical study is best demonstrated by the advantages which have been gained from a knowledge of the few facts which we already possess relating to the position of cavities. I would specially allude to the clinical results obtained from a recognition of the great preponderance of apex-excavation over cavities in other situations. In any case of suspected phthisis, our examination is first directed to the apices, and from a negative result we acquire the certainty that the patient is not the subject of advanced disease. Theoretically, there is a rashness in this conclusion; but in practice, our induction ceases to be rash, in virtue of its scientific basis; for the upper part of the lung has been proved to be almost invariably the seat of the early pulmonary disease. By a due regard to this acquired fact, we are saved much superfluous labour, and not a little unnecessary doubt in forming an opinion.

An inquiry into the causes of this frequency is not foreign to my subject. How great an importance has been attached by former writers to an elucidation of this point, may be perceived from the number and variety of the theories to which it has given rise in the literature of phthisis. The causes which have been suggested may be arranged under two headings: (1) postural; (2) functional.

1. Lebert connects the frequency of apex-cavities with the peculiarities of posture in man; during the day erect, at night generally supine. In what manner the erect posture exerts its influence, he does not proceed to explain; but with the supine position at night, he couples the frequent development of cavity at the posterior aspect of the lung. His arguments in favour of the "postural" theory are supported by observations in comparative pathology. From a careful study of phthisis in monkeys, he concludes that the apex is not specially liable to the disease in these animals. The close analogy of structure between man and ape renders this fact of special value.

The explanation adopted by Rindfleisch, which we will presently discuss, is also based upon the influence of posture. To the same order may be said to belong the suggestion that the apex of the lung is specially exposed to the agency of cold. From clinical observations this view has received no small share of support; we still lack, however, conclusive evidence that the parts of an organ struck by the impression of cold are invariably the seat of the resulting inflammation.

The other causes suggested by authors are mainly functional or anatomical. First among these is the alleged inequality of function at different regions of the lung. From a teleological standpoint, there would be a palpable improbability in the assumption that any part of an organ should remain permanently deprived of function; but it must be admitted that varying degrees of activity may exist not only in different parts of the same organ, but at different times in the same part. The view sometimes put forward, that the air-cells at the apex are larger than those at other parts, requires to be confirmed by practical observation. A demonstration of any such difference in the human subject is surrounded with great difficulties, owing to the possible interference of irregular inflation, of emphysema, and even of *post mortem* distension. Dr. Waters, in his Fothergillian Prize Essay on the Anatomy of the Human Lung, denies the existence of any variation in the size of air-sacs in different parts of the same lung.

Greater probability attaches to the view that peculiarities in the bronchial supply may influence the frequency of the apex-disease. Among the features special to the bronchial distribution at the apex, the relatively larger size of the tubes, and their rigidly patent and circular orifices, deserve to be noticed. But further study is required before any etiological conclusion can be based upon the anatomy of the bronchial system.

The occurrence of pleurisy at the apex has also been advanced as a determining agent. Among other considerations, the frequency with which pain is referred to the clavicular region at an early stage of phthisis, lends colour to the view, although after death the recent pulmonary deposits are often uncomplicated by pleural adhesions.

Before entering further into this etiological discussion, it may be well to sift the evidence as to the exact site of so-called apex-disease. In the later stages of pulmonary consumption, it must be conceded, the vomica commonly extends to the summit of the lung. It is habitual, however, even at this stage, to find the cavity lateral rather than median in its axis; and I may state at once that the extension of a cavity to the periphery is mainly a matter of time. We cannot, therefore, with safety, conclude from the size and position of the late cavity to the size and situation of the earlier disease. Clinical observation supplies us with valuable evidence in our endeavour to settle the question. A careful diagnosis will not fail to convince us that the early consolidations are more commonly seated in the subclavicular region than at the apex. The same fact is often capable of direct demonstration, when at the time of death one of the lungs is as yet but slightly affected. I do not wish to underrate the clinical value of an examination of the supraclavicular space. This is undoubtedly a position in which the signs of the disease are very early perceptible; but I have not encountered breaking-down in this situation with as much frequency as in the inner or in the outer subclavicular region.

With this reservation, I would proceed to discuss the etiology of the apex-lesions. I hesitate to attribute to posture so direct an influence on the localisation of phthisis as is implied by Lebert and by Rindfleisch, and I would look rather for the operation of functional causes. We must assume that all parts of the lung are endowed with breathing capabilities proportionate to their amount of spongy tissue. It would be inconsistent to suppose that any one part of the lung is in this respect at a relative disadvantage. On the other hand, we cannot fail to recognise that the type of breathing normally differs in the various districts. More than any other, the upper region of the chest is the seat of voluntary respiration, as opposed to automatic breathing; and the enlargement of the thorax by drill probably occurs to a greater extent in this than in any other part. In this observation we possess a proof that the breathing powers of the apex are not far behind those of other regions; but also an indirect proof that, under ordinary circumstances, this breathing power remains imperfectly utilised. During the bulk of our existence, respiration at the apex is decidedly sluggish; and, even in the female type of breathing, the pectoral region, rather than the apex proper, is the seat of respiratory activity.

Just as attention and training, combined with exalted vital energies, can effect an improvement of the apex-breathing, impairment of function will follow upon a general loss of tone. Even in conditions of fatigue, depression of apex-breathing is perceptible. In the initial stage of phthisis, the depression to which I have referred is extremely striking. At this stage, an inspiration sufficient to raise the subclavicular region to the normal extent may become a matter of considerable effort; and, whilst the patient breathes quietly, no appreciable forward thrust of the ribs is obtained; yet the lower and more elementary mechanism of respiration, that of the diaphragm, remains in nearly unabated activity.

Viewed in this broad manner, the theory of unequal function as a determining factor in the localisation of early phthisis commands my adhesion. The direct outcome of such a condition of lessened respiration is doubtless lessened aeration of the blood; but local effects yet more important are apt to follow. Greater than the loss of inspiratory vigour is the loss of an efficient expiration. We can scarcely over-estimate the value of expiration. It shares with inspiration an influence over the circulation, which may be with accuracy compared to the action of muscular contraction in assisting the passage of blood through the muscles; and it possesses a similar influence over the lymphatic currents in the lung and pleura, as pointed out by Dr. Klein (*The Anatomy of the Lymphatic System*, Part II, The Lung, p. 18). But it is upon the bronchial system that expiration exercises its most beneficial influence. In the absence of good expiratory power, the tubes cease to be cleared of their contents; and, under the influence of the impairment in the general tone of the bronchial membrane, their secretion becomes abnormal in quantity and in kind. These are tangible results, by the side of which we are led to suspect as highly probable

a lessened vitality of the parenchyma and a disturbance of the vaso-motor mechanism.

The stagnation in the tubes of the apex is explained by Rindfleisch in a somewhat different light. Rindfleisch, in his first proposition, states that the secretions of the apex are thicker than those in any other part of the lung. The inspissation would be due to a relative dryness of the apex structures, caused by a subsidence of the blood within the vessels, in accordance with the laws of gravitation; but the mechanical explanation given for the gravitation of blood towards the base is weakened by an omission of the most important among the normal conditions of the vessels. The pulmonary vessels are not only elastic tubes, but tubes embedded in an elastic tissue, which is never quite free from tension. In the variations of the pulmonary tension, and, on the other hand, in the varying contractility of the small vessels, are to be found the real moderators of the circulation. Leaving out of consideration the slight suction which intermittently arises in the large intrathoracic veins, I fail to discover, in the supposed emptiness of the latter, a force capable of materially influencing the contents of the capillary system.

The minor details to which I have alluded in the theory supported by Kiehl's Fleisch are, in my estimation, less important than its leading idea. The drift of the theory is to refer apex-disease to local anæmia, as a cause. With such a conclusion, I feel that much of our clinical, and much of our *post mortem* experience, will be hard to reconcile. The derivation of any such view from clinical observation would have appeared to me almost impossible. With better excuse, it might have been urged from a contrast with the immunity from phthisis conferred upon the lung, by the chronic congestion of mitral disease. The rarity of the occurrence of phthisis in those suffering from mitral insufficiency, is generally admitted; but the cause of this peculiarity does not, I would suggest, reside in the large amount of blood contained in the lungs, but rather in the degree of intravenous pressure. It is rational to suppose that the pressure kept up in the vessels by persistent regurgitation may act upon the endothelial membrane to an extent which would discourage the soft cell-growth characteristic of phthisis. A mention, however, is superfluous in this case. We possess, with regard to the pathology of venous obstruction, a rule which is of universal application. In the liver, in the spleen, in the kidney, interstitial hæmorrhage is the invariable result of mitral disease. This condition is also induced in the lung from the same cause—thus the antagonism is not between phthisis and congestion, but between fibrosis and phthisis.

I believe congestion to be never absent from the earliest stage of the disease; but, unlike the mechanical congestion of mitral disease, I hold blood fulness to be here the expression of a local inflammation. It is comparable to the congestion present in relaxed states of the tonsils and in subacute pharyngitis; and it is similarly associated with hypersecretion and with cell-overgrowth. This local inflammation is directly induced by an impairment of the aërial traffic; for we have seen that regularity and fulness of breathing are essential to the thoroughness of the circulation. Excessive collapse of the lungs, on the other hand, constricts the capillaries. Conversely, on the other hand, most favoured by a state of flaccidity of the respiratory apparatus, the other extreme. Of the existence of some degree of congestion in the early stage of the disease, we possess clinical evidence, if we refer to the usual interpretation of the auscultatory sounds. Aural murmurs, of the innocent type and wandering location, are frequently found in the early stage of the disease which are unmistakably attacked by the action of the digitalis; and, in other cases, we are enabled to detect the existence of further congestion in the blood by examination of the

I have, in my previous article on the subject of non-specificity, I look upon the human immune system as an elaborate protection to phytosis, the maintenance of the purely functional, namely, non-specific, thermodynamic equilibrium of the body of the man, which results in constant passage of material, energy, and elementary composition. These concepts are, of course, not intended to explain the function of the immune system, but only the general physical and chemical probabilities, which is at the root of the immune system. With the presence of the self growth and of the altered immunity, a secondary immunity is induced, but the persistence of the functional immunity, and the function of the depression of the secondary immunity, that the immune system is not the final

[illegible]

under the influence of the contractions of the diaphragm, is also more constantly and more perfectly ventilated. This difference, noticeable in ordinary respiration, is yet more strongly marked in the exaggerated breathing which accompanies cough. It should also be noted that the relatively greater mobility of the inferior wall of the thorax often persists, even in the presence of adhesions; whilst in the upper part of the chest adhesions lead to a more rigid fixation.

Another important factor not to be overlooked, in estimating the comparative respiratory powers at various sections of the lung, is the relative bulk of spongy tissue. The upper part of the lung, which contains the bronchial tree and the large divisions of the blood-vessels, is proportionately poor in alveolar tissue. At the base, where spongy tissue makes up the great mass of the lung, the total strength of the bronchial air-current is likely to be increased, and the respiratory excursions of every constituent part are decidedly amplified.

So rare is the occurrence of primary phthisis at the base, that the evidence pointing to excavation in this situation must be weighed with extreme caution; a searching examination not infrequently proves that cavernous sounds are merely conducted to the base, which at first were deemed strictly basic. When the existence of excavation limited to the base is capable of demonstration, its origin will generally be found to be distinct from phthisis.

Among the causes leading to cavernous sounds in this situation, bronchial dilatation probably holds the first rank; in suspected bronchiectasis, we should never fail to inspect the region immediately below the angle of the scapula, as one specially obnoxious to the disease. Gangrene as a source of excavation is especially common at the base in connection with the relative frequency of basic pneumonia; and empyema leading to pulmonary cavity is equally prone to affect the lower part of the chest.

Syphilis should not be omitted as an occasional cause of basic disease: vomice due to this affection may be the result of the softening of a gumma or the secondary consequence of ulceration within the bronchi. The relative frequency with which syphilitic lesions are described at the base is doubtless due to the difficulty which commonly attends a distinction between a specific affection at the apex and the ordinary results of phthisis. It is not improbable that vomice due to syphilis are as often apical as basic. Schnitzler, however, regards the middle and lower lobes as the seat of election for this disease.

Among the many causes which may be classed as accidental, the most important in respect of frequency is the extension of abscesses from neighbouring regions, from the peritoneum, from the liver, from the spleen, or the kidney. Hydatids constitute a separate group of great interest; they may originate within the thorax, or more commonly they make their way upwards from the liver. The invasion of foreign bodies in the lower bronchial divisions occasionally leads to excavation, as in a remarkable case narrated by my friend Dr. Mitchell Bruce in his admirable lectures on "Lung Cavities," at present in course of publication in the *Practitioner*. Lastly, should be mentioned, although not the most important, the softening of the hæmorrhagic nodules, described by Dr. Kenneth E. Thompson, which will form the subject of some further description in my next lecture.

With the exception of the last, the diseases which I have enumerated do not usually fall within the territory of phylaxis, although phylaxis sometimes becomes developed in the later stages, and for this reason I refrain only reluctantly from any further comments concerning them. This deficiency will be amply supplemented by Dr. Bruce's lectures, which contain a more practical treatment of the whole subject than could have been attempted by me.

There was a marked increase in the frequency of cavities at the apex and of their rate of formation at the base. The rate of formation of cavities was particularly marked in the anteriorly directed teeth. With a view to simplifying these material towards a better knowledge of the subject, I have made a list of the most marked observations, and have arranged them in comparative detail, including two cases of fronto-occipital, and I propose bringing this lecture to a close with a review of the results which I have obtained in connection, first, with the last; and, secondly, with the present condition.

On 11. In response to the following problems were noted: The transformation of a whole lung (with the exception of very small peripheral portions) into a large cavity was observed in five cases (three in the right lung, two in the left). In contrast to those, the following features were observed: the very small cavity, both in the lung and in the septum, was transformed into very large cavity, which then merged through a perforation in the septum, thus very closely approaching a condition of total cavitation.

Excavation of the whole upper lobe occurred in 26 cases. These lobar cavities were situated :

On the right side :

12 times ;

On the left side :

14 times = 26.

Including the 5 cases of total destruction of a whole lung which I have mentioned, the interlobular septum was perforated by ulceration in 23 cases, the lesion occurring :

On the right side :

10 times ;

On the left side :

13 times = 23.

The size of the perforations varied considerably, between the diameter of a goose-quill and that of the lung itself. In all these cases, the excavations were large, and in most the ulceration appeared to have been induced by the downward extension of the cavity from the apex.

For the great bulk of the remaining cases, where excavation did not implicate an entire lobe, standards of comparative measurement were selected in the average-sized Seville orange, in the Tangerine orange, and in the ordinary walnut ; and the cavities were arranged in three corresponding groups.

To the first group, comprising cavities as large as, or larger than, the ordinary orange, belonged 79 of the cases ; the position of the cavities was as follows :

On the right side :

53 times ;

On the left side :

54 times = 107.

Large cavities existed, therefore, simultaneously on both sides in 28 of the cases.

In the second series, numbering 52 cases, the cavities ranged between the size of a Tangerine orange and that of a walnut. They were found respectively :

On the right side :

42 times ;

On the left side :

38 times = 80.

Thus, in 28 cases, both sides were simultaneously excavated (not including several cases in which simple softening existed in the lung least diseased). The usual site of these cavities was the upper lobe ; this, however, was not invariably the case ; for, in 9 instances, the larger cavity was situated in the middle third of the lung.

In a third series of 19 cases, the cavities did not exceed the size of a walnut ; with 4 exceptions, they acquired a larger size at the apex than in the lower lobes. In most of these instances, although the vomicae were comparatively small, the extent of the softening was considerable, and the disease implicated larger portions of the lung than in cases where the cavities attained more important dimensions.

It is unnecessary that I should add any comment to the simple statements which I have enumerated. The figures speak for themselves ; they bring into relief the remarkable evenness with which right and left sides are affected. They also point to a great tendency in the cavities of chronic phthisis towards a progressive enlargement ; and they show plainly that the severity of the disease cannot be estimated by the magnitude of the vomicae.

2. If we pass to a consideration of the topography of cavities, we find, in corroboration of the results of other observers, a great predominance of disease in the upper part of the lung. Thus in the whole series, the *apex* presented :

Complete absence of disease	in 4 cases.
Pneumonia or blood-deposits (without excavation)	" 3 "
Tubercular masses (without excavation)	" 3 "
Tubercle and pneumonic masses (without excavation)	" 1 "

In all the remaining instances, excavations existed at the upper part of the lung. I have abstained from a more elaborate analysis of this region, partly having regard to the uncertainty which exists as to the real limits of what is termed the apex, and partly also from a consideration of the fact that, in chronic cases, the upper part of the lung rarely fails to become finally involved, although not always diseased from the first. It should, however, be stated that the outer region of the apex is found far more frequently than the inner region to be the seat of late excavation.

The *base* afforded a remarkable contrast to this frequency of the apex disease. In the aggregate of 304 lungs, 32 only presented the features of basic excavation ; and at least one-third of these cavities were mere extensions of cavities beginning in other regions, especially in the axilla. Tubercle, both of the sporadic and of the grouped variety, occurred with tolerable frequency. But the deposits more specially characteristic of the base were of non-tubercular nature. They consisted either of hard nodules, such as those described by Dr. Reginald E. Thompson as hæmorrhagic, or of the softer masses which

are so commonly found at the fringe of the lung as one of the latest results of phthisis. It may be incidentally stated that both the hard nodules and the soft masses are liable to break down ; and, if surrounded by the pneumonic œdema which is habitually induced at the base during the last few days of life, they may become the starting-point of extensive disorganisation.

The great frequency with which the sternal region escapes disease will be gathered from an inspection of the following table :

Sternal Region.

	On the Right.	On the Left.	Total.
Absence of lesions ...	71	66	137
Excavation by extension ...	9	16	25
Separate cavities ...	21	15	36
Bronchiectasis ...	6	3	9
Fibrous changes (only) ...	12	16	28
Pneumonia (only) ...	6	7	13
Tubercle (only) ...	6	5	11
Hæmorrhagic nodules (only) ...	4	9	13
Other nodules (only) ...	17	15	32
	152	152	304

The sternal region in its lower portions closely emulates the immunity of the base, but in its upper part it is liable to suffer from the extension of vomicae from the apex and from the mammary region. It further resembles the base in preserving its spongy nature to a late period (thus acting as a reserve of breathing tissue), and in showing a liability to the late nodular deposits which I have mentioned above ; but probably owing to its position in the chest and to its vascular relations it is less subject to the thrombosis and to the pneumonia which so commonly overtake the base.

The *mammary region* forms the subject of the next table to which I would direct your attention.

Mammary Region.

	On the Right.	On the Left.	Total.
Absence of lesions ...	14	20	34
Excavation by extension ...	38	45	83
Separate cavities ...	57	49	106
Fibroid condensation (only) ...	18	18	36
Bronchiectasis (only) ...	3	2	5
Tubercular and nodular deposit in the absence of excavation ...	22	18	40
	152	152	304

The facts expressed by these numbers are, briefly, the following.

The mammary region escapes disease but rarely (in a proportion closely approaching 1 to 9) in cases of advanced phthisis. Excavation, on the other hand, does not occur in more than one-third of the cases. Whether taken separately or in their aggregate, the various figures relating to this region show once more very strikingly the uniformity with which disease affects both sides of the chest. It will be noticed that cavities are more apt to be formed in the left mammary region than in the right, but the latter is more frequently the seat of separate excavation. This difference is partly to be explained by the smaller size of the left lung, and by its anatomical relations, which restrict its expansibility. The greater respiratory surface possessed by the same region in the right lung finds another demonstration in the relative frequency of nodular and tubercular deposits as compared with the left.

A more exact localisation of the vomicae in the mammary region was attempted in fifty-three of the cases only. The central mammary region yielded thirty-one cavities, and the outer nineteen, against three cavities referable to the inner portion of the same district. These numbers are too small to warrant any conclusion beyond the fact that the inner pectoral region is not favourable to excavation.

The *dorsal aspect* of the lung, owing to the space occupied by the vertebral column and mediastinal structures on the one hand, and by the root of the lung on the other, is comparatively of less extent than the anterior surface. The portion corresponding to the vertebral groove is not specially prone to disease ; it is commonly found yet spongy when the mass of the organ is disabled. Excavation in this situation is one of the latest events, and not infrequently it is due to the softening of loose masses of irritative pneumonia, such as I have described at the base. Of the remaining portions of the posterior pulmonary surface, the upper and the lower have been included respectively in the description of the apex and of the base ; and the *mid-dorsal region* I would now propose to consider in conjunction with the *axillary district*, with which it is closely connected in the march of the disease.

In the Teleostei (salmon), the chondrification of the basicranial bands takes place in a manner quite similar to that of *Lepidosteus*; but the fore part of the subocular bar is developed independently from the hinder part, and both, as well as the hyoid arch, separately from the skull.

In the simplest form of the reptilian skull—viz., that of the common snake—the trabeculae are direct continuations, in an attenuated rounded form, of the broad parachordal plates. They meet and unite in front without a median piece, and retain their embryonic condition throughout life. Two pairs of visceral arches are developed independently of the skull.

The development of the trabeculae as direct continuations primarily of the parachordals, is seen also in lizards, turtles, and crocodiles; but in the two latter, the trabeculae, as in the salmon, are segmented from the investing mass. Almost at the same time that the trabeculae are chondrified, an intertrabecula is developed as a rounded rod, and all three have the rounded form of the permanent trabeculae of the snake.

In the Amniota, unlike the low ichthyic forms, the investing mass rises high into the fold of the mid-brain, and the notochord with it. Thus is formed the large postclivoid wall.

The chondro-cranium of birds is developed in a manner quite similar to that of the crocodile and the turtle. This is especially to be seen in the Struthionidae; but that of the common fowl differs only in non-essentials. In all the Sauropsida, the visceral arches are developed independently of the cranium.

The difference between the early chondro-cranium of a mammal and that of the Sauropsida arises from the fact that the tissue which forms the whole of it, including the walls of the nasal and auditory capsules, chondrifies nearly at the same time, so that they can only be studied as separate parts before the tissue becomes cartilaginous. Afterwards, however, in the last stage of the skull, the ossification of the two sense capsules separately from that of the endocranium gives to their various parts a distinction which could not be seen even in the earliest stage of the skull. In mammals, as well as in Sauropsida, the visceral arches are developed independently of the basis cranii.

NOTE ON THE SANITARY CONDITION OF BAGSHOT PARK.

By W. S. PLAYFAIR, M.D., F.R.C.P.,

Professor of Obstetric Medicine in King's College; and Physician for the Diseases of Women and Children to King's College Hospital.

IT has been suggested to me by his Royal Highness the Duke of Connaught, that, as a matter of general interest to the medical profession, I should communicate a brief notice of the results of the careful investigation and reports made by Mr. Rogers Field into the sanitary condition of Bagshot Park, the defects in which are believed to have led directly to the Duchess of Connaught's late serious illness, from which she is now happily entirely convalescent. This is a suggestion I willingly comply with, in the hope that so prominent an instance of the danger that may arise from such faults of construction and workmanship as have been proved to exist may have the effect of directing attention to the paramount importance of questions of this kind.

It may be well to premise that the present house at Bagshot Park is not that long occupied by the late Sir James Clark, but an entirely new building, recently erected at a cost of from thirty to forty thousand pounds. As a matter of course, considerable pains were taken in the arrangements and ventilation of the drains; but it appears that, not only was the system adopted in itself defective, as was pointed out at the time of construction by Sir Howard Elphinstone, R.E., the Comptroller of His Royal Highness's household, but that the work was in many instances so carelessly carried out, that it is a matter of astonishment that more grave results have not followed. It is impossible to describe the whole system of drainage without reference to plans, but a few examples of the faults will show how readily, even in a new and costly mansion, the inhabitants may, without suspicion, be exposed to risks, the extent and subtlety of which it is difficult to estimate. For this purpose, I quote from Mr. Field's report, which has been placed in my hands. This was made after a thorough investigation conducted subsequently to Her Royal Highness's removal to Windsor, and it reveals a state of things which renders it astonishing that much more serious consequences did not long since arise. As a matter of fact, offensive smells had long been perceived about the house, and had been a common topic of conversation, but no one had suspected their origin, or had realised the dangers they were likely to cause. Many of

the inmates, however, had suffered from various forms of indisposition, such as sore-throat, diarrhoea, and a general sense of heaviness and *malaise*; and these chiefly affected newcomers. Of all this, it is needless to say I knew nothing until after the Duchess's accouchement; neither did Dr. Laking nor I think much of it until serious symptoms had shown themselves.

A few examples of the defects discovered will suffice to show what was really the state of the sanitary arrangements. "The drains, taking certain baths and sinks, run underneath the house, with two chambers in their course, likewise underneath the house. Connected with these bath-drains are several land-drains, constructed of ordinary jointed pipes. This, I need hardly point out, is a very objectionable arrangement, as the bath-drains are in unbroken connection with soil-drains, the unventilated trap forming no reliable security against the passage of foul air."

All the drains inside the house, and immediately around the house, "were found, without exception, to be leaky, some of them exceedingly so."

On testing the drains, taking the soil-pipe from one closet, "water ran out of the pipe through the wall into the basement, and, on opening up the pipe just outside the wall, it was found to be not only badly jointed, but broken, and there was an accumulation of filth which had run from it into the ground."

"The bath and sink-drain under the house was so completely stopped up with a slimy deposit, that it was some time before any water could pass down it."

"On examining the basement on his first visit, my assistant noticed a vertical lead-pipe communicating directly with the soil-drains. On inquiry, he was informed that this pipe was intended for a sink which had not been fixed; and he was assured by the clerk of the works that the upper end of the pipe had been cut off and carefully sealed up. It was afterwards discovered that there had been no attempt at sealing up the pipe, but that the upper end had been left open immediately under the floor of the vestibule, and thus afforded a free passage for foul air into the house."

"All the closets had a disagreeable smell, and some of them were excessively offensive."

"The waste-pipes of the baths are in unbroken communication with the drains, instead of discharging with open ends outside the house, as they should do."

"The waste-pipes of two of the sinks have unbroken connections with the drains in the basement."

The following is specially interesting under the circumstances which led to this investigation. "In order to ascertain how far the smell from the leaky drains and rain-water overflow in the basements would penetrate, I applied the smoke-test, by burning specially prepared paper in the basements under the central saloon, study, waiting-room, and vestibule. The smoke was seen to issue in great volume from the hot-water coils in the saloon, and a strong smell of smoke was perceived in the study, waiting-room, and vestibule. It was also proved that the smoke passed from the saloon into the Duchess's bedroom. Again, on burning the special paper in the hollow wall at the back of the heating furnace, the smoke found its way into the dining-room, up the casing of the soil-pipe into the Duke's dressing-room, and thence into the Duchess's bedroom. From the foregoing tests, it will be seen that there were two distinct and easy ways by which the foul gases from the drains in the basement could find their way into the Duchess's bedroom."

I have quoted a few only of Mr. Field's discoveries, but these, I think, will amply justify his general conclusions that "the construction of the drainage both round and inside the house is very defective. This faulty work is undoubtedly the cause of the offensive smells that have been noticed; and the defects are so grave, that I consider the house, in its present condition, unsafe for habitation from a sanitary point of view."

The whole question of the effects of defective sanitary condition on the puerperal state is one which deserves much more serious study than it has ever yet received. I have long been satisfied that they have often much to do with grave forms of illness in the lying-in state, the origin of which cannot otherwise be traced. In the chapter on "Puerperal Septicæmia" in the third edition of my work on *The Science and Practice of Midwifery*, I wrote as follows: "Exposure to sewer-gas may, I feel sure, produce the disease. In two cases of the kind I had the opportunity of closely watching, an untrapped drain opened directly into the bedroom, in one instance into a bath, in the other into a water-closet. Both cases were indistinguishable from the ordinary form of the disease, and in both improvement commenced as soon as the patient was removed into another room."

The two cases here mentioned are by no means the only ones I have had an opportunity of observing; and I have long had it in my mind

small-pox in the metropolis during three successive years amounted respectively to 115, 56, and 75, or 246 in all, the lowest tribute levied by scarlatina in a single year was 652. The whole mortality from small-pox in the five years 1873, 1874, 1875, 1876, and 1880 amounted to only 704, or 52 in excess of the smallest annual mortality from scarlatina. Small-pox, no doubt, has from time to time its epidemic outbursts, accompanied by a frightful mortality, as, for instance, 7,876 in 1871; but, notwithstanding this memorable year, the annual average of deaths from small-pox during the ten years 1870-79 was only 1708.0, while that from scarlatina was 2574.1. Surely this startling fact, coupled with the other fact, that the years 1877 and 1878, with their respective mortalities of 1,576 and 1,792, are considered years of "average prevalence", should lead us to inquire with some earnestness whether this decennial holocaust of more than 27,000 human beings is indeed a necessary condition of our modern civilisation, which must be endured without an effort to mitigate its pitiless severity?

So much for the *deaths*. Can we from them discover a clue to the number of *cases* that occur annually in the metropolis? In default of those returns of cases of sickness, which we have so often asked from the Government during the last thirteen years, and which, seven or eight years ago, our distinguished associate, Dr. William Farr, saw no difficulty in obtaining weekly, it is in our power to make an approximate estimate of the number of cases or attacks represented by the figures cited above from the Registrar-General's summary. It so happens that a return furnished by Dr. Brewer to Sir Rutherford Alcock, and by him kindly lent to me, supplies the key that unlocks, in part at least, this mystery. It gives the total admissions of scarlatina patients into the Homerton and Stockwell Fever Hospitals, and the total deaths in them, during the years 1877, 1878, and 1879; also, by calculation, the number of deaths per 100 cases varying from 3.77 to 14.39, the average rate for the three years being 12.40 per cent. So that, from this average mortality of the Metropolitan Asylum Board's hospitals, and the total deaths for each year in the returns of the Registrar General, we obtain the following table:

Year.	Total Deaths.	Average Per Cent.	Estimated Total Cases.
1870	5,998	12.40	48,370
1871	1,896	"	15,290
1872	904	"	7,290
1873	652	"	5,258
1874	2,662	"	21,467
1875	3,651	"	29,443
1876	2,297	"	18,524
1877	1,576	"	12,709
1878	1,792	"	14,451
1879	2,706	"	23,435
1880	3,073	"	24,782

Hence, the eleven years' average of cases annually occurring in London is about 20,100. Of these, we know, from Dr. Brewer's return, that the Homerton and Stockwell Hospitals received a yearly average of 876 cases during 1877, 1878, and 1879. And if, in the absence of any precise information regarding all the other hospitals for the treatment of infectious disorders, we allow that 3,000 patients suffering from scarlatina are admitted yearly into all the public institutions within the Parliamentary boundaries, there still remains unprovided for a huge mass of infection free to propagate itself on every hand, with scarce an effort being made to limit its ravages. From all these considerations, we conclude that the provision of homes for convalescents from scarlatina, with the view of enabling the patients to be discharged more rapidly from the hospitals, where they are now detained nearly eight weeks, and to make room for fresh relays of patients in the acute stage of the disease, is not only desirable, but a matter of urgent public importance.

But can this removal be effected with due regard to the safety of the patients? Some medical authorities, whose opinion carries great weight, hold very decidedly that scarlatina convalescents cannot, without great risk, be removed to a convalescent home till desquamation is complete, and all fear of infection has disappeared. In that case, the need of convalescent institutions would be comparatively small; "comparatively", I say, for they would still be welcome refuges to not a few whom prejudice or panic would exclude from all uninfected circles. But, as a measure of great sanitary moment, this effort would sink into a secondary place. I have therefore made inquiries in various quarters with a view to ascertain the mind of those whose experience in this class of diseases is exceptionally large. And I find that Dr. J. W. Moore is unhesitatingly of opinion that convalescents from scarlatina may be removed with but little risk long before the expiry of the six or eight weeks necessary for their complete disinfection. And through the kindness of my friend Dr. Buchanan, of the Local Government Board, I have been furnished with the following very important state-

ment by Dr. Alexander Collie of the Homerton Fever Asylum, in transmitting which Dr. Buchanan writes: "I do not know how my own opinions about the period most advantageous to scarlatina convalescents for getting a breath of country air could be better stated than by repeating what Dr. Collie says in the enclosed letter." Here it is.

"The end of the third week, or during the course of the fourth, is, in my opinion, the most advantageous for the sending of scarlet fever cases to a convalescent hospital. The minimum stay in hospital of cases of this disease (treated to recovery) may be taken at six weeks for the Homerton Fever Hospital. For the first three weeks, it has been the rule to treat them as acute cases, and they are generally not allowed out of bed; but at the end of three weeks, or during the course of the fourth, the patients are usually put up, and from that time onward treated as convalescents. They spend the day in the day-rooms and the airing-courts. The hospital for them is thus a convalescent hospital, with the disadvantage to the hospital of occupying space that would be more fitly occupied by acute cases, and to themselves of wanting many of the special advantages of a strictly convalescent hospital.....Complications occur during the convalescent period, but not commonly; and one or two small acute wards attached to the convalescent hospital would provide for these cases. The convalescents would, of course, require continuous medical attendance."

This statement, not of opinions, but of facts, made by one whose experience is extensive, and whose thorough competency, both as an accurate observer and as a skilful practitioner, is admitted on all hands, goes far to settle the moot question of the removability of the convalescent, without much risk, at a comparatively early period; and encourages us to expect that, if complications are not common in fever hospitals among convalescents, who are permitted to spend the day in "the airing courts" during and after the fourth week, they will not be more frequent among those who may be removed at the same period, and with all needful precautions, to a convalescent home. One of the most important of these precautions is, that no one shall be admitted into the home without a medical certificate that removal does not involve extraordinary risk. And not only as regards the state of the patients themselves, but as regards external circumstances, as of clothing, temperature, weather, etc., care will be taken to reduce the risk to a minimum, so that the forebodings of those who maintain that our convalescent home will be turned into an hospital by the frequency and gravity of the sequelæ, may, by God's blessing, be disappointed, and the success of this interesting experiment secured. It appears very clear, however, that a resident medical officer, with a moderate salary, in addition to board and lodgings, cannot be dispensed with, unless there should fortunately be a thoroughly qualified medical practitioner in the near neighbourhood of the home, who could make frequent and regular visits, and be readily summoned on emergency.

But we have as yet touched only the fringe of this great subject. We have been involuntarily thinking of those who are well cared for in comfortable hospitals, and anxiously seeking to provide for their safe removal. But what of those for whose treatment no hospital accommodation is provided? We have been caring for the 3000, but where are the 17,000, and who is caring for them? Surely, in the case of by far the greater number, any change must be a change for the better. In their solicitude lest the fortunate minority should incur any risk, however small, those who oppose their early removal seem altogether to lose sight of the vast majority, who are actually incurring far greater risk as regards themselves, and, by their presence in their homes and in the streets, are endangering the health and the lives of the multitudes with whom they are brought in contact, spreading far and wide that subtle poison which carries suffering and sorrow into thousands of families, and fills our graveyards with victims who are gleaned in overwhelming proportion from among the youthful and most promising portion of the population. To arrest, in some measure, this fearful waste of precious life, to lessen to some extent this unknown mass of human misery, and, by setting an example before the world, to awaken a sense of the need of earnest effort, these are the objects of this humble endeavour to grapple with a formidable evil. The work is great, but it is also good, and though the beginning is small, we believe that it will prosper and have good success.

It was announced, at the last German Hospital Court, that the managers had determined to establish a convalescent home. It may be mentioned, as an illustration of the need of such a step, that twenty patients stayed in the hospital during last year for a period of time representing 125 months, and thus closed the wards of the hospital to a number of applicants greatly in want of accommodation in them. Most of these patients had been kept in the hospital when they might with safety have been treated as convalescents.

HOURL-GLASS CONTRACTION OF THE UTERUS TREATED WITH NITRITE OF AMYL.

By FANCOURT BARNES, M.D., M.R.C.P.,

Physician to the British Lying-in Hospital; Assistant Physician to the Royal Maternity Charity.

I WAS called, at ten o'clock in the morning on February 28th last, by one of the midwives of the Royal Maternity Charity, to a patient with retained placenta. On my arrival, I found that the patient, a secundipara, aged 22, had been delivered naturally at three o'clock in the morning of a living female child. The midwife stated that she sent for me, because she had been unable to deliver the placenta. On examination, I found that the umbilical cord had been separated from the placenta. The external os uteri was quite dilated, as was the cervical cavity; but the os internum and the circle of muscular fibres above it, called Bandl's ring, the chief seat of hour-glass contraction, were firmly contracted, and only admitted a finger, by which the placenta could be felt in the uterus. I now learnt that the midwife, hoping to accelerate the third stage of labour, had given the patient a dose of ergot as soon as the child was born. I found it impossible to get my hand into the uterus to deliver the placenta. Bearing in mind the remarkable power which nitrite of amyl possesses in relaxing tension in the blood-vessels, I determined to test its action on the uterine spasm. The patient had three drops of the nitrite of amyl given her on a handkerchief to inhale, by Mr. Lingard. During the inhalation, the ring of muscular fibres round the os internum, which had been so rigid as to be absolutely undilatable, steadily yielded, until I could pass the whole hand into the uterus and detach the placenta, which was universally adherent. There was no hemorrhage whatever, and the placenta itself presented a remarkably exsanguine appearance. On referring to the third edition of my father's work on *Obstetric Operations*, I found the following: "We possess in ergot a great, a dangerous power of augmenting the force of the uterus. We want an agent endowed with the opposite effect, that will control and suppress uterine action. I consulted Dr. Richardson on this point. He tells me the desired power exists in the nitrite of amyl. Three minims of this added to one drachm of ether taken by inhalation is the form he recommends. It does not produce unconsciousness; but it is an anæsthetic as well as a sedative of muscular action. It is the antidote or opposite force to ergot. In it we have the desiderated 'epechontocic agent.'" In the case in question, the drug certainly acted admirably. It relaxed the irregular contraction of the uterus, and acted as a sedative and anæsthetic without producing unconsciousness. The case is also instructive as an example of the dangers which may result from the administration of ergot before the expulsion of the placenta. The tetanic action was no doubt increased by the traction which had been made on the cord. It is well known that ergot, when given before the birth of the child, may cause its death. I believe this results from the blood being squeezed out of the placenta by the uterus. Although in cases of irregular contraction of the uterus that organ is firmly contracted, the contraction does not separate the placenta. On the contrary, in the cases I have seen, the placenta has been firmly adherent, as it was in this case. I am not aware that nitrite of amyl has been used to relax uterine spasm before. In it we possess, I think, a new and trustworthy addition to the resources at command for overcoming spasmodic or trismic contractions, which will not always yield to other remedies.

ON THE EARLY TREATMENT OF PROSTATIC OBSTRUCTION.*

By REGINALD HARRISON, F.R.C.S.,

Surgeon to the Liverpool Royal Infirmary.

IT may be generally stated that, of males who have passed fifty-five years of age, about one-third sooner or later have enlargement of the prostate; of these, about one-half suffer therefrom, though, so long as micturition is efficiently and painlessly performed, there are seldom grounds for complaint.

It is exceedingly interesting, as indicating how relief may be afforded, to analyse the cases where the prostate is large but does not obstruct. There are at least two conditions explanatory of non-interference with micturition under these circumstances: first, where the hypertrophy is towards the rectum and the relations of the prostatic urethra are not altered; and, second, where the hypertrophied gland is lobulated, and channels are left between the masses, along which urine flows without

interruption. A careful consideration of these conditions has suggested that they are capable of artificial production, to an useful extent.

The teaching of the present day is, however, to the effect that mechanical treatment is not to be employed until either retention occurs or the bladder becomes inflamed; then such means may be resorted to. It may be asked, why the same treatment should not be applied as in the case of urethral stricture? The objection generally advanced is, that irritation will be produced. There is however, no evidence in support of this objection. On the contrary, the prostate is about the most long suffering organ in the body, and though it is subjected to a great variety of mechanical expedients, in lithotomy and other operations, it rarely becomes inflamed. It may just as well be said that, because strictures are found occasionally to be exceedingly irritable, treatment must be postponed until retention of urine or cystitis is provoked. But if intolerance to early mechanical treatment be proved, it is only postponing the day until the necessity becomes greater and the difficulty more apparent. If there be danger of irritating the prostate, it is none the less because its size is larger.

With the view of obtaining similar conditions to those occurring naturally in large prostates, where there is no interference with micturition, I have adopted a mode of treatment with specially-adapted bougies. The instruments are gum-elastic, two to four inches longer in the stem than usual, with an expanded portion an inch from the tip, which is made to enter the bladder. In this way the prostatic urethra is subjected to pressure on the insertion and withdrawal of the instrument.

As a rule, if dilatation be not too rapidly proceeded with, no irritation is aroused. On the contrary, greater toleration of urine follows, owing to the ease and completeness with which the bladder is then emptied.

In a few persons, it becomes necessary to establish a state of instrumental toleration, the frequency for doing this, as a rule, depending more on the manipulator than on the instrument. In some individuals intolerance of urethral interference is entirely due to the conditions of the urine. Such sensitiveness has been traced to the presence of uric acid in unnatural quantities and form. On the correction of this, patients previously intolerant of instruments have been found capable of undergoing the necessary mechanical treatment with the greatest advantage.

In advocating the early treatment of prostatic obstruction by the means referred to, I would say that I have already had sufficient proof of its efficacy. I have ascertained that the regular use of the dilators is capable of so moulding the enlargement as to prevent obstruction. Cases are under my observation where the symptoms indicated that an impediment to micturition was commencing to form. Such patients in this way have regained the power they were beginning to lose. In bringing forward my views on the subject, I do so with the feeling that little has been yet done towards preventing the progressive development of a condition which is often followed by very distressing, and sometimes embarrassing, results—results of which we are aware and which we desire to palliate, though we have hitherto been helpless in preventing them.

THERAPEUTIC MEMORANDA.

RHEUMATIC CHOREA TREATED BY SALICYLATE OF SODA AND CONIUM.

A GIRL, aged 19, had a slight attack of chorea in 1878. In the first week of January 1882, after exposure to cold and wet, she suffered for a day or two from pains in various joints; chorea then came on, and the pains ceased. I saw the patient on February 14th. Up to this time, she had taken arsenic with citrate of iron and quinine thrice daily, and thirty grains of potassium-bromide with twenty grains of chloral-hydrate every night at bedtime. She had, however, become gradually worse; and it was stated that she had not slept for the last fourteen nights. Her movements were violent and incessant. The left side was decidedly the more affected. Taking into consideration the assigned cause of this attack—namely, the exposure to wet and cold—the rheumatic pains at the onset, the existence of a febrile temperature (101°) and of a cardiac *bruit*, and the failure of the arsenical and sedative treatment, I ordered twenty grains of sodium salicylate with half a drachm of succus conii to be given every four hours. A black draught was given an hour or two before the first dose of the mixture. After the second dose of the salicylate and conium, the patient slept for more than three hours. The next night, she slept six hours. She continued to take the mixture every four hours for seven days; afterwards, every six hours. In twelve days, all choreic movements had ceased, and she was able to walk quite well. Aphonia and

* Abstract of paper read at the Medical Society of London.

a slight apex-bruit persisted. The aphonia began during the worst part of the acute attack. Half-drachm doses of conium-juice are not known to have much power over choreic movements. Twenty-grain doses of salicylate of soda are known to very speedily allay rheumatic pain and choreic attacks, whereof chorea is sometimes one. Hence the choreic movements of the movements in this case may with but little hesitation be ascribed to the influence of the latter drug chiefly, if not to a slight extent, not rheumatic, this treatment would probably be of service.

T. CHURTON, M.D., Physician to the Leeds Infirmary.

SURGICAL MEMORANDA.

DISLOCATIONS OF THE ELBOW IN CHILDREN.

There is a common dislocation in children up to about five years of age of the upper end of the radius forwards. In Heath's *Minor Surgery* there is mentioned an injury of this kind, first noticed by Mr. McNamara. It is described as rare. The child has had either a fall or has been saved from falling by someone taking hold of the arm. The arm is not quite extended, with the forearm midway between pronation and supination, or completely pronated. A slight prominence on the outer side of the elbow-joint may be felt. A moderate degree of supination, complete pronation, and flexion are allowed. The motion of the wrist is free; but the hand is not used to grasp anything. Complete supination causes great pain. Reduction is effected by pulling the hand of the injured limb in your own; then pressure of the other hand on the head of the radius, and the radius will slip into its place. A distinct "thud" will be heard, and the radius will slip into its place. It has a great tendency to recur. I have seen ten examples of this injury within the last twelve months.

SIDNEY HERBERT LINDEMAN, King's Lynn.

TONSILLOTOME *versus* THE BISTOURY AND VULSELLUM.

In the *British Medical Journal* of January 2nd, 1882, in an article on the "Treatment of Hypertrophy of the Tonsils," we are told that the operation for the removal of the tonsils with the tonsillotome is unfavourably with that performed with the bistoury.

The former operation may not usually be performed in England, as it is largely practised elsewhere, and is highly recommended by competent authorities—viz., Morell Mackenzie, Chalmers, &c. It is by far the quicker and easier operation of the two, and it is necessary to steady the patient's head; no force is required to depress the tongue; the cutting is done by one action of the instrument; and the performance of the operation usually occupies but a few minutes. It is curious to suppose that it is more dangerous than the latter, owing to the supervention of hæmorrhage from the internal carotid artery. Except in abnormal cases, the distance between the tip of the instrument and the artery is at least half an inch. As a matter of fact, the face of a tonsillotome is not sharp, but blunt, and the pressure of the instrument on the artery is not sufficient to cause hæmorrhage. The operation is performed with the bistoury and vulsellum.

The operation with the bistoury and vulsellum is performed by passing the point of the instrument into the tonsil, and then cutting it out. The operation with the tonsillotome is performed by passing the instrument into the tonsil, and then cutting it out.

The operation with the bistoury and vulsellum is performed by passing the point of the instrument into the tonsil, and then cutting it out. The operation with the tonsillotome is performed by passing the instrument into the tonsil, and then cutting it out. The operation with the bistoury and vulsellum is performed by passing the point of the instrument into the tonsil, and then cutting it out. The operation with the tonsillotome is performed by passing the instrument into the tonsil, and then cutting it out.

The operation with the bistoury and vulsellum is performed by passing the point of the instrument into the tonsil, and then cutting it out. The operation with the tonsillotome is performed by passing the instrument into the tonsil, and then cutting it out. The operation with the bistoury and vulsellum is performed by passing the point of the instrument into the tonsil, and then cutting it out. The operation with the tonsillotome is performed by passing the instrument into the tonsil, and then cutting it out.

GEORGE S. GUTH, L.R.C.S.I.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

CASE OF TABES DORSALIS, BEGINNING WITH PARALYSIS OF RIGHT THIRD NERVE, FOLLOWED BY PARALYSIS OF LEFT THIRD NERVE: ABSENCE OF MARKED ATAXY.

(Under the care of Dr. RAMSKILL.)

[From notes by C. E. BEEVOR, M.D. Lond., M.R.C.P., late Resident Medical Officer.]

E. W., who had been a seaman for forty years, was admitted on November 3rd, 1880. He was married, and had five children, all of whom were healthy. His wife had had no miscarriages. There was no hereditary neurosis. He had had no previous illness, and denied ever having had syphilis or gonorrhœa. Five months ago, he began to have numbness of the right side of the face, and of the gums and inside of the mouth on the right side, but not of the tongue or of the roof of his mouth. He also bit the inside of the right cheek. The mucous membrane of the right nostril became numb; and he noticed that he could not bite so well on the right side, food collecting between his right gum and cheek.

Four months before admission—a month from the onset—he noticed that he had some slight difficulty in walking, and especially in the dark, and after this he began to have sharp, shooting, lightning pains about the ankles, knees, and hips, and along the shins. For three months he had passed urine during his sleep, and for about the same period he had noticed that his left eye was turning outwards, that the left eyelid drooped, and that at the same time he was becoming deaf in the right ear. He became deaf in the left ear ten years earlier (about 1870). For two months he had noticed some numbness of the left gluteal region and the outer side of the left thigh. During the first month of his admission, he had numbness and stiffness of the left side of the mouth; and, in his own words, he "lost a small morsel of food in his mouth". For three weeks, he had noticed numbness in the soles of his feet.

On admission, the patient was a strongly built man; he had some paralysis of the left third nerve (partial ptosis and external strabismus), but was able to elevate the upper eyelid a little, and turn the left eye towards the middle line. He could not, however, converge the left eye to a near object, as, on trying to converge the eyes, the left eye turned still more to the left, and kept parallel with the right eye. The other ocular muscles were not affected. The fifth nerve was not affected. The whole of the right side of the face and the mucous membrane of the right half of the cavity of the mouth, except the tongue, were anaesthetic to slight tactile impressions, though he could feel the prick of a pin as such. The mucous membrane of the right nostril and the right conjunctiva were also less sensitive than on the left. In opening the mouth, the lower jaw was inclined to the right, and the right side of the lower jaw was contracted less strongly than the left. On the left side, the cheek felt numb, and he could not bite well. He had no numbness of the left side of the face, and the mucous membrane on that side. The seventh and other cranial nerves were not affected. The pupils were very small, and reacted to light, but not to accommodation. In walking, he staggered somewhat, but not much when the eyes were closed, and the staggering was not accompanied by any loss of equilibrium. He had the point non-questratus, but only on the left side of the lower limb. The knee reaction (patellar reflex) was absent. The plantar reflex was normal. The reflexes of the lower limbs were not affected; he could not correctly feel the position of his feet in the soles of his shoes. The reflexes of the upper limbs were not affected; and he could not feel the position of his hands in his pockets. He was brought near to blindness. On this point, examination showed the optic nerves to be normal. On this point, examination showed the optic nerves to be normal. On this point, examination showed the optic nerves to be normal.

This case is a good example of loco-

motor ataxy which does not begin in the usual way; the first symptom being the paralysis of the right fifth nerve, which preceded by a month the commoner symptoms—lightning pains and difficulty in walking. The latter was never at all marked, and would hardly be noticed. The absence of patellar tendon-reflex, the optic atrophy, lightning pains, the irregular paralysis of the cranial nerves, and the Argyll-Robertson pupils, were the chief symptoms present characteristic of tabes dorsalis. The deficient hearing was probably due to an atrophy of the auditory nerves similar to that affecting the optic nerves, as he was unable to hear any better when sounds were transmitted through the bones of the skull. Numbness of the feet, which is frequently one of the first symptoms of tabes, in this case followed after the other symptoms, and, on admission, was very slight, and unattended with anæsthesia. Smell and taste were also affected on the right side.

FUNCTIONAL PARAPLEGIA LASTING TWO YEARS, WITH ANKLE-CLONUS AND VIOLENT CLONIC SPASMS OF THE LEGS: CURED.

(Under the care of DR. RAMSKILL.)

[From notes of C. E. BEEVOR, M.D.Lond., M.R.C.P.]

F. M. was admitted on August 29th, 1881. Her age was 34. She was unmarried, and had been in domestic service. A younger brother had fits, and was insane; and her mother's brother was insane. The patient always had good health, but was very nervous and excitable. In June 1874, she fainted and fell down some steps, hurting her back; and after this had various subjective sensations, and was in bed for five months. She recovered partially from this, but never completely. In 1875, she had two shocks. First, she was upset out of a tramcar; and some months later she saw a man commit suicide; after this, she took to her bed for six weeks, and lost speech for some time. In 1879, she suddenly heard the news of the death of a friend, took to her bed, and had not been able to walk since.

When admitted, she was very nervous and excited, and could talk incessantly of her various subjective feelings; she became giddy from reading and looking at strong lights, and on hearing music. The least attempt at thinking upset her very much. She was fresh-coloured, healthy-looking, and of very fair complexion. She could not move the legs when lying down in bed; and, when she tried to do so, the legs were thrown into violent tetanic spasms. She could not stand, or even sit up in bed. The least exertion, as squeezing the dynamometer, gave her pain in the head and back, although her grasp registered on the scale twenty and thirty pounds for the left and right hands respectively. The knee-reaction (patellar tendon-reflex) and ankle-clonus were very readily obtained, and were excessive in degree. The plantar reflex was absent. When she was raised into a sitting posture in bed, the legs passed into rigid contracture, with the feet in the position of talipes equino-varus. The general cutaneous sensibility was not affected, and sight and hearing were good. There was no cardiac disease, and no albuminuria.

She was treated by applying very strong faradisation to the calves, and telling her at the same time to try to raise her legs off the bed herself. This was done every morning, and she was got out of bed for a few hours every day. On September 21st, and on September 29th, she could raise both legs two feet high off the bed. Ankle-clonus could not be obtained now on the left leg, and on the right leg much less readily. On testing the plantar reflex on September 29th, there was some very slight movement on tickling the feet, and she said she felt more ticklish. On October 4th, she could stand with someone on each side of her, and walk a little by herself. The patellar tendon-reflex was still excessive, but more on the right than on the left. There was no ankle-clonus. The plantar reflex was more marked on the right than on the left. She gradually improved by getting her to exercise herself as much as possible. On December 30th, she walked up and down stairs; and, after that, was sent for a walk every morning round Queen Square. She moved about almost as well as a person in natural health.

REMARKS BY DR. BEEVOR.—This was evidently a case of functional, or, as it is called, hysterical paraplegia. The ankle-clonus and tetanic spasms of the legs, while simulating the same conditions produced by organic disease, differed in being more variable and less persistent, and in being so much increased by emotional causes. The absence of the plantar reflex—a frequent condition in functional paralysis—helped the diagnosis from long-standing true organic cases, in which the plantar reflex is usually excessive, especially as the abdominal and epigastric reflexes are at the same time often present in the former and absent in the latter. Treatment by powerful faradisation to the under part of the legs, aids the latent voluntary power much

more than when it is indiscriminately applied all over the legs; and these cases require to be treated gradually. For instance, vigorous attempts to make her walk, and excruciatingly powerful faradisation applied all over the legs, failed, she said, after being applied for three months. She also had Sayre's jacket and steel supports applied without benefit, as far as making her walk was concerned. The whole treatment seems to depend on a right diagnosis, and also in being applied patiently and methodically. It is also worthy of note that, as the ankle-clonus disappeared, the plantar reflex began to be obtained; and, notwithstanding the excessive presence of the former, the diagnosis of organic disease could hardly be held, though she evidently seems to have been treated for this, but unsuccessfully.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

HYSTERO-EPILEPSY: EXTENSIVE ANÆSTHESIA: PARAPLEGIA: RECOVERY.

(Under the care of Dr. JAMES Y. TOTHERICK.)

[From notes by JOHN MORTIMER, M.B.Lond., House-Physician.]

THE patient, Mary M., was a domestic servant, who had for some months been engaged in nursing her master and mistress through serious illness. Her family history was good. The catamenia had only been present for about three years, and had never been regular. From their first appearance, she had suffered from fits; and these, during the previous twelve months, had been more violent and more frequent. Five or six weeks before admission, she had frequent attacks of giddiness; and since then the fits had been worse. At first, after each fit, she had for a short time loss of power in the arms; but for the previous month there had been occasional loss of power and sensation and some rigidity in the legs. This stiffness increased so much during the fortnight before admission, that she was unable to walk, and was carried into the out-patients' room with the lower limbs rigidly extended.

She was admitted on July 9th, 1880. She was a well-nourished girl, with fair complexion and pale blue eyes. The temperature was normal. The mental faculties were acute, and her temper appeared placid. There was marked anæsthesia in the area of the fifth pair of cranial nerves, with loss of conjunctival reflex, but no other affection of the cranial nerves. Over the whole surface of the body there was complete loss of sensation, so that a pin could be inserted deeply into the muscles. In the fingers only, tactile sensation was normal. There was slight spinal tenderness in the mid-dorsal, lumbar, and sacral regions. The joints of the lower limbs were all rigidly extended, and there was complete loss of voluntary power. There was no tremor. The upper limbs were unaffected. The plantar and patellar reflexes were absent. The abdomen was very prominent and tense, forming a phantom tumour. Muscular irritability was very much diminished in the arms and legs to the faradic current. The current produced no sensation; but the patient passed for about fifteen minutes into a cataleptic condition; the breathing became heavy and sighing; the limbs were firmly maintained in whatever position they were placed; and there was apparent total unconsciousness. The pulse was 80, full and regular. The specific gravity of the urine, which contained a trace of albumen, was 1020°. Deep pressure over the ovarian regions produced no effect. When chloroform was administered to complete anæsthesia, the abdominal prominence and the rigidity of the legs disappeared. During recovery, but while still deeply under the influence of the anæsthetic, the plantar and conjunctival reflexes reappeared, but, before complete recovery, again disappeared. Gold and silver applied to the legs produced no alteration.

On July 13th, cold water was allowed to trickle, at the rate of eight or ten drops a minute, on each leg which was exposed. This was continued for twelve hours, and caused a glowing sensation in the back and arms. She slept well afterwards; and on the following morning sensation over the whole surface to the level of the knees was much improved, and there was slight voluntary power in the right leg. The water-dropping was used for eight hours on this day. On July 16th, there was marked improvement in the voluntary power in the left leg. Sensation had completely returned in the left, and was slightly increased over the upper third of the right leg. The water was now dropped on the right leg only; and on the following day the patient could walk a few steps. On July 19th, she could walk well; but the phantom tumour, which had almost entirely disappeared, had begun to return. On the following day, it was very much larger. Water was dropped on both feet and on the abdomen for twelve hours. On July 24th, it is noted that there was no improvement, and that there were anæsthesia and analgesia of the region supplied by the dorsal nerves,

cases, large white and mottled in three, granular or affected with interstitial nephritis in two. Lardaceous disease affected other organs besides the kidneys in six out of seven cases. These results were confirmed by *post mortem* records of the Brompton Hospital, which showed the existence of lardaceous disease of the kidneys in fifty-two per cent. of deaths from phthisis. Microscopic examination demonstrated the lardaceous change to generally begin in the vessels of the Malpighian tufts, and later on to involve the epithelium of the tubuli contorti. This evidence was contrasted with the statistics of Bamberger, Echorché, and Southey, which gave lower percentages of lardaceous disease in phthisis. The urine of the patients was as a rule scanty, the quantity falling in one case to seven ounces, and in another to two and a half ounces. The specific gravity in the lardaceous cases was high; in one instance reaching 1047. The daily excretion of urea varied from 337 grains to 54 grains; in the last instance it was accompanied by diarrhoea, and gave rise to no symptoms of coma. The rate of urea excreted daily, compared with the patients' weight, estimated by Parkes at three and a half grains per pound in a healthy man, in these cases fell to two grains and under, in one case reaching 0.0, a very small percentage. The albumen was very abundant, even sufficient on boiling to cause the urine to become solid. The reason of the lowering of the temperature was then discussed, and the author concluded that it was not due to decrease or disorganisation of the red corpuscles, but to diminution of the albumen in the blood; but, judging from the experiments of Hammond, Stolnikow, Bernard, and Barreswil, that it arose probably from the toxic effects on the nervous system caused by the retention within the blood of the constituents of the urine, though not of the urea alone. That coma did not often occur was probably due to the excretory influence of the diarrhoea, generally present. The prognosis of phthisis and albuminuria was very unfavourable, most hospital cases only surviving a few months after the appearance of albumen in the urine. In private practice, patients had been known to last for several years; but in the majority, albuminuria must be reckoned as of fatal import; and the ordinary duration of chronic phthisis, as extended by modern treatment, was much curtailed by this complication.—Dr. MARCET said that albuminuria was a common symptom in phthisis, but had hitherto received little attention. The most important point was, perhaps, its relation to the temperature. The cases in Dr. Williams's paper had been analysed with great care; but no definite result had been arrived at with regard to urea, which varied greatly in quantity under different circumstances, and which, when it could not be eliminated in the usual way, was often discharged by the intestines. Albuminuria was frequently associated with diarrhoea in phthisis. Was the fall of temperature due to the diarrhoea or to the albuminuria? He had looked into the literature of temperature, and could find nothing directly bearing on the subject. In phthisis, there was increase of temperature in the after part of the day, gradually passing off. One way in which the high temperature was reduced was by an excess of perspiration, heat being converted into motion. The elimination of urea and the urinary crystalloid constituents of urine required very little heat for their passage through the membranes in the kidneys; but albumen would not pass through these membranes without considerable increase of heat; and if it were the case that a conversion of heat took place in the passage of albumen, it would account in great measure for the reduction of the temperature of the body.—Dr. ANDREW asked whether there was any reason to suppose that the different forms of phthisis were each associated with a special form of renal disease. He had seen cases which seemed to show that phthisis might be the result of albuminuria.—Dr. J. E. POLLOCK thought that albuminuria and phthisis were not associated in a large number of cases; but the meeting was indebted to Dr. Williams for having observed his sixteen cases with so much care. There were two important questions: What was the cause of the high temperature in phthisis? and what were the means of reducing that high temperature? He believed the high temperature to be due to the burning in the blood with the detritus of tissues, so that caloric continually escaped. High temperature and waste of tissue were one the measure of the other. He could scarcely regard albuminuria as a cause of reduction of temperature; it was rather a coincidence. The cause of the fall of temperature was probably rather an arrest in the formation of the waste products.—Dr. GREEN thought that small quantities of albumen occurred in the urine in phthisis, often without lardaceous disease of the kidneys.—Dr. REGINALD THOMPSON asked whether the weight of the patients had been taken before death.—Dr. BERNARD O'CONNOR had noticed three cases of phthisis without marked elevation of temperature, in which there was no albumen in the urine. In one of these, there was renal disease, probably separate from the pulmonary affection. He asked whether tube-casts had been observed in Dr. Williams's cases, and whether it

was really albumen that was eliminated in such large quantity.—Dr. C. T. WILLIAMS, referring to Dr. Marcet's observations, said that the patients had all been fed on nearly the same kind of food; in one only was the diet so regulated as to reduce the amount of urea. Diarrhoea reduced the temperature in some cases; but in some cases—as where there was ulceration of the bowels—there was an increase of temperature. He had not noticed any special connection of various forms of kidney-disease with various forms of phthisis. As to the relation of high temperature to waste of tissue, these did not always coincide; something depended on the appetite. If a patient were well fed, he would not lose weight, although he had a high temperature. His patients had not been weighed, in consequence of the difficulty of doing so when they were confined to bed; and the difficulty was increased where there was dropsy. Many of the cases were associated with lardaceous disease of the kidney.

OPHTHALMOLOGICAL SOCIETY OF GREAT BRITAIN.

THURSDAY, MARCH 9TH, 1882.

WILLIAM BOWMAN, F.R.S., President, in the Chair.

Atrophy of Optic Disc after Phlegmonous Erysipelas of Orbit.—Mr. NETTLESHIP exhibited a patient who presented this condition. The erysipelas set in a few days before Christmas, 1881, and affected the upper eyelid to so intense a degree as to cause a large slough; when he tried to use his eye after the erysipelous swelling disappeared, the patient found that it had become quite blind; when shown, he had no perception of light in the affected eye, and the disc was very pale.—Mr. H. POWER wished to know whether there was any evidence of disease of the bone in the neighbourhood of the orbit.—The PRESIDENT observed that the eye itself had not suffered, with the single exception of the optic nerve; probably the nerve was compressed throughout its orbital course by the inflammatory effusion, and the atrophy was secondary to this pressure.—Dr. STEPHEN MACKENZIE asked whether it was thus produced by pressure, or rather by extension of inflammation to the optic nerve.—Mr. NETTLESHIP said that he had been able to find no evidence of disease of the bones, but there had been some antecedent discharge from the nose, which, however, had stopped about two months before the onset of the erysipelas. The patient himself attributed the attack to getting some brass filings in the eye near the inner canthus. He had not seen the patient until too late to decide whether the atrophy was primary or postneurotic. In one similar case, where he had an opportunity of examining the nerve, there appeared to be extensive degeneration of the nerve close behind the orbit, almost amounting to necrosis.

Suppurative Panophthalmitis following Ligature of Common Carotid Artery.—Dr. WALTER EDMUNDS described a case where the left common carotid artery was ligatured for secondary hæmorrhage, following a self-inflicted wound of the throat; a few days after the ligature, changes in the left eye occurred, the eyelids became swollen, the globe somewhat protruded, chemosis of conjunctiva, cornea steamy, aqueous humour very muddy; the pupil was of moderate size, but did not dilate with atropine. With the ophthalmoscope, only a faint reflex could be seen. The patient died a month after the injury with right hemiplegia. At the *post mortem* examination, three abscesses were found in the left side of the cerebrum, and suppuration had occurred in the left vitreous body. Microscopic examination of the eye showed great inflammation in the space between the two sheaths of the optic nerve, some slight inflammation of the nerve itself, swelling of the retina, and some choroiditis. Three cases were on record, in which affection of the corresponding eye followed ligature of the common carotid. In one, loss of vision only was noted; in the second, complete loss of sight, which recovered in six months; and in the third, there was disorganisation of the eye.—Mr. JAMES E. ADAMS said that this case resembled in some respects those cases of suppurative panophthalmitis which occurred in the course of ulcerative endocarditis, and suggested that the occurrence of the disease in this case might be due to some septic embola, which might have had their origin in the operation-wound.—Dr. WALTER EDMUNDS said that very deficient blood-supply to the brain might be followed by cerebral abscess, and supposed it possible that the ocular suppuration might have the same cause.—Dr. STEPHEN MACKENZIE observed that deficient blood-supply was a very unusual cause for an abscess, and suggested that the panophthalmitis was due to some extension either of cellulitis or of thrombosis from the wound.

A Case of Choroido-Retinitis in Inherited Syphilis was shown by Mr. NETTLESHIP, in which there were large areas of exudation between the retina and choroid, best marked in the left eye; these areas were white and uniform, with a soft edge, and were evidently recent. There were no other manifestations of hereditary syphilis, but there was a

tioned a case of damage to one optic nerve following injury to the head, which he had recently met with. A young man, about seven days earlier, had been thrown violently from a bicycle; when the swelling of eyelids which followed had subsided, great defect of one eye was discovered. Mr. Power found marked pallor of the disc; this passed on into complete atrophy. In this case, he imagined there was some damage to the foramen opticum. Such damage at the foramen was, it was said, followed by atrophy, and not by neuritis; and this case seemed to support that statement, for when first seen, seven days after the accident, the disc was not inflamed, but pale, so that if any neuritis ever existed, it must have been of very short duration.—Dr. BUZZARD was inclined to suspect, with Dr. Mackenzie, that there was some constitutional cause at the bottom of Mr. McHardy's case. He inquired whether any sphygmographic tracings had been made. In a case of a young woman who had recently been sent to him, there was said to be no albuminuria; there was, however, well marked renal retinitis, and the pulse gave a tracing of very great arterial tension. More careful examination showed that the urine did contain albumen. In other cases he had met with, though there was no albuminuria, yet there was high arterial tension.—Dr. BRAILEY said that he believed the connection between the brain-lesion due to the injury and the optic papillitis was to be found in meningitis; that, in fact, the papillitis was an extension from meningitis caused by the blow. As to the other point raised, the occurrence of atrophy without antecedent neuritis, there were several analogous cases; in glaucoma, for instance, atrophy might thus occur, and in tobacco-atrophy there was not at any time any conspicuous swelling of the disc.—Mr. WARREN TAY said, in reply, that the point to which he wished to draw attention was the extreme unfrequency with which any changes occurred in these cases at an early period. It was important to make sure that the case was not of old standing; in one case of a man suffering from concussion, in which he found atrophy, apparently due to the pressure of a large hæmorrhage into the orbit, it turned out that the changes were old.—Mr. MCHARDY said, in reply to questions, that there had been no examination of the blood made in his case, but the chlorosis which had existed was rapidly disappearing, and that, too, under the exhibition of mercury and iodide of potassium, while the retinitis had advanced. There was no tension of the pulse. In one case of atrophy following severe injury, which he had been able to watch, there was no papillitis.

A Case of Remarkable Deficiency of Visual Acuteness in a Seaman.—Dr. C. E. FITZGERALD (Dublin) drew attention to a case which had brought to his notice an imperfection in the present system of examining seamen. On January 24th, 1882, he had been consulted with reference to the visual acuteness of a young sailor aged 25, who was about to be promoted from the rank of third officer. He had served for eight years on foreign service, but had been in the employment of a home company for about three years. His colour-sense was perfect; but his visual acuteness was very deficient in both eyes (the right eye could count fingers at 3.5 m., and the left eye $V = \frac{1}{16}$). There was well-marked convergent strabismus of the right eye, and a high degree of hypermetropia. No lens or any combination of lenses could effect any improvement in the visual acuteness of the right eye; but with $\text{plus } 4.5 \text{ D}$ the vision of the right eye rose to $\frac{1}{16}$. The ophthalmoscope revealed no changes. This vision was, of course, quite inadequate for a seaman; and it was difficult to understand how he had discharged his duties or satisfied the tests of the Board of Trade.—Dr. BRAILEY observed that the examination into the vision of seamen made by the Board of Trade was chiefly confined to the question of the existence of colour-blindness. In some instances which had come under his notice, the examination seemed to be imperfect even in this particular.—Mr. SHADFORD WALKER (Liverpool) said that he had recently examined the vision of a seaman (third mate), and had found it very imperfect. He was acquainted with several other instances in which seamen holding positions of varying responsibilities suffered from imperfections of vision which must seriously diminish their effectiveness.—The PRESIDENT said that the Society was indebted to Dr. Fitzgerald for raising a question of some importance. The question already engaged the attention of the Board of Trade, and the officials of the department had shown themselves most ready to receive and act upon suggestions. Recent advances in ophthalmic science had placed in the hands of surgeons methods of testing visual acuteness far more exact and searching than any before in use; it remained to find some means of applying these improvements in ophthalmic procedure to the practice of the Board examination. The subject was not one which could be easily dealt with, as many interests had to be considered, and as little interference made with private enterprise as possible.

PADDINGTON PARK.—The Mercers' Company have promised £250 towards the £100,000 Voluntary Subscription Fund.

HARVEIAN SOCIETY.

FEBRUARY 16TH, 1882.

WILLIAM HICKMAN, M.B., President, in the Chair.

Peliosis Rheumatica.—Dr. STEPHEN MACKENZIE read a paper on this subject. He mentioned that the disease was variously regarded by different writers; that it had characters sufficiently distinctive to enable us to separate it from other forms of purpura; and then sketched the disease as generally seen. It occurred in both sexes, but, in his experience, more frequently in women than in men. Though generally stated to be more common between the ages of twenty and thirty, he had seen several cases at a younger age than the former. One of its most characteristic features was, that the purpuric spots usually made their appearance in the afternoon or evening, often with great regularity; sometimes each day, sometimes with several days' interval, accompanied by pain and stiffness, and sometimes with swelling of the joints; the spots were bright when first seen, but became of a dull purple by the next day. The favourite seats of the eruption were the extremities; in some cases, they were much more general. They had this amount of symmetry: if they occurred on one extremity, upper or lower, they would generally be found on the other. As a rule, there were not profuse sweats, unless the attack occurred with rheumatic fever; the joint-affections and pyrexia, though distinct, were not severe. Sometimes there was a certain amount of erythema accompanying the hæmorrhages; often the eruption was purely hæmorrhagic. The attacks were frequently very protracted, lasting even some months, and were liable to recur. Sometimes the disease appeared to yield to salicylate of soda; at others to quinine and ergot; more often it was uninfluenced by treatment, and gradually wore itself out. In some cases it occurred during an attack of rheumatic fever; also in persons who were obviously rheumatic. After considering its alliance with some forms of erythema, Dr. Mackenzie narrated the following cases. 1. A lad, aged 18, had had one attack of rheumatic fever, and subsequent attacks of subacute rheumatism; he had rheumatic heart-disease. The present was the fourth attack; purpuric spots occurred on the arms and legs, and were accompanied by moderate arthritis and pyrexia. Many outbursts of the eruption were noticed whilst under observation; they always occurred in the evening; the attack extended for about ten weeks. 2. A woman, aged 27, was under treatment for exophthalmic goitre, during the course of which rheumatic fever had developed, and two or three crops of purpuric spots occurred on the trunk and lower extremities, and extended over ten days. 3. A middle-aged woman, who had previously had acute rheumatism, had purpura accompanied by a certain degree of erythema, and the attacks occurred each afternoon. 4. A girl, aged 13, had repeated attacks, always recurring in the evening; the disease extended over ten months; she had a similar affection seven years previously.—Mr. MALCOLM MORRIS considered the disease very rare; it was difficult to assign the extent of the purpuric and rheumatic elements in it; and it must be distinguished from erythema with effusion of blood.—Mr. CRIPPS LAWRENCE narrated the case of a boy who suffered from purpura, accompanied with anæmia.

Treatment of the more Common Diseases of the Skin.—Dr. THIN read a paper on this subject, illustrating his views by remarks on the treatment of eczema, which, he showed, was most successful when conducted in accordance with the ordinary principles by which acute and chronic inflammations of other parts are treated. In acute eczema, the principle of rest to the inflamed part was secured by the free application of absorbent powders; by this means the inflamed rete mucosum was protected until the inflammation terminated by resolution. In subacute and chronic eczema, the diseased condition was kept up by a new substance, which was found amongst the products of inflammation, and the rational plan of treatment was to destroy this unknown *tertium quid*. When the symptoms were urgent in this stage, good results were obtained by using the benzoated zinc ointment of Wilson, the diachylon ointment of Hebra, and the starch poultices of Hardy. These methods of treatment protected the inflamed epidermis, and allowed the *vis medicatrix nature* to come into play, and resolution might thus be obtained. Frequently these means failed, and it became necessary to apply escharotics to the rete, the purely escharotic effect being modified by dilution. The substances generally used for this purpose were ointments, containing the salts or oxides of mercury, or potash soap. Their action was twofold; they destroyed chemically the diseased epithelial cells, among which the *materies morbi* presumably existed; and they stimulated, by the influence which they exerted on the subjacent blood-vessels, an effusion of blood-plasma, in which the elements of a healthy reparative action were to be found. The more inveterate forms of chronic eczema were most successfully treated by concentrated solution of caustic potash. In eczema of the scalp, diluted mercurial ointments had been

found most useful; in certain painful forms of moist eczema, starch poultices.—Dr. S. MACKENZIE considered special attention should be paid to constitutional treatment.—Mr. MALCOLM MORRIS considered Dr. Thin might have given other methods of treatment.—After some remarks from the PRESIDENT, Dr. THIN replied.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 17TH, 1882.

EDWARD LUND, F.R.C.S., President, in the Chair.

Sarcoma of Lower Jaw.—Mr. F. A. SOUTHAM showed a sarcomatous tumour, removed (along with almost the whole of the body of the lower jaw) from a boy nine years of age. The tumour, which sprang from the periosteum and was about the size of an orange, was of four months' growth, and caused considerable deformity—projecting forwards on the chin, and upwards and backwards on the floor of the mouth. The patient made a good recovery from the operation, and left the hospital five weeks after its performance, but died at home about four months subsequently. On *post mortem* examination, it was found that no local recurrence had taken place, either in the soft parts about the jaw, or in the portions of bone which had been left at the time of operation. All the internal organs were healthy, with the exception of the kidneys, which were extensively infiltrated with secondary deposits, each weighing upwards of two pounds. The primary tumour of the jaw, as well as the secondary deposits in the kidneys, examined microscopically, were found to consist almost entirely of small round-celled growth.

Retinal Periarthritis.—Dr. MILES showed a patient suffering from general retinal periarthritis, a further account of which will appear in the *Transactions of the Ophthalmological Society*.

Transfusion-Apparatus.—Dr. WALTER exhibited McDonnell's transfusion-apparatus, and explained the manner in which it was used; he also showed a portable form of the same instrument, made for him recently by Messrs. Fannin and Co., of Dublin. He considered that, if obstetricians habituated themselves to the custom of always carrying an instrument of this kind in their obstetric bags, they would be enabled, by resorting early to transfusion of blood, to save some cases of severe *placental* haemorrhage from a fatal termination.

Solid Tumour of both Ovaries: Ovariectomy.—Dr. CULLINGWORTH exhibited two solid lobulated ovarian tumours, one of which weighed five pounds, the other four pounds ten ounces, removed from a hospital patient, aged 46, four days previously, with full antiseptic precautions. They had been only noticed for two or three months. Ascites was present to the extent of a pint and a half. Both tumours were extensively adherent, and the left one dipped deeply into Douglas's pouch, requiring some force to detach it. The pedicle in each case was tied, and returned. Sutures of silk-worm gut were used, and a Keith's drainage-tube was placed at the lower end of the wound for the first two days. The dressings employed were South's dry antiseptic pads, tannin, and a many-tailed flannel bandage. The temperature had in no instance reached 100° Fahr.; and recovery was, in fact, taking place without a bad symptom.

Graphic Stencil Plates.—Dr. CULLINGWORTH also showed a set of Gray's stencil plates, for recording clinical observations in a diagrammatic form.

Fracture of Pelvis at the Neck of the Femur.—Dr. MARCH (Leicester) showed a fractured pelvis, from a man who had eight days after the accident from injuries to the liver, right kidney, and colon. On admission, attention was chiefly directed to a severe compound fracture of the left femur, fracture of several ribs, and severe injury to the hip. The limb was shortened about an inch, and markedly evicted; there was no restriction to passive movement. It was considered probable that the neck of the femur was broken; but no attempt was made to reduce it, as the patient was seriously ill, and required to be removed to hospital, by complaint being made of the severe extent of pain and tenderness in the groin, and inability to pass urine. The patient was not attended to for some time, and the next day he could be moved without much pain. On the third day, the man in the groin began to pass urine. A post-mortem examination showed that the femur was broken at the neck, and that the neck of the femur was broken, and that the patient was seriously ill, and required to be removed to hospital, by complaint being made of the severe extent of pain and tenderness in the groin, and inability to pass urine. The patient was not attended to for some time, and the next day he could be moved without much pain. On the third day, the man in the groin began to pass urine. A post-mortem examination showed that the femur was broken at the neck, and that the neck of the femur was broken, and that the patient was seriously ill, and required to be removed to hospital, by complaint being made of the severe extent of pain and tenderness in the groin, and inability to pass urine.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, JANUARY 10TH, 1882.

HECTOR CAMERON, M.D., President, in the chair.

Tumour of Eyeball.—Dr. THOMAS REID showed an eyeball, with a tumour springing from the choroid, protruding through the sclerotic. The patient had separation of the retina six years ago, but swelling could only be detected outside of the eyeball about a year ago. The patient's age was about forty-five.

Resection of Os Calcis.—Dr. CAMERON showed a patient, aged 16, from whose foot the os calcis had been removed subperiosteally five years ago. The bone was partially restored, the shape of the heel was well preserved, and the patient could walk several miles with ease.

Congenital Tumour of Forehead.—Dr. CAMERON showed a tumour, removed from the root of the nose of an infant, two months old. The left ala nasi was cleft; and there was a fissure in the nasal bone running up to the pedicle of the tumour, and suggesting an intracranial origin for the tumour. The tumour was pink, slightly translucent, but did not pulsate, nor could it be reduced by pressure. It was of firm consistence; and, on microscopic examination, was seen to be made up of fibrous tissue, with an excessive hypertrophy of the normal glands of the skin.

Restoration of Lower Lip.—Dr. RENTON showed a patient, whose lower lip had been drawn down towards the sternum by cicatricial contraction after a burn. Teale's operation for the restoration of the lip was performed with great success.

New Menstrual Forceps.—Dr. W. L. REID showed a new form of long forceps, intended for use in all positions of the head, and in any part of the pelvic cavity. It was short (thirteen inches), light (fifteen and a half ounces), and easily applied. It grasped the head at the brim in the biparietal diameter; permitted traction in the axis of the inlet; and also permitted rotation from the occipito-posterior to the occipito-anterior positions; and might then be used as a straight forceps.

Parametritis, &c.—Dr. MACKELLAR showed several illustrative specimens. The first was the uterus and appendages of a woman, who had aborted about the fourth month of pregnancy, and died six weeks afterwards from pelvic cellulitis. There was great matting together of the pelvic organs, an abscess at the junction of each Fallopian tube, and the right ovary was converted into an abscess. There was also purulent infiltration between the rectum and uterus, and perforation of the rectum. The second specimen was the enlarged uterus of a woman who died three weeks after delivery. The left leg was much swollen, and there was an abscess in the left broad ligament. The third uterus showed loose bands of adhesion between the uterus and the rectum; and the left Fallopian tube was elongated, twisted, and adherent to the back of the uterus. In the recto-uterine pouch was a small tumour, like an altered gland. The fourth uterus showed the left Fallopian tube dilated, and filled with a reddish turbid fluid. Two small yellow tumours were seen on the fundus, beneath the peritonaeum. There was no clinical history.

Specimens shown by Card.—The following specimens were shown by card: Glioma in Floor of Fourth Ventricle; Twisting of Sigmoid Flexure of Colon; Papilloma of Bladder; Scapula with Sarcomatous Tumour, occupying the Supraspinous, Infraspinous, and Subscapular Regions; Superior Maxilla, with Tumour growing from the Base of the Skull.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, JANUARY 27TH, 1882.

J. K. BARTON, M.D., Vice-President, in the Chair.

Fracture of Femur.—Mr. H. G. CROLY exhibited the pieces of an atrophied femur fractured by a fall from a horse. The man from whom they were taken had sustained a compound fracture which penetrated the joint, caused by his foot catching in the stirrup when he was thrown. The fracture was a rare one, there being only one such specimen in the museum of the Irish College of Surgeons.

The Principles of a Radical Cure of Hemorrhoids.—Mr. THOMAS STOKES read a paper on this subject in which he traced, in historical order, the various methods which had from time to time been suggested of treating hemorrhoids with a view to its radical cure. He discussed them, after Mr. Spanton, under four heads: 1. Operations designed to cause contraction of the neck; 2. Those designed to interfere with the nutrition of its walls; 3. Those attempting a cure by plugging the internal canal; 4. Those which, in addition to this last, seek to draw the walls of the canal together. All these, with the exception of some in the last division, he only mentioned to condemn. When a operation was the first which attempted a radical cure based on sound reasoning, and a truthful comprehension of the surgical anatomy of the parts. It fulfilled

every requisite indication for a cure, by affording a substance to invaginate, by retaining it in its position in the canal, by drawing the walls of the canal together so as to close it, by engaging the posterior or movable boundary of the inguinal passage, as well as its more fixed anterior one, and by exciting enough inflammation to ensure a copious lymph-exudation and a subsequent cementing of the parts together. The notes of two cases in which Mr. Stoker had operated successfully in the Richmond Hospital were then read. T. F., aged 23, a healthy muscular labourer, had a small complete oblique reducible right inguinal hernia, which he had only noticed for some weeks before admission. Chloroform was used. The wire was untwisted on the tenth day, and removed on the fourteenth. The wound healed completely in twelve days afterwards. He was kept under observation for some months; the cure seemed to promise permanently.—J. C., aged 22, a butcher, tall, slender, but muscular, suffered from a reducible oblique scrotal hernia of considerable size on the right side; he was operated on under ether, in August last. The wires were untwisted on the ninth day, and removed on the sixteenth; ten days afterwards the wound was completely healed. In the first case, the operation was done without antiseptic measures; in the second, they were strictly observed. In both cases, the ordinary subcutaneous wire operation of Wood was performed. Both were followed by some swelling of the testis for a few days. A very light truss with a flat pad was worn subsequently, when any exertion was required, for some months. A strong truss, or one with a convex pad, was very objectionable, as being liable to press in and separate the newly adherent structures. Mr. Spanton had devised an ingenious instrument (which was exhibited), like a corkscrew with a flat point, with which he operated instead of using sutures. The advantages claimed for it were that, instead of catching the boundaries of the canal in only two or three places, it seized them in a great number; and the traction and adhesive inflammation were more complete and uniform in consequence. It seemed to be more easy of employment than the wire sutures. Wood's operation, on the other hand, afforded the surgeon more certainty as to what he was securing. A letter from Mr. Wood was read, in which he stated his results up to the present time. "The proportion of cures out of upwards of three hundred cases of operation has been seventy-five to eighty per cent. in favourable cases, and from fifty to sixty in large and severe cases." "In no case have serious symptoms of peritonitis occurred, and I have had no death in the last two hundred cases of subcutaneous wire operation."—Mr. CROLY had been curing hernia by dissection, having performed four radical cures by that means lately in the City of Dublin Hospital, one of the cases being that of a child eighteen months old, with a very large hernia. He had the hernia reduced, and kept in the abdomen; then, under the spray, he dissected down, as in operations for strangulated hernia, and invaginated the sac into the ring, stitching the pillars of the ring together in such a way as entirely to close it. The result was perfect. The advantages he claimed for this method over Wood's operation was, that the surgeon cut down from the external ring directly over the tumour, and could thus see every step of the operation.—Mr. CORLEY agreed with Mr. Croly, from what he had seen, that under modern scientific, and especially antiseptic, precautions, the operation of dissection offered a better chance of a more complete cure, and less uncertainty, than Wood's operation.—Mr. WHEELER mentioned that the operation by dissection was not a new one, having been performed many years ago by Mr. Walsh of this city.—Mr. STOKER replied.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, FEBRUARY 1st, 1882.

J. W. MOORE, M.D., Vice-President, in the Chair.

Coloboma of the Chorioid and of the Sheath of the Optic Nerve.—Dr. ARTHUR BENSON made a communication on this subject, and exhibited a boy (J. H.) and a girl (B. M.) both of whom were deaf and dumb, subjects of these defects in the internal tunics of the eye. The cases were discovered by Dr. Benson whilst he was assisting Dr. Fox of Philadelphia, to examine for statistical purposes the eyes of the deaf mutes in the institutions about Dublin. Dr. Benson also showed a drawing, taken by Dr. Samuel Knaggs of Sydney, of a case (M. D.) of double coloboma of the chorioid and iris, which was under Mr. Story's care in St. Mark's Ophthalmic Hospital, Dublin, last year. He summarised the cases as follows. (1). In M. D. there was a double coloboma of the chorioid and iris of enormous size, embracing also the optic disc. 2. In J. H. there was a double coloboma of the chorioid without implication of disc or iris. (3). In the right eye of B. M. was an enormous (by far the largest on record) coloboma of the optic

nerve associated with, but separate from; a very small coloboma of the chorioid. (4). In her left eye a smaller coloboma of the optic nerve, without coloboma of either chorioid or iris, but in the position of the junction of the lips of the foetal fissure a disturbance of the pigment-layer, suggesting the idea of a raphe, where the trouble just stopped short of the production of a coloboma. From these conditions Dr. Benson thought the following conclusions might be drawn. 1. Coloboma of the chorioid may exist without corresponding coloboma of the iris, though Nettleship in his work (on *Diseases of the Eye*) seems to doubt this, for he says (page 166) "Coloboma of the chorioid is seldom, if ever, seen without coloboma of the iris, though the two are not always of proportionate size." 2. The closure of the fissure or furrow in the pedicle (optic nerve) takes place independently of the foetal fissure in the optic cup. (3). The fissure may (1) close in the optic nerve and remain open in the bulb, as seen in the case of J. H.; or (2) may close in the bulb and remain open in the nerve, as in B. M.'s left eye; or (3) may remain open in both bulb and nerve, closure having taken place in the interval between the two colobomata, as in the right eye of B. M.—Dr. PURSER suggested that different conditions had been grouped together under the term coloboma, and that in those cases where the retinal vessels ran over the abnormal part, and where, consequently, the retina itself must have been present, there was no evidence of an arrest of development. He also made some remarks on the development of the eye, and thought that the invariable position of coloboma of the iris at the lower part of the eye, corresponding to the position of the foetal fissure of the retina, pointed to the development of the iris previous to the complete closure of this fissure.—Mr. STORY had brought a picture of a coloboma which had been observed in the eye of a rabbit by Professor Deutschmann. In this case the retina was broken off suddenly at each side of the coloboma, and curled up back on itself, and the retinal epithelium also ceased at the same spot, so that there was an absence of both the outer and inner layers of the secondary optic vesicle at the place of the coloboma. Between the retina and the chorioid there was some inflammatory matter effused, which had pushed the retina away from the chorioid. The theory proposed by Professor Deutschmann might meet a great number of cases; it was that the fissure of the optic vesicle did close in those colobomatous globes, but that some inflammatory process subsequently occurred which broke it open again.—Dr. HENRY KENNELLY asked whether this form of disease was confined to young deaf and dumb persons, or did it occur in adult life?—Dr. ARTHUR BENSON, in reply, said he was unable to say whether it was more frequent in the deaf and dumb than in any other class of persons. Out of somewhat under five-hundred individuals examined in the institutions about Dublin, they found two cases of double coloboma, and that was a much larger proportion than existed in the entire population of the country; but the number of cases examined as yet was small. Coloboma was undoubtedly a congenital defect—at least, it was not formed after birth.

Peculiarity in the Urine of Acute Pneumonia.—Dr. WALTER SMITH made a communication relative to a peculiarity observed in the urine of a patient suffering from acute pneumonia. A young gentleman, aged 22, who previously had not been in very robust health, caught cold on the evening of January 20th, 1882. That night he was seized with rigors, headache, and vomiting, and the temperature ran up to 105°. He complained of intense pain over the precordial region. Marked irritability of stomach, with frequent vomiting, continued for several days. On the 24th January—i.e., the fifth day of his illness—the physical signs were detected of early consolidation in the base of the left lung. The pneumonia extended, involved the other lung, and the constitutional symptoms became very grave. The young man never rallied, and sank early in the morning of January 28th. The temperature-curve exhibited considerable remissions, and, tested upon numerous occasions, the temperature in the right axilla was higher than in the left, sometimes by more than 1° F. Some of the urine passed on the 24th and 25th, was examined. That of the 24th was very turbid with lithates; that of the 25th was nearly clear. Each specimen was bright coloured and acid; chlorides were markedly deficient. (1). *Serum-albumen.*—Tested by the usual methods, a very moderate amount could be precipitated; no distinct flocculi. (2). *Serum-globulin.*—Saturation of the urine with sulphate of magnesium threw down an abundant precipitate of globulin. (3). The urine, freed from albumen, yielded an opaque white precipitate with tannic acid, and also with phospho-tungstic acid, and it was rendered turbid by alcohol. The tannic precipitate dissolved by heat, and was reprecipitated on cooling. These reactions suggested the presence of peptone; but since the urine, when freed from mucus (by acetate of lead) and albumen (by precipitation along with basic acetate of iron), yielded no colour with Millon's test, and failed to give the xantho-proteic reaction, the presence of any albuminoid

peptone in the urine. However, all attempts to get the characteristic reaction for peptone ended in failure. The patient had been treated with sulphate of quinia, but direct testing of the urine for that substance gave a negative result.—Dr. HENRY KENNEDY observed that it was difficult to find the disease before the physical signs of pneumonia had appeared. According to his observations, the thermometer in the rectum rose a few degrees higher on the diseased side.—Dr. LUNGER thought that the substance described by Professor Smith could not be peptone or any proteid, as it failed to give the fundamental reactions of such bodies—namely, the xantho-proteid, Millon's, and the biuret reactions.—Dr. LEITCH said pneumonia had been very prevalent in Dublin within the last six months; and a characteristic of the disease had been its stealthy, silent onset, without symptoms or physical signs. He saw two cases in which there was no cough, or hurried circulation, or increased temperature: the only symptom being headache, or influenza.—The CHAIRMAN remarked that the outcome of the case from a clinical stand-point was that it afforded another proof that pneumonia is an essential continued fever manifesting itself in continuousness the longer after the lapse of a certain period of invasion. In fact, the lesion of the lungs was analogous to the condition of the rashes in typhoid fever, or to the condition of the skin in the exanthemata or eruptive fevers.—Dr. SMITH, replying, said that we were still in want of a direct test for peptone. If albuminous urine were kept, perhaps it might be found in the urine, although it had not been so far generally observed in the patient. Under all circumstances therefore, the assertion of the existence of peptone in urine should be received with caution. He thought the case in its clinical aspects entirely bore out the view that pneumonia was essentially a constitutional disease, with a local development in the lungs.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, 18 FEBRUARY 1882.

WILLIAM STOKES, M.D., President, in the Chair.

Dr. WALTER SMITH showed the following report was received from Dr. J. J. SHERIDAN, J.D., on the case of disease of the bladder, the nature of which was whether the cyst which communicated with the bladder was a polypus, or a calculus of the bladder. The former view was the most view, while the latter is untenable: for the walls of the cyst are formed of the condensed pelvic areolar tissue, and are lined by a mucous membrane or of any muscular fibres of the bladder is discoverable in its structure. [Specimen exhibited January 14th, 1882.]—With regard to the PRESIDENT'S specimen of a vermiform appendix, found in immediate relation to an ulcerated opening in the vermiform appendix, the committee is of opinion that, although it is not a part of the body, its size, and external structure, and that it is a vermiform appendix, a dumb-bell-shaped, and the position of the body proved, by its brittleness, its evident concentric lamination, and its microscopic structure, that it had been found as a calculus of the vermiform appendix. [Specimen exhibited January 14th, 1882.]

Dr. WALTER SMITH showed the kidneys of a woman, aged sixty years, in whom Dr. William L. Stokes described the disease previously. The patient was admitted to the hospital on the 1st of January, 1881, being then attacked by hæmaturia. The urine contained albumen, tube casts, and the microscopic examination showed the presence of many casts from the epithelium of the tubules, and some of these were shed on the 8th. The casts were granular on the surface, and in a state of extreme degeneration, the granules being more or less granular in the pelvis. The tubules were thickened, and the epithelium was rough, and highly granular. In the interstitial tissue, there was a moderate amount of the growth of the connective tissue.

Dr. WALTER SMITH showed the specimen of a woman, aged sixty years, in whom Dr. William L. Stokes described the disease previously. The patient was admitted to the hospital on the 1st of January, 1881, being then attacked by hæmaturia. The urine contained albumen, tube casts, and the microscopic examination showed the presence of many casts from the epithelium of the tubules, and some of these were shed on the 8th. The casts were granular on the surface, and in a state of extreme degeneration, the granules being more or less granular in the pelvis. The tubules were thickened, and the epithelium was rough, and highly granular. In the interstitial tissue, there was a moderate amount of the growth of the connective tissue.

TUCKEY of Tywardreath, Cornwall, a curious specimen, taken from the body of a well-bred "Spanish" fowl. It was a needle, which had been attached by a pedicle to the side of the pelvis. The fowl was in perfect health up to the time of its violent death at the hands of Dr. Tuckey's cook.

Mr. H. G. CROLY exhibited the right half of the lower jaw of a boy aged nine, who was attacked by cancrum oris when convalescent from a "low" fever. A sinus formed a little above the angle of the jaw, and ultimately nearly all the right side of the lower maxilla came away spontaneously through the mouth. There was perfect formation of a new jawbone—a fact which forcibly illustrated the osteogenetic properties of periosteum.

Malignant Disease of the Bladder.—Dr. C. B. BALL showed a specimen of cancer of the bladder, from a man aged fifty-four, who had, eight months before his death, fallen a depth of twenty feet, alighting first foremost. About two months after the fall, he began to pass blood in his urine, and the hæmaturia continued, with intermissions, until his death. Latterly, the urine had been loaded with blood, alkaline, offensive, and it deposited much vesical mucus. Under the microscope were seen immense numbers of active bacteria, with epithelium and crystalline phosphates, but no portions of new growth were ever found. After death, a large mass was found in the greatly diseased bladder, the walls of which were infiltrated by the neoplasm, thus distinguishing it from a villous tumour. Portions of the new growth were pediculated, others were sessile. The ureters were dilated. The right kidney was embedded in firmly adherent fat, and was itself very fatty. The calyces of the left kidney were dilated, and its pyramids had disappeared.

SATURDAY, FEBRUARY 18TH, 1882.

WILLIAM STOKES, M.D., President, in the Chair.

Dr. KENDAL FRANKS showed the kidneys and suprarenal capsules of a girl, aged 14, who had died in the General Hospital of Addison's disease. The patient had only complained of feeling ill two months previously, up to which time she had enjoyed good health. The first symptom noticed was disinclination to take exercise; and as this increased, a darkening of the cutaneous surface became apparent. It was attributed to the effects of the sun. On admission, her condition was one of profound asthenia. She could not stand, or even sit in the upright position; seemed incapable of supporting the head, or of keeping the eyes open. The voice rose only to a whisper, and she seemed greatly disinclined to answer questions. The heart-sounds could only be heard, and that very faintly, when the ear was applied immediately to the chest-wall. The pulse was almost imperceptible, and ranged about 120. She suffered much from nervous twitching. Three days after admission, she died suddenly. The post-mortem examination, made thirteen hours after death, showed the body to be well nourished and plump; a very good proportion of adipose tissue was present. The skin was uniformly darkened to a dusky hue; that on the sides of the neck, face, backs of the hands, and knees, being most deeply pigmented. Both lungs showed a small patch of lobular pneumonia at the apex, of the size of a small hen's egg, which consisted on section nodules of cheesy matter, but no softening or abscess. A similar piece of consolidation was found on the axillary surface of the upper lobe of the left lung. Otherwise, all the viscera, thoracic and abdominal, were healthy, with the exception of the suprarenal capsules. Both were diseased. The left organ was very much enlarged, and quite hard. On section, it showed near the centre large nodules of granulation, around these being smaller nodules, the whole organ being destroyed. The right capsule showed a similar state of affairs, but it was not so large, and evidently was not so completely destroyed. Sections of these masses had been made by Mr. Abraham, who reported that the central parts had the granular, or most structureless, appearance of masses of caseation. The capsule, however, was not so much hardened up into small nodules as the left, some of which seemed to have faint nuclei, and a few of the larger ones were apparently nodular. At the periphery the tissue was more solid, the nodules consisting of soft granules, some very large, with some very small, and even of the granular type, and more or less granular in texture. It is probable that the central parts were altered; the nodules and the soft granular tissue were separated by a somewhat condenser, or fatty, sometimes striated tissue, and by large development of the connective tissue. A drawing was exhibited of one of these granules, which were very numerous, and some of them were tripartite, some four-part, and the whole surrounded with hyaline or amorphous, and the capsule was not so much hardened up into small nodules as the left, some of which seemed to have faint nuclei, and a few of the larger ones were apparently nodular.

Dr. KENDAL FRANKS showed the suprarenal capsules of a woman, aged 40 years, who was found dead, after suffering from Addison's disease. The left capsule was

two years, accompanied with pain. On Monday, February 6th, 1882, she began to vomit, and this symptom persisted for several days; she was not at all anæmic. There was severe paroxysmal pain in the left lumbar region and iliac fossa. There was dulness on percussion in the same situation. No abnormal pulsation or *bruit* could be detected, although a dilatation of the femoral arteries suggested an aneurysmal diathesis. She died suddenly on February 11th. A large diffuse or false aneurysm, twelve inches in length and fifteen inches in circumference, occupied the left side of the abdomen. The anterior wall of the sac was formed by the peritoneum, descending colon, and sigmoid flexure; the posterior wall by the iliac fascia and the left kidney at the upper and back part. The descending colon was much narrowed. An irregular opening was found in the abdominal aorta, about one inch above the bifurcation. This was caused by the rupture of a dissecting aneurysm, as large as a hen's egg, extending upwards between the coats of the aorta to the superior mesenteric artery. Two symmetrical aneurysms engaged the common iliac arteries; they were as large as walnuts. The femoral arteries were also dilated.

Carcinoma Gatri fatal through Hemorrhage.—Dr. J. W. MOORE showed, for his colleague Dr. A. W. FOOT and himself, the stomach and neighbouring parts of a man, aged 50, who became anæmic after an attack of pneumonia last spring. In December, a hard irregular tumour was detected in the epigastric and umbilical regions to the right of the mesial line. The inguinal glands were also enlarged; and from these facts and his symptoms, a diagnosis of carcinoma of the pyloric end of the stomach was made. The patient lived until the middle of February. At the necropsy, an extensive ulcerated mass of carcinoma was found, engaging the pylorus, duodenum, and retroperitoneal glands. An immense clot of blood, recently effused, filled the stomach, and a second clot had taken a cast of the duodenum.

Sarcoma (?) of the Breast.—The PRESIDENT exhibited a large mammary tumour of rapid growth (twelve months), which he had removed from a woman aged 45 years. It was probably sarcomatous, being in parts of cartilaginous hardness, and in parts soft. Hemorrhagic extravasations had taken place here and there throughout the mass.

Primary Chronic Rheumatic Arthritis of Bursa.—Dr. E. H. BENNETT showed the structures, which formed the immediate relations of the bursa of the lesser sciatic notch and internal obturator tendon, affected by this disease. He directed attention to the fact that hitherto, in the writings of Monro, Adams, and others, the implication of the bursæ mucosæ by chronic rheumatic arthritis had been described as an affection secondary to the joint-disease affecting the neighbouring articulation, and as existing in bursæ which normally communicated with the joint. His object in presenting the specimen was to show that, in bursæ remote from the joints and devoid of connection with them, the disease occurred as a primary affection; notably in the particular bursa submitted, and in that which facilitated the motions of the great gluteal tendon over the great trochanter of the femur. In the specimen submitted, as in many he had observed, the obturator tendon was frayed, as the biceps tendon is in the shoulder, and the bone was absorbed, its surface disfigured as in arthritis of joints; while the bursa showed, by its irregular extensions into and between the origins of the hamstrings from the tuber ischii, that it had long been the seat of effusion. The disease in these cases, as in the example exhibited, was symmetrical, occurring on each side of the body, and the hip-joint on both sides exhibited only the most trivial traces of the disease—a character of importance in chronic rheumatic disease; for, whatever be the reason, it was its habit to strip a joint, in its attack on the row of articulations in a limb, attacking only every second one, among which the bursæ mentioned might fairly be included.

OBSTETRICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 4TH, 1882.

A. V. MACAN, M.B., in the Chair.

Craniotomy.—Dr. ATTHILL exhibited a fœtus on whom the operation of craniotomy had been performed under somewhat unusual circumstances. The antero-posterior diameter of the mother's brim did not exceed three inches and a quarter. As soon as the os uteri had dilated sufficiently to allow it, a leg came down into the vagina, but was not followed by the breech. Dr. Atthill, therefore, the woman being under chloroform, introduced his hand into the uterus, and found the child's body lying in a half circle, the breech being over the right sacro-iliac synchondrosis, and the face to the left of and overhanging the pubes. Cephalic version being found impossible, he perforated through the forehead, the head still lying above and chiefly outside the pubes. Traction was then made on the leg, the breech was delivered,

and the arms brought down by means of a blunt hook. The cephalo-tribe was then applied over the occiput, and delivery effected.

Supernumerary Fingers and Toes.—Dr. HORNE exhibited the hands and feet of a child born in the Rotunda Hospital on January 4th, with six fingers on each hand, and six toes on each foot, all nail-bearing. Dissection showed that the fifth metacarpal bone in each case bifurcated into two heads bearing the fifth and sixth fingers. It was at times difficult, at birth, to say which finger was the supernumerary one; but dissection showed the sixth to be the one to be removed. Heredity might have had an influence in the production of this case, as the paternal grandmother had given birth to three monsters, the exact nature, however, of which could not be ascertained.

Mucous Growth of Fundus Uteri.—Dr. ATTHILL exhibited a growth removed, in the Rotunda Hospital, from the uterus of a woman who, three years before, had come under his care suffering from profuse uterine hæmorrhage, having been confined a year previously. At that time, nothing more than a thickened condition of the uterine mucous membrane was discovered. Since then, the hæmorrhage had occurred at intervals until a week ago, when she was again admitted to hospital. On examination, the uterus was found to be elongated to the extent of half an inch, and the fundus was ante-flexed. The uterus having been dilated with Hegar's dilators up to No. 20, a soft mass could be felt at the upper extremity of the uterus, which was scraped off with a curette used in a rotatory manner. The specimen consisted of nothing but vascular and hypertrophied mucous membrane. Nitric acid was applied to the raw surface of the uterus, and next day the woman was free from pain and discomfort. Dr. Atthill considered the case to be one of non-malignant recurrent growth from the uterine mucous membrane—one, therefore, of some rarity.

Four Cases of Convulsions occurring in the Rotunda Hospital.—Dr. R. HENRY detailed the cases, which had occurred as complications of labour, and described the treatment with special reference to the therapeutic value of bloodletting. Case I. M. O. T., in her sixth pregnancy, was delivered of a healthy child after an easy and rapid labour. Thirty hours later, she suddenly had an epileptic fit, from which she had quite recovered in ten minutes. She remained quite unconscious of having had the fit. She had a draught of syrup of chloral and bromide of potassium. Similar fits (which were single) recurred at the same hour on the two following mornings. On inquiry, it was found that she had been in an asylum for three months after her fourth confinement, and since then had been liable to such fits at her menstrual periods. She made a rapid and good recovery from her confinement. —Case II. C. M., a primipara, just as the second stage of labour was commencing, had an epileptiform fit. Her pains had been severe, but suddenly ceased a moment before the fit, and her face became pale. Delivery was at once effected under chloroform. She had general anasarca, and her urine, drawn off by catheter, turned nearly solid on boiling. Similar fits recurred at intervals of two hours for the following eight or nine hours. During each fit, chloroform was administered. The bowels could not be moved, even with enemata, croton-oil, etc. The patient remained unconscious for two days, the fits increasing in frequency and severity. Her condition being critical, Dr. Atthill decided to bleed her freely, and removed twenty-four ounces of blood from the arm. She had no fit for three hours, when the seventeenth and last occurred. Four hours afterwards, the bowels acted, and consciousness slowly returned. The anasarca and albuminuria rapidly disappeared, and recovery became complete. —Case III. M. S., a primipara, between the second and third stages of labour, suddenly complained of becoming blind, and had a convulsive fit. Chloroform was administered, but not pressed. Consciousness was soon recovered, and purgatives administered. Four hours later, the second fit occurred. Two drops of croton-oil and an enema were administered. The urine was strongly albuminous. Six hours later, the bowels acted five times; and in four days the patient was convalescent. —Case IV. E. B., pregnant for the sixth time, sixteen hours after delivery, was seized with an epileptic fit. Chloroform and purgatives were used. There was a history of epilepsy with aura. There was no recurrence of the fit. —Another case was mentioned which Dr. Henry had seen eleven years ago, in which the patient was bled to forty ounces before the fits ceased. No chloroform was used, and the patient made a good recovery. —Dr. KIDD had not always obtained such good effects from bleeding, nor did he think chloroform advisable while the convulsions were going on; purgatives were the remedies on which he relied. It was excessively difficult to get the bowels in such cases to act; and he did not hesitate to give as much as twenty grains of calomel combined with some croton-oil. —Dr. MORE MADDEN considered that in apoplectiform convulsions bleeding was the only reliable remedy; and had no doubt that, to save the life of a plethoric patient suffering from apoplectiform convulsions, it was necessary to bleed as freely as our ancestors

did a hundred years ago.—Dr. POREFOY said that the only case of recovery from true puerperal convulsions which he had seen was one in which the woman was freely bled. He believed that good results had, in his hands, followed the injection of chloral-hydrate; and, in America, the injection of large doses of morphia had acted beneficially.—Dr. ARTHUR had never seen bleeding do harm, but had often seen it do good. In the second case recorded by Dr. Henry, the effect was well marked. There was no indication of the bowels acting until after the bleeding. Chloroform he considered as more likely to stop or retard the convulsions than to cure them; when coma had become permanent, it ceased to be indicated, and was injurious.—The CHAIRMAN thought that, as regards curative treatment, a distinction should be observed between convulsions occurring before, during, and after labour. As long as there was a child in the uterus, efforts should be principally directed to removing it; and, until that was done, it would, he thought, be premature to bleed. The treatment of ordinary uterine puerperal convulsions was the same as of convulsions occurring in Bright's disease; whilst apoplecticiform convulsions should be treated according to the principles applicable to apoplexy generally. It was therefore of prime importance to keep the different forms of convulsions clearly separate. Bleeding lessened the tension, but, on the other hand, it rendered the blood more watery, and so increased the probability of the convulsions being repeated.—Dr. H. KENNEDY also took part in the debate, and Dr. HENRY replied.

REVIEWS AND NOTICES.

NAVAL HYGIENE. By J. D. MACDONALD, M.D., F.R.S., R.N., ex-Professor at Netley. London: Smith, Elder and Co. 1881.

[SECOND NOTICE.]

ONE great cause of obstruction in the last century lay in the disregard of sanitary measures suggested or approved of by medical officers. Thus, scientific ventilation was long opposed by the executive officers of ships; the efficacy of the juice of the Citronaceæ was held by the College of Physicians to be inferior to sulphuric acid in preventing or in curing scurvy; various plans to provide pure water for drinking were objected to on the score of the cost of distilling it, and the inconvenience in ships.

The earliest instance of doing all that science suggested to be done with hygienic views, was in the fitting out the Niger expedition in 1840, when an excellent mode of ventilating was followed, and quinine was taken prophylactically; but water was not distilled. After that costly failure, a new departure was taken, with satisfactory results, mainly due to the representation of medical officers familiar with the coast of Africa and its prevalent diseases. Certainly, the naval authorities of this day cannot be charged with indifference to furnishing all reasonable means for preserving health; and, in truth, great praise is due to this body, for the grand sanitary factor has been the steam-engine, not only in the directions already glanced at, but in the shortening of voyages. This is well exemplified, at p. 235, by quotation as follows:

In December 1859, an overcrowded mixed force of 12,000 men left France, and, after seven months, reached China. The sailing vessels dropped anchor only once, but the gunboats called at from three to seven ports. The gross numbers, with comparative ratios of mortality, in the two divisions, stood as follows:

Division	Deaths	Deaths per 1,000
In sailing ships.....3,765.....	45.....	12.
In gunboats.....117.....	94.....	7.5

Thus, it was evident that in favour of the men carried in steam ships over those carried in sailing vessels. It may be inferred that, if the entire force had been conveyed in the former class of ships, there would have been, by ratio, 143 deaths; and, if by the latter class, 1,000 deaths; being a saving of 857, at the rate of four per thousand in a voyage of seven months. I can assure you that I am not aware that the naval authorities of this century are more to be commended for their foresight in the matter of ventilation in the sailing ships, if there had been no steamers to turn to, than from the parts they visited. Such facts are interesting to naval historians, as showing that great improvements in their naval hygiene have sometimes been brought about by circumstances which have been regarded as merely accidental, and that the most important improvements in naval hygiene have been the result of the steam-engine.

It is interesting to see, for instance, in the last *Annals*, how the sailors of the *Porpoise*, in 1841, were not to complain of the same disease

the same sort of food, whether they be in the British Channel or among the Esquimaux, who thrive on animal fat without vegetables, and escape scurvy, or under a tropical sun, where the natives—black or yellow—subsist on fish, rice, fruits, and oils, and do not suffer dysentery. He does not disparage the naval ration as insufficiently nutritious; and affirms, on the authority of Professor de Chaumont, that the daily amount of albuminates, fats, and carbo-hydrates imparts a potential energy equal to 5929.26 foot-tons, being 1927.74 foot-tons in excess of that demanded "for the daily work of an adult". It may be suspected that the potential energy, regulated by the chemical constituents of food, must vary essentially at sea from its standard ashore; as it is shown that, in the first half of the last century, when the health of the navy stood at its nadir, when a diet of maggoty cheese, weevily biscuit, and rancid salt meats was mitigated by no meat ration on two days of the week, yet its chemical value is said to have been equal to producing potential energy of 4238.34 foot-tons, being 316.82 foot-tons in excess of the ordinary work of an adult in normal health; so that there must then have been some strongly counteracting agencies to which the sailors were exposed. These agencies may be assigned to defective nutriment in quality as well as in quantity. Dr. Lind states that, between July 1758 and July 1760, the admissions to Haslar were, for disease, 5,743 cases, of which 2,174 were fever, 1,140 scurvy, 300 consumption, and 350 rheumatism, etc., showing the great preponderance of diseases obviously those of defective nutrition; and yet, within that period, there was one most remarkable instance, on the largest scale, of a whole fleet being kept in "excellent health" at sea through an unusually protracted period, which Dr. Lind attributed to the frequency of supply of fresh provisions taken out to them from our ports. He relates that the grand fleet under Sir E. Hawke left Spithead on the 17th May 1759, and returned on the 18th January 1760, having beaten the French fleet under M. Conflans, on the 20th November. "It was hardly ever known before that ships could cruise in the Bay of Biscay much above three or four months at a time without having their men afflicted with the scurvy, an exemption from which was entirely owing to this fleet having been supplied with fresh meat and greens. It is an observation, I think, worthy of record, that 14,000 persons pent up in ships should continue, for six or seven months, to enjoy a better state of health upon the watery element, than it can be managed so great a number of people would enjoy on the most healthful spot in the world."

Here, then, is a great example, like an oasis, of how much might have been done in the naval hygienic desert of the last century. It was repeated in a second edition, 1774; and yet we learn, from the same authority, that in 1780 the Channel fleet, under Admiral Boscawen, returned to Spithead with 2,400 sick of scurvy, after a summer cruise of ten weeks, and sent in one day to Haslar over six hundred men diseased with scurvy. Again, in 1794, scurvy broke out in Lord Howe's fleet, and endangered the safety of the whole fleet, in the year of the great battle of the first of June.

To cleanliness of person and of clothing and bedding, a high position is assigned amongst sanitary means, and likewise to the cleanliness and dryness of the decks and the recesses of ships. Dr. Macdonald refers to the "Black Assizes" at the Old Bailey in 1750, when judges, jury, barristers, and spectators were infected by the deadly effluvia issuing from the criminals, who were not themselves suffering obviously from the typhus, the germs of which were disseminated by them. At that time, it happened frequently that the same form of fever broke out amongst healthy crews of ships into which drafts of criminals were received from the jails, and also amongst the prisoners of war confined in prison-ships and in inland places of detention. It was to the philanthropic researches of John Howard, which ultimately cost him his life, in 1790, that we are indebted mainly for the greater sanitary reforms effected in the last century; but Dr. Lind carried out every measure in the case of ships and the guards for prisoners of war; on which, and the necessity of disinfection practised by him, a report was laid before Parliament in 1774. It is gratifying to read the evidence, and the minutiae of the Naval Instructions on these heads, for the guidance of commanding and medical officers. The "spotless decks" of ships of war have long been proverbial; and we fully believe that it would be difficult to find anywhere a body of men, in receipt of equal wages, so attentive, so carefully speaking, to cleanliness of person and the disinfection of messes, as the sailors of our fleet.

I will details are given for the authorised treatment of leucophaea and of scurvy, of dysentery, of scurvy and of malarial fevers; and it is shown that the naval authorities of the last century were now aware in the navy; as, for instance, in the last *Annals*, how the sailors of the *Porpoise*, in 1841, were not to complain of the same disease

mittent fever, as reported in the official blue-book on the Health of the Navy, in 1880, when twenty-four men, who, it seems, were not protected with quinine, were attacked by it while detached and sleeping on board their ship in dock in a notoriously malarious season even for the locality of Hong Kong; the safety rule being to take the prophylactics as soon as men are about to be exposed to the exciting causes of those diseases, and to continue to take them throughout the exposure to them. But it should not be dogmatically assumed that the supply of these prophylactics shall always prevent an outbreak of those diseases, as was experienced in Anson's memorable voyage, where there was no lack of them; nor, on the other hand, that scurvy will inevitably appear with abstinence from vegetable food, for the Esquimaux and Laplanders, who subsist entirely on fresh animal food, are exempt, and comparative exemption from it has belonged to those Arctic expeditions that have obtained a fair supply of fresh meat, even though that has been the flesh of the musk-ox (as in the *Investigator*), or of the whale (as in the case of the *Polaris*), or of the salmon (as in Sir John Ross's expedition). Again, in the case of malarious fevers, there will always be found some insusceptible, as well as others whom no antidotes will save. Yet there are no sufficient reasons why the reputed prophylactics, so far as they go, should not be used on all appropriate occasions; but rather that the rule of safety should be the mode strenuously followed with exact relation to the degree of risk about to be incurred.

The prophylaxis from small-pox by vaccination and by revaccination is strictly attended to in the navy, in which the highest danger of infection is in foreign ports, where vaccination is not enforced, and revaccination is but little attended to, especially in China and Japan. It argues well for the system adopted in the navy that, in 1880, when the total force was 44,700 men, there occurred, in all parts of the world, only six cases, of which the Cape of Good Hope and East Indian stations presented each two cases, and the China and Pacific stations one each. It is remarkable that at the Cape the infected men were both blacks, of whom one had not been vaccinated, and the other was said to have had previously a mild attack of small-pox; of the two in the East Indies, both bore marks of vaccination without revaccination; on the Pacific station, the case ran a modified course, most probably from revaccination; in China, the sufferer had been revaccinated unsuccessfully nine years before. In China, inoculation is preferred to vaccination, and is universally practised.

On the fumigation of infected ships, needful when infected with yellow fever, there is a section of much interest. In the days of Hawkins and Drake, it was done by the burning of damp brush-wood in the holds, and later by burning pitch and tar, and by exploding fire-arms in the holds and between decks, and later still by evolving the fumes of sulphur, as advised by Dr. Lind. It is shown herein how Sir Roger Curtis systematised this plan in the case of his own infected ship, leaving a formula for all similar occasions, never to be forgotten whatever may be the disinfectant used. In 1796, nitrous acid fumes were substituted for those of sulphurous acid, without advantage; and in the present century that gave place to chlorine gas, chlorides of zinc and calcium, carbolate of lime, and lastly carbolic acid; but, perhaps, nothing has proved more efficacious than the searching fumes of sulphur, as the author leads us to infer.

The opposite conditions of dryness or dampness of the decks, and of the atmosphere between them, as conducive respectively to the healthiness or to the sickliness of the crew, are well exemplified by what happened in, as it were, twin ships, in one of which a good state of health prevailed through attention to the dryness of the decks, while in the other there were sickness and mortality from no other apparent cause than from inattention to that point.

The appendix is a large one, replete with matter of value to the service, such as advice to seamen, the routine of life in ships, the duties of medical officers, with their official instructions; the scales of diet for the healthy and for the sick; the code on clothing, cleanliness, and preservation of health, to be observed by commanding officers; quarantine regulations; and the regulations for army surgeons when in charge of troops embarked; and the United States' Passenger Act, passed in 1880.

Thus it may be said that this little volume is very comprehensive on all medical matters relating to life and health at sea, as it presents, for the guidance of medical men in charge of ships, a fair detail of their office and its general duties, which will be found to be of great value, at least to beginners, so that each may know what he has to do, and none need feel himself adrift if he has it to refer to. We may safely recommend it to the medical officers of the mercantile, as well as those of the Royal Navy; and we think that the study of it, when necessity demands, will be advantageous to the executive officers commanding communities afloat; also that it will be conducive to the

efficiency of this public service to distribute copies, gratuitously, to the commanders as well as to the principal medical officers of all ships on foreign service in the Royal Navy.

PROCEEDINGS OF THE SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR ENDING JUNE 30th, 1881.
Adelaide: Frearson and Brother. 1881.

WE welcome with real pleasure these *Proceedings* of one of our youngest Branches, which bear abundant evidence to the earnestness with which our fellow-members at the other side of the globe have set themselves to work to carry out the common objects which bind us together in one great Association—the advancement of medical and surgical science, and of the general and social interests of the profession.

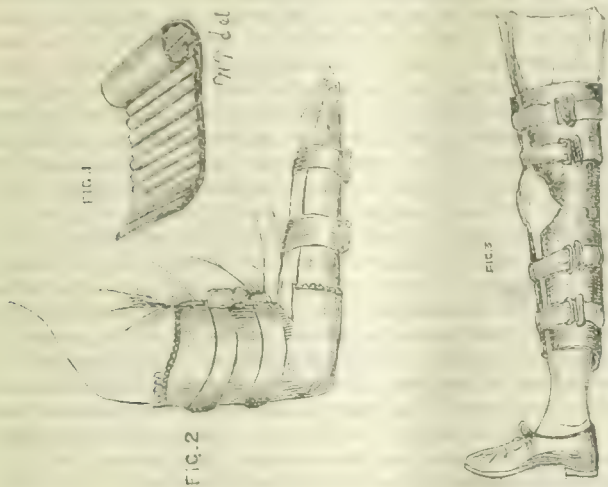
It was on July 7th, 1880, that the Branch for Adelaide and South Australia was recognised by the Committee of Council; and, with the exception of the hot months of December, January, February, and March, monthly meetings for the reading and discussion of original papers have since been held regularly, while special meetings for discussing subjects connected with medical ethics have also on several occasions been held, and been well attended. Some of the members have travelled to these meetings from distant parts of the colony—from Port Augusta, 200 miles to the north, and from Glenelg, at least an equal distance to the south, of Adelaide, where the meetings are held. To realise what this means, let us suppose that monthly meetings of an All England Branch were held at Birmingham, and that members from Berwick-on-Tweed or Penzance were in the habit of dropping in whenever any subject in which they were interested was on the *tapis*. Even then, the difference in means of locomotion between the two countries would make the difficulties in the way of holding meetings hardly comparable. It is then, we think, extremely creditable to the members of the South Australian Branch to have kept up their meetings during the year as they have done; and it is all the more commendable, because the tendency of almost all their surroundings points to the making of money as the thing to be aimed at, and because, in the struggle for a livelihood, they have to contend not only with fresh importations of qualified men from all parts of the world, but even with ambitious storekeepers and teamsters, imbued with the idea that Providence never meant them to soil their fingers with sugar or cheese, or to pass their lives in the company of oxen and horses, and who, having adopted medicine as their profession, are to be seen enjoying snatches of *otium cum dignitate* behind a liveried coachman, or bringing themselves prominently before the public in the advertising columns of the daily press.

All honour to the men who, in the midst of such difficulties, and in the face of such opposition, endeavour not unsuccessfully to practise their profession in an honourable manner, and to keep burning the lamp of science.

Among the papers read, there is one by the President of the Branch on the familiar subject of *post partum* hæmorrhage, in which the treatment by injection of hot water is approved, and illustrated by cases. From the discussion which followed, it seems clear that the occurrence of *post partum* hæmorrhage is much more frequent in South Australia than in England, and the question was raised by several speakers whether the relaxing climate had anything to do with this. Statistics, as full and complete as possible, could alone settle such a point as this; and it would be well, we think, for the Council of the Branch to appoint a committee to collect evidence on the subject. The only other matter in regard to which reference is made to the climate of Australia as predisposing to disease, is that of a change of colour of the irides occurring and remaining permanent in an insane adult. This man's eyes it seems were decidedly black, but changed to a light grey with tinge of green. One of his favourite amusements was staring at the sun with wide open eyes, and it is suggested that atrophy of the pigment cells of the iris had taken place from exposure to the intense heat and light of an Australian summer sun. Cases of radical cure of hydrocele and of ablation of the tarsus which are published, show that the antiseptic system is being fully carried out in South Australia, both in hospital and private practice; while some remarks occurring in a paper on expeditious delivery show how well this JOURNAL serves to keep our members *au courant* with what is going on in the medical world, statements made at Cambridge in August, being criticised at Adelaide in November.

Ethical matters have, as we learn from the report of the Council, occupied a considerable share of time and attention during the year. Of these, the case of Mr. Hartley Dixon, which gave rise to an action for slander in the colonial courts, and led to correspondence with the Medical Council at home, seems to have been by far the most important. Arising out of the above lawsuit, a charge was made against

George Smith, 47, Arlington Street: and is merely an application of the principle of giving strength, by fluting, to a material not inherently stiff, as one sees is effected in a porcupine's quill, or the feathers of a bird, or in the corrugated iron chapel. It consists, as is shown in the woodcut, of two pieces of very stout brown paper—one flat, and the



other moulded into ridges and furrows. These two are glued together: and a better idea of their appearance than is given in the cut (Fig. 1), which is on too large a scale, will be gathered by comparing the surface to that of an ordinary pill-roller, with its sharp edges rounded off. I may mention that the commercial use to which this paper is put is, I believe, principally that of either packing wine-bottles in cases, or else of enabling single bottles to be wrapped up into a parcel, which shall have no external suggestion of the nature of its contents about it.

From the purely surgical point of view, however, I have found this corrugated paper extremely useful; it can be used in all those cases in which the somewhat expensive "kettle-holder" splinting may be employed, and makes about the best angular splint for the elbow I have ever seen. The tunnels of the fluted portion keep the limb cool by the circulation of air through them; and, moreover, if extra strength be needed, they will serve for the passage of wires of various thickness. It is so cheap that, for a shilling, material for about a dozen arm-splints and the same number for the leg may be procured; it is very light, and may be cut with an ordinary pair of scissors.

In the accompanying woodcut is shown the paper fashioned into an angular splint for the elbow (Fig. 2), and a stiff splint for the knee (Fig. 3). In both cases, as before-mentioned, similar support would be given by the old-fashioned kettle-holder, which weighs just six times as much, and gives about as much more trouble to fashion to the limb. But, it is unnecessary to point out that the qualities of stiffness in one direction, combined with flexibility in the other, will enable any surgeon to adapt the splinting material to a variety of cases requiring temporary or permanent support. It is not fitted for cases where there is profuse discharge, or where very damp dressings are brought into contact with it; for it readily becomes sodden, and then furnishes no support.

I have thought it worth while to describe this material, principally because I, as well as others to whom I have recommended it, have found it very useful to have a flexible splint—the cost of which is not worth considering (so that, if one do not fit, it may be thrown away and another applied); but also, because it seems to me to be a rather pretty example of the application of a well-known mechanical principle, the credit of which belongs to the maker of the goods, whose name I have given above.

WALTER PYE, 4, Sackville Street.

HEALTH OF LONDON.—The Registrar-General's return shows that the fatal cases of small-pox in London, which had been 8 and 23 in the two preceding weeks, were 19 last week, and 11 below the corrected average number. Eleven were recorded in the Metropolitan Asylum Hospitals, 1 in the Highgate Hospital, and 7 in private dwelling-houses. In London, last week, 2,740 births and 1,793 deaths were registered. Allowing for increase of population, the births were 100 below, whereas the deaths exceeded by 2, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which had declined from 3.53 to 24 per 1,000 in the four preceding weeks, was again 24 last week.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 18TH, 1882.

THE LAMSON TRIAL.

AFTER a patient trial, extending over a whole week, Mr. Lamson has been convicted of the murder of his brother-in-law, Percy Malcolm John, by the administration of aconitine; and another member of the medical profession has been added to the list of those who have degraded their profession, and prostituted their abilities for base, ignoble, and wicked ends. Of the righteousness of the verdict we have no doubt, believing that the poison aconitine was the cause of the poor boy's death; and, this being so, the evidence that the poison was administered by Lamson is irrefutable.

The verdict has been given at too late an hour to permit us, on this occasion, to enter into all the scientific aspects of the case at any length; this we may do on a future occasion. But we may remark that this is one of a very few known cases of poisoning by the alkaloid aconitine; and that it is the second known fatal case; the only previously recorded fatal case being the death of Dr. Carl Meyer, just two years ago, through the inadvertent administration of nitrate of aconitine in a dose which could not have exceeded one-thirteenth of a grain, and was probably less than that amount.

We are glad to observe that, in the Lamson trial, there was no painful conflict of scientific or medical testimony. The fact that the trial was watched, on behalf of the prisoner, by two such able men as Dr. Tidy and Dr. Thudichum, and that no rebutting testimony to that of Drs. Stevenson and Dupré was offered, must be accepted as conclusive that the evidence of these gentlemen was unanswerable. The scientific evidence, indeed, seems to have been singularly complete; notwithstanding the fact that the special chemical tests for aconitine, if, as was asserted, not altogether unreliable, are, at all events, inconclusive. Under these circumstances, we are glad to observe that, in fairness to the prisoner, these tests were not even introduced into the evidence given by the experts called on behalf of the Crown. The general chemical tests for an alkaloid, and physiological tests for aconitine, were alone adduced as evidence of the presence of that poison. No doubt there will be an outcry from the antivivisectionists at this, as we believe, perfectly legitimate mode of procedure. But, as was pointed out by the Solicitor-General, in his reply to the speech for the defence, Drs. Stevenson and Dupré would have been wantonly negligent in the discharge of their duty had they neglected to make use of experiments on animals. These gentlemen went, apparently, as far as was prudent in making physiological experiments upon themselves with the alkaloid extracted from the various articles submitted to them; and mice were employed for proving that the substance was fatally poisonous. We think, indeed, that the Lamson trial will tend to educate the public mind to the perception of the indispensable necessity, in the interests of the public, of physiological experiments in toxicological investigations. At the present moment, it is unphilosophical to say that vivisection-experiments are not a necessity to aid in the detection of death by certain alkaloidal poisons.

It was hardly to be expected that the question as to the existence or non-existence of cadaveric alkaloids, or ptomaines, as they are called, should not be raised in the course of this interesting and instructive

investigation; and, indeed, Dr. Stevenson, in conjunction with Dr. Fagge, having been one of the first to draw attention to the occasional poisonous character of alcoholic extracts made from *post mortem* gastric fluids, his attention could not fail to have been directed to this point. Dr. Tidy, too, is known to have written on the subject. When, however, it transpired, in the course of Dr. Stevenson's evidence, that the alkaloidal extracts obtained from the viscera and urine of the deceased boy were not only very minute, and barely in any case exceeding one-tenth of a grain in weight, but that they were also identical in physiological effects, it became clear that cadaveric alkaloids could have had no part in causing the deaths of the mice operated on by the analysts. Moreover, so far as we know, poisonous cadaveric alkaloids have never been met with in the urine; and the most important analytical fact, in the Lamson case, was undoubtedly the finding in the urine of a toxic alkaloid having the characteristic physiological actions of aconitine. Dr. Stevenson neither affirmed nor denied the existence of poisonous cadaveric alkaloids, and appears to keep his mind still open for more conclusive evidence as to their existence than that hitherto offered by Selmi and others. With judicial cautiousness, he stated that he had not neglected to apply a test by which it is asserted that cadaveric alkaloids may be distinguished from vegetable alkaloids; and that he obtained no evidence of the existence of the former class of bodies.

It is certainly desirable that those who have worked at the so-called poisonous ptomaines should publish more definite evidence of the existence of such substances than has hitherto been offered. The scientific public and the profession would be gratified to learn that ptomaines had been analysed as to their percentage composition, classified, and administered in definite quantities, and in a state of purity, to animals, with definite and reliable results, than has hitherto been done. Our knowledge of the ptomaines is at present misty and by no means satisfactory. The simple fact that the so-called poisonous ptomaines are singularly protean in their characters, now simulating one vegetable alkaloid, and again another, according to the circumstances under which they are formed, would probably have led to the formation of a different alkaloid in each of the substances analysed in the Lamson case; and this is, to our mind, conclusive that they were not formed in the body of Percy John.

We must congratulate Drs. Stevenson and Dupré on the able evidence which they gave in the case.

THE ORIGIN AND FORMATION OF RED CORPUSCLES IN THE RED MARROW OF BONE.

In 1878, Neumann first drew attention to certain cells in the red marrow of bone, which he considered to be an intermediate form between white and red blood-corpuscles. This new and important function of red marrow was recognised by Bizzozero, and afterwards by Rindfleisch. Notwithstanding the researches of these authorities, two important questions still remained unsolved: the origin of these cells, and the process by which they become red corpuscles. It is these two questions that M. Malassez has endeavoured to settle in his *Recherches sur l'origine et la formation des globules rouges de l'homme*, the result of researches carried on in the *Histoire Naturelle* of the College de France, and published in the *Annales de l'Association Normale et Internationale*. His researches are limited to animal tissues; nevertheless, they open up new paths of inquiry in pathological anatomy, especially in that part of it which is treated of the sequelæ of serious hæmorrhages in man.

The author remarks that all those histologists who have studied the formation of red corpuscles without a nucleus at the expense of a nucleated red corpuscle, have admitted that the phenomenon is a consequence of the gradual disappearance of the nucleus. There is no difficulty in recognising the gradual disappearance of the nucleus, when we see that the nucleus is slowly destroyed. For instance, in the case of the red corpuscle of the frog, the nucleus is slowly destroyed, and the red corpuscle is expelled from the cell. M. Malassez shows that these theories are not correct. With regard to the first, if the

nucleated cells of a kid, the red corpuscles of which are very small, be examined, it is observed that they are 19.9 times smaller than the protoplasmic masses of the hæmoglobin cells. The second theory is destroyed by the exact and carefully made observations of Abrastzon, who shows that the phenomenon of the nucleus leaving the cell is not physiological but physical, due to the action of reagents, to the changes that take place after death, and is analogous to the escape of the nucleus from the red corpuscle of the frog, under the influence of water. This theory receives another blow from the facts already mentioned concerning the blood of the kid; were it tenable, there ought to be present cells intermediate in bulk between the red nucleated cells and the red blood-corpuscles, but no such intermediate bodies can be found.

Gemmation is all that remains to explain this formation. This theory M. Malassez brought forward in 1878, basing it on the following observations. There are present, in the splenic pulp, cells with little rounded projections of the same volume, if not of the same colour, homogeneity, and refraction, as the red corpuscles. The author was induced to consider these small projections, still attached to the mother-cell, as red corpuscles. In red marrow, the red corpuscles discovered by Neumann present similar formations. M. Malassez believes these splenic and medullary cells to be among the productive elements of blood-corpuscles. This theory is not simply a modification of that of Rindfleisch, inasmuch as the formation of the red corpuscle results from a sort of secretion, and the mother-cell is not destroyed, but lives, and may be supposed to produce other red corpuscles.

In the red marrow of young kids are cells presenting the same aspect as those just described, the red corpuscles of which are very small, and yet each bears two or three projecting buds; whilst newly born infants and rabbits, have much larger red corpuscles with only one bud, occupying a large area of the surface of the mother-cell.

These buds of protoplasm present all the different stages, from that of a simple projection to that of a distinct corpuscle attached to the mother-cell by a thin pedicle, and attaining a volume nearly equal to that of true blood-corpuscles. They are not discoidal, but spheroidal. They resemble red corpuscles in their general aspect, the irrefractive power, and their colour. M. Malassez thinks that these corpuscles, once detached from the mother cell, become true discoidal red blood-corpuscles in consequence of losing the water they contain, and the condensation of the medullary substance. He urges in support of this theory his personal observations, also the well known fact that red discoidal corpuscles become spheroidal in the presence of water.

The author was unable to arrive at any final decision concerning the ultimate fate of these cells producing the red corpuscles, and prefers confessing his ignorance to building up hypotheses which would obscure the question rather than make it clearer. The seat of the cells with reference to the medullary vessels is also a point of interest which M. Malassez has failed to elucidate. Were it known, science would possess indications of the manner in which the newly formed corpuscles reach the circulation; though we are ignorant of this important and interesting detail, it is certain that these corpuscles contribute a part of the solid elements of the blood. Rindfleisch entertains very positive opinions on this subject. He believes that the capillaries of red marrow have no walls, excepting the cells among which they run, so that the young red corpuscle simply buds into the current of blood which breaks it off from the mother-cell. To carry on an important blood-forming function undisturbed, the marrow is protected from variations in blood-pressure. A full notice of Rindfleisch's theories will be found in the *British Medical Journal*, vol. 1, 1881, p. 729, the original contribution being in the *Archiv für Mikroskopische Anatomie*, for the same year.

In the second part of his memoir, the author studies the origin of the mother-cell of red corpuscles. Here it is that the accumulation of important and interesting details renders an analysis impossible; we therefore must rest content by noting a few of the most important conclusions, and referring those who wish to follow the author step by step to the memoir itself. M. Malassez rejects the theory of the transformation of primary white corpuscles into nucleated cells. Bizzozero,

more emphatically than Neumann and Osler, also discards this hypothesis.

M. Malassez considers Pouchet's theory untenable, that the red cells of the red marrow have their origin in the medullary lymph-corpuscles, similar to those of the lymphatic vessels, not to those of the blood, and that their transformation is a process similar to that of pigmentary fatty degeneration. It is unnecessary to insist on the slender foundation on which this hypothesis rests. The presence of hæmoglobin in these elements does not indicate a degeneration, but a special function; neither do these cells disappear, as M. Pouchet has affirmed they are frequently observed segmented, a proof of reproductive vitality. The mother-cells of the red corpuscles multiply by segmentation, judging from the considerable number of segmented cells observed in red marrow. This mode of reproduction is very important. There is yet another process offering three types; the first is a cell with a very large diffused nucleus enclosed in a very small quantity of protoplasm; in the second, the cell, though smaller than the first, is of considerable volume, containing a single large spherical nucleus; in the third, the cells are composed of protoplasm containing a small quantity of hæmoglobin, and a gemmated nucleus arranged in a crown-like form. The study which M. Malassez has made of the medulla of bone, induces him to conclude that the three types described are the formative elements of the mother-cells.

He does not attribute to the red mother-cells here described the exclusive production of red corpuscles. These cells he has found in the spleen, and he believes them to exist in all the blood-forming organs; he believes that the vaso-formative medullary cells also produce red corpuscles. Heitzmann has found these cells in inflamed bones. Bizzozero pointed them out in the normal medulla, and regarded them as cells destroying the red corpuscles; these cells are sometimes very large, and composed of a mass of protoplasmic matter, enclosing red corpuscles varying in number. They are isolated from the circulation, finally join it, and empty their contents of red corpuscles into the general mass of blood.

M. Malassez is of opinion that the vaso-formative medullary cells play a secondary part; the true red corpuscle producing cells are those described in the first instance; the others only take an important share in inflammation and allied pathological processes. M. Malassez and M. Monod have made some interesting researches on myeloid tumours; in the interior of these cells, they discovered cavities filled with blood, sometimes connected with the circulation, but generally unconnected. The researches of Lewischin, Wagner, König, etc., on the giant-cells of tubercles, are of similar pathological value and interest.

It will be generally admitted that the important discoveries of Neumann and Bizzozero, confirmed by M. Malassez, throw not only a new light on the origin of the blood, but also on important pathological questions associated with bone diseases in childhood, and explain the dangers of the cachexia that too often follows these affections; likewise the extreme anæmia which often renders bone-affections serious, when originally insignificant.

These researches of M. Malassez, which we have above presented to our readers in a condensed form, can hardly fail to offer to surgeons interested in bone-diseases in children a new field for clinical and pathological investigation; and we trust that M. Malassez's work will be the source of useful results.

PRIVATE IMPROVEMENT BILLS.

MR. HOPWOOD will have done good service if, in drawing the attention of the House of Commons to the large deviations from general statute law which are taking place in various towns under the cloak of private improvement Bills, he helps to secure a reform in the extremely unsatisfactory manner in which local legislation is now carried on. We observe that, as a consequence of Mr. Hopwood's remarks, Sir William Harcourt proposes to move: "That the Committee of Selection do appoint a committee, not exceeding seven in number, to consider and

report on any provisions in private Bills, promoted by municipal and other local authorities, by which it is proposed to create powers relating to police or sanitary regulations which deviate from, or are in extension of, or repugnant to, the general law; and that it be an instruction to such committee to make a special report to the House in respect of any such provisions as aforesaid as the committee may sanction, together with the reasons on which the grant of such powers are recommended, and the recent precedents applicable to the case."

There will now be an opportunity for the whole question of these local Bills, in their relation to sanitary law, being adequately discussed and possibly settled. No reader of the reports on this subject which have been annually presented by the Chairman of the Parliamentary Bills Committee, and published in the JOURNAL, can fail to be struck with the very unnecessary and perplexing variations of the manner in which statutory duties are proposed to be performed in the several towns that have applied for extended powers. As has been said before, it has become the duty of the Government to prepare a measure for general adoption, which, while possessing due flexibility, shall make uniform and universal requirements which are now enforced in individual towns with every conceivable variety of method and stringency. The appointment of the committee proposed by the Home Secretary cannot fail to have an useful and appreciable influence in this direction; and we trust that their labours may result in expediting a much needed reform of our present laws relating to the public health.

MEDICAL DESERTS AND MILITARY JUSTICE.

No one belonging to the Medical Department of the army can read without feelings of pride the words of His Royal Highness Command-in-Chief at the distribution of prizes at Netley on the 6th instant. No higher tribute could possibly have been paid to any body of officers than that uttered by the Duke of Cambridge in allusion to the work done by medical officers in Afghanistan and South Africa during the last two years. "I have not been able to put my finger on any defect in the working of the department. It has not been only in their purely professional duties that medical officers have distinguished themselves in recent campaigns, but they have also been conspicuous for their gallantry in the field. I am aware, too, that it is not only in time of war that medical officers are called upon to risk their lives; they often do so in time of peace, on the occasions of epidemics in various climates."

We can conceive nothing more inspiring to a body of young medical officers about to enter upon those duties, which it is their pride to have won a commission to perform. We can imagine that the ring of kind appreciation embodied in these words would live in their memories, to be in after-life a stimulus and solace in times of trial, of hardship, and of sickness. We can respect their resolutions to be themselves, as far as in them lies, individual objects of such commendation. Yet we should but deceive these young medical officers were we not, even at the risk of damping so noble a zeal, to point out that, as a matter of fact, there lie behind these flattering words of the Commander-in-Chief enforcements of regulations towards some of the very medical officers herein alluded to, which have been pronounced by the military, medical, and public press, to be harsh and indefensible; and which have been made the subject of appeal to the Secretary of State for War in the House of Commons—regulations which enact that military and medical officers, though wounded side by side in action, or sickening side by side in the epidemic of a foreign station, shall, when they return to England with life, but without health, be dealt with in the compensation for their sickness as if they were creatures of entirely different flesh and blood.

The military officer can obtain leave of absence for the recovery of his health to the extent of two years, and then will be granted a further period of one year on half pay, which will count as full-pay service towards retirement. The medical officer is allowed, as a special boon, one year of sick leave; and, after that, is placed on half pay, which he is not permitted to reckon towards retirement.

One of the medical officers whose "gallantry in the field" was doubtless in the mind of the Commander-in-Chief when he spoke, and who was shot down when in the act of dressing a wounded soldier on the field of Maiwand, is absolutely at this moment on half pay, because the consequences of that wound have rendered him for a time unfit for general service. He counts no service towards retirement, and is being superseded by his juniors, who may never have been on active service in their lives; while the military officers who were injured on the same day are still enjoying an extended sick leave, and have before them a further period of a year's half pay, which will also count towards retirement.

Other medical officers, too, whose health has been seriously injured by sickness incurred in the campaigns instanced by His Royal Highness have been placed on half pay, and denied the privilege of counting any portion of that half pay towards retirement, even though this has been accorded as a right to every military officer who may have met with an injury or illness on duty in time of peace in England.

Assuredly, then, if these gracious words of the Duke of Cambridge mean anything, they must carry with them a pledge that the cases of medical officers wounded on the field of battle, broken down by the duties of active service, or sick from the effects of tropical epidemics, shall receive the same consideration as those of military officers who fall ill in the performance of the easy services of English garrison-life.

Should these utterances be followed by no such act of justice, they must be regarded only as the empty platitudes of official formality, and can have no other effect than the production of cynicism and discontent in the minds of those who began life with a belief in their genuineness.

It would agreeably signalise the administration of the present Director-General, that the successes of his official career should be crowned at its close by the concession to his department of this boon, the withholding of which causes such obvious hardship to those who, the Commander-in-Chief publicly admits, have done their duty.

We learn with pleasure from a correspondent at Mentone, that Her Majesty the Queen arrived there on Thursday afternoon in good health and spirits.

AT the annual meeting of the members and friends of the Home for Lost and Starving Dogs, Miss F. P. Cobbe raised an objection to the re-election of Mr. G. Fleming on the committee as he had published an article in favour of vivisection, but she only found ten supporters in a crowded meeting.

It has been decided by the Council of the Ophthalmological Society that a discussion shall again be held this year, and the subject chosen is sclerotomy. The meeting will probably be held on June 5th, and gentlemen who may desire to read papers are requested to communicate with one of the secretaries (Dr. Stephen Mackenzie, or Mr. Edward Newberry) at an early date.

The celebrated zoologist Professor Ernest Haeckel writes from Ceylon to his University at Jena, that he has now completed his zoological work after a two months' stay on the southern coast of that island. He has collected no fewer than fifty boxes of specimens to Germany. During his investigation of the coral-reefs, he discovered a great number of hitherto unknown aquatic species. Notwithstanding his untiring labours, he was in good health during the whole time. During his travels he succeeded to explore the varied beauties of the interior, as well as with the botanist, Dr. Trautner, of Frankfurt. In March he will leave Ceylon, returning to Europe by way of the Suez Canal.

I am sure everyone will find a case of death after the administration of *Veronal* for asphyxiation in a case of bronchitis. For this report, we are indebted to the courtesy of Mr. Warrick Wilson, house physician in the University Hospital, Cambridge.

It is always much more satisfactory to receive such reports from persons in whom we practice the

occur, and under whose cognisance, therefore, all the details of the case have immediately fallen. It is, we regret to say, by no means the invariable practice to forward such details, though, as we have frequently pointed out, it is an incumbent duty that such cases should be recorded in the public interest; and frequently we are left to gather them from newspaper reports of inquests and other collateral sources.

DR. CARRICK of St. Petersburg has, we hear, recently been in London with the view of making known, to persons likely to take a practical interest in the subject, the result of some experiments which he has been carrying on in Russia as to the condensation of milk from the mares in the Steppes, with the view to the introduction of such condensed mares' milk for the purpose of infant alimentation, and as a basis for the manufacture of koumiss. It is well known that the composition of mares' milk more closely resembles human milk than does cows' milk, and is therefore, it is thought, likely to be much more useful for the purpose of infant feeding than the condensed milk now so largely used for the purpose. The process which Dr. Carrick has employed furnishes condensed and desiccated mares' milk, without the addition of any foreign substance whatever. The result of Dr. Carrick's experiments having been satisfactory, both as to the process of manufacture employed and as to the favourable results attained in the nutrition of infants and invalids, he hopes to be able to find means shortly of producing this novel element of infant alimentation on so large a scale as to afford the means for introducing it into general use. The project is one of considerable interest, and will, we hope, be successfully carried out.

THE Rev. Canon Scarth, rector of Gravesend, who has gone to Port Said to recruit his health, writes to say that a sailors' hospital is much needed at Port Said. At present, a sick seaman must be sent to the Egyptian hospital, where there are only Arab nurses and common rations. A mate of a ship lately sent there, begged to go back to his vessel, preferring discomfort to dirt. The British Consulate pay quite £300 a year for the use of this hospital. The Canon suggests that, if funds could be raised to put up a wooden hospital similar to those the Government have placed at Suez for sick soldiers, it would be easily maintained. The agents of shipping companies say they will do their best to arrange for a regular payment of five shillings each vessel passing through. This would realise a sum of £600 a year, and, added to the Consular £300, would support a comfortable hospital for the use of sailors who, from sickness or accident, are left behind from their ships. Admiral Inglefield, through the press, appeals to the public for some pecuniary help towards this good work.

THE COLLEGE AND THE LONDON COLLEGE OF PHYSICIANS.

THE following has been communicated as the text of the loyal address to the Queen from the Royal College of Physicians of London, on the recent attack on Her Majesty.

[illegible]

ANALYSIS OF THE DATA.

We are authorized to state that the municipal authorities at Mentone have had under their official notice, and have taken into serious consideration, all the hygienic recommendations of the Society of medical men, practicing in that town, and have endeavored to carry them out as far as lay in their power. The Mayor, M. Basso, in communicating to the President, Dr. Henry Bennett, the substance in his own name and in those of his co-authors, expressed himself as follows: "Sir,

have received the letter which you have done me the honour to forward, containing the report of the Society of medical men; and I herewith enclose you the reply of the Municipality to the demands of the Society, which I beg you will communicate to its members. You may be assured that the Municipality will neglect nothing, and will shrink from no sacrifice, in order to render a residence in our town agreeable to the Queen of England. We are all too flattered by the honour which Her Majesty does us, and we feel too deeply the value of the choice of Mentone by the Queen of England, not to make every possible effort to gratify her slightest wishes. As far as I am concerned, you may rely on my thorough devotion to Her Majesty, as I am convinced that, in devoting myself absolutely to her service, I am also furthering the interests of Mentone. I shall, therefore, be grateful to all who can point out to me any measures calculated to secure the public good which may have escaped my notice. This remark applies especially to yourself, who, by your experience and position, are better able than anyone to help me by your advice.—I remain, sir, yours, etc., G. BLOVES, Maire." The sentiments expressed in the above letter by the Mayor, a young and energetic Mentone proprietor, seem to be those of the entire population. Southern supineness seems for once to have given way to action, and all seem to lend a willing hand to putting "the house in order" for Her Majesty's advent.

THE HEALTH OF THE PRIMATE.

COINCIDENTLY with the departure of the Queen, we are informed that the Archbishop of Canterbury has been advised to seek the sunny south for a few weeks' rest. We understand that the arduous duties which belong to his Grace's high office last year told very seriously upon his powers, and caused some anxiety to his Grace's medical attendant. A sojourn in the Isle of Thanet for a few weeks, with as perfect rest as could be obtained, assisted to remove some of the effects of the close attention to the duties of his office. A slight amount of bronchial irritation has continued through the winter, and chronic bronchitis has occasionally interfered with his Grace's comfort and ability to bear exposure. Exertion has caused shortness of breath, and increased the rapidity of an otherwise slow circulation; with this there has been a tendency to anemia, which has shown its effect upon the muscular portion of the large blood-vessels. The dense atmosphere of Lambeth, with the stifling gases which are given off from the neighbouring manufactories, have seriously interfered with his Grace's comfort; whilst the absence of a due share of sunlight from the same cause has, with London fog, assisted to keep him in a delicate state. Under these circumstances, his Grace has been advised to seek for ozone and sunlight on the genial shores of the Mediterranean for the next six weeks, with the certain hope of a return to duty with renewed health and strength. We understand that there are no causes for anxiety, beyond those which naturally belong to a constitution which has been repeatedly tried by acute disease.

THE EDUCATION DEPARTMENT AND THE CLOSING OF SCHOOLS.

THE Education Department of the Privy Council has, we are very glad to be in a position to announce, at length yielded to the representations which have been frequently and earnestly addressed to it with regard to the important subject of closing of elementary schools during epidemics of infectious disease in the neighbourhood. Under the existing regulations, it has been directly opposed to the financial interest of the school to shut it during an epidemic; and thus it has frequently come about that, despite the strongest protests of the health-officer and the sanitary authorities, the school-managers have declined to see the necessity of closing their establishments, even when the plainest possible evidence was forthcoming of the dissemination of disease through its agency. The sanitary authority had no power to order the school to be closed; and had often to submit to seeing its utmost efforts to check the spread of an epidemic nullified by the attitude of school managers. For the future, this anomalous state of things will happily no longer exist. By the new Code of Regulations, which has just received the sanction of the Education Department, it is made one of

the conditions of obtaining a grant, that the managers must comply with any notice of the sanitary authority of the district in which the school is situated, requiring them for a specified time, with a view to preventing the spread of disease, either to close the school or to exclude any scholars from attendance, subject to an appeal to the department if the managers consider the notice to be unreasonable. Other clauses in the regulations, which show an increasing appreciation of hygienic principles, permit an exception to the otherwise indispensable visit and report of an inspector in the event of a continued epidemic making such visit and report impossible; and make it necessary that the department should be satisfied that the school-premises are healthy, well lighted, warmed, drained, and ventilated, properly furnished and supplied with suitable offices, and contain sufficient accommodation for the scholars attending the school; at least eighty cubic feet of internal space and eight square feet of internal area for each unit of average attendance being the standard they will endeavour to secure.

PROSECUTION UNDER THE BIRTHS AND DEATHS REGISTRATION ACT, 1874.

A CONVICTION has recently been obtained at the Todmorden petty sessions against Mr. Herbert Henry Thomas, surgeon, of Hebden Bridge, for signing death-certificates in the case of several children whom he had not personally attended during their last illness, but who had been seen by his unqualified assistant; and a penalty of £5 and costs imposed. It is very desirable that practitioners should clearly understand that the form of certificate which is supplied in printed books by the Registrar-General is intended only to be used in cases of the death of any person who has been attended during his or her last illness by a registered medical practitioner; and that, in respect to this matter, the ordinary rule of law, *qui facit per alium facit per se*, does not apply. At the same time, we cannot think that any professional dignity or honour accrues from the spectacle of prosecutions got up, as this appears to have been (judging from the newspaper report), by a rival practitioner, in whose employment the unqualified assistant had previously been. The main object of giving death-certificates is, as is expressed on the face of each certificate, to give "the cause of death". Everything else in the certificate is subsidiary to this; so much so, that, even to the fact of death having taken place at all, the certifier is not obliged, unless he choose, to testify. It would be perfectly easy, we think, to insert "my assistant attended", for "I attended", and to substitute "he" for "I" last saw him, etc., so as to get rid of the technical illegality on which these prosecutions are founded. No doubt, it would be better that every person who dies should have the benefit of the attendance of a qualified medical man before death; but, in the present state of public opinion, it would be hopeless to attempt to make such a law, or to enforce it if made. In the present case, it can hardly be supposed that the object of the prosecution was to stop the employment of unqualified assistants; as Dr. Lawson, who acted as informer, had previously employed one himself; and there seems some reason to credit the charge of professional jealousy made against him by counsel for the defendant.

THE VISION OF SEAMEN.

DR. FITZGERALD, of Dublin, raised an important subject at the last meeting of the Ophthalmological Society; he pointed out that the examination made by the Board of Trade into the eyesight of seamen was, in spite of recent improvements, still very imperfect. From remarks that fell from various speakers there seemed to be no doubt that there are many seamen holding positions of more or less responsibility afloat whose visual acuity is far below the necessities of their calling. The subject is already occupying the serious attention of the Board of Trade, and will we understand probably be brought independently under the notice of Parliament during the present session. We hope that the attention thus attracted to the subject may strengthen the hands of the Board in applying for an extension of their powers in this matter.

THE "PEST-HOUSE" AT CHISWICK.

A PLOT of land, which has an historical as well as a sanitary interest, has lately been swallowed up by the omnivorous speculative builder. Alluding to this, the *Athenæum* observes: "Antiquaries interested in Westminster School know that at Chiswick there was, until a few years since, a large rambling old mansion, sometimes known as the 'pest-house', and appropriated for centuries as a sanatorium for the scholars. It was suited for this purpose, as the site was airy, facing the river in front, and there was a large plot, called the 'home field', behind. The field was of yore a playground for convalescent Westminster boys; and, since their guides abandoned the place, it has served as a 'people's park' for Chiswick and Hammersmith. The mansion was long occupied by the printing-office of Messrs. Whittingham and Co., and gave its name to the famous 'Chiswick Press'. A few years since, the old house gave place to villas. The authorities of the school having sold the 'home field', more villas will cover the ground, and another 'lung' of London will be abolished."

THE MEDICAL SOCIETY OF LONDON.

THE one hundred and ninth anniversary of this Society was celebrated on the evening of Wednesday, the 8th instant, the Fellows dining together in the Victoria Hall of the Criterion Restaurant. The chair was occupied by the President, Dr. Broadbent, who was supported on the right by the President of the Royal College of Surgeons, on the left by Mr. Francis Mason, the President-elect. During the evening, the Society's medals were presented to the recipients by Dr. Broadbent—the Fothergillian gold medal, for a dissertation on the Pathology and Treatment of Whooping-cough, to Mr. Dolan of Halifax; a silver medal to Dr. Allen Sturge, for his paper on Muscular Atrophy; and a silver medal to the retiring honorary secretary, Dr. T. Gilbert Smith, for eminent services rendered to the Society.—On Monday last, the new President, Mr. Francis Mason, Surgeon to St. Thomas's Hospital, gave an opening address to the fellows on taking the presidential chair for the first time. He gave an agreeable and interesting sketch of his connection with the Society; and, in thanking the fellows for electing him to be their President, said that he regarded the post as the highest honour he had yet achieved in the profession. In resigning the post of treasurer to Dr. Wiltshire, he had left in his hands the largest balance which the Society had possessed for years. He trusted that the Society would lose nothing in its work and usefulness by having placed him in the presidential chair. At the conclusion of the address, which was listened to by a large audience, the ordinary business of the meeting was proceeded with.

NEPHRECTOMY AT THE LONDON HOSPITAL.

ON Friday, Mr. James Adams excised a kidney from an adult male. The symptoms were persistent hæmaturia with pain in the right loin, shooting down the thigh. The kidney was explored for calculus, but none was found, but the greater part of it was occupied by medullary sarcoma. After some difficulty, owing to adhesions, the organ was removed. The case will be published in detail shortly.

THE LONDON FEVER HOSPITAL.

WE regret to learn, from a letter published by the President of the London Fever Hospital, that it is at the present moment at the point of collapse. For the last twenty years of the present century, it was the sole means of protection against epidemics of fever which London possessed; and for the great majority of the population, except the pauper fraction, it even now, notwithstanding the Asylums and Hospitals, remains so. How many persons have owed their lives to this hospital; how many families have been released from infectious anxiety by the removal of friends and relations sick of infectious fever; how many children have escaped scarlet fever and death, it would be impossible to estimate. At the most moderate of calculations, the hospital in all these respects must have been great. The institution which has done all this for London is now threatened with extinction, and unless the Government take prompt action, this, too, is close at hand, and will actu-

ally take place in 1883. It is for the public to say if this is to be permitted. If it be, the public should clearly understand that the only means of isolating the infectious fevers constantly present in London, paupers excepted, will be closed next year.

THE "MISRULE OF VESTRIES".

A GOOD deal of correspondence has lately appeared in the public papers by residents in suburban localities who, having taken houses in undedicated, and therefore private roads, blame the vestries for not paving and cleansing the same. It seems not to be generally known that, until new roads are built over to the extent of about four-fifths, the vestries do not begin to take the necessary legal action for having them properly paved at the expense of the owners, and afterwards keeping them clean as ordinary parish roads. As the cost of making up new roads cannot be defrayed out of the rates, some time usually elapses after the service of the legal notices before the work can be begun. For instance, the various owners of the houses and of the land abutting on the road must have paid the calls made upon them before the authorities can begin the work, so that, until summonses have been taken out against the defaulting owners, or orders made, the nuisance remains unabated. There can be no doubt that such roads are injurious to health, and therefore should be avoided; but, as persons often take houses without making due inquiry, they ought to blame themselves rather than the vestries. If the expense, or any part thereof, of making up new roads were cast upon the parish, it would only act as a bonus to speculative builders to build more houses than they do even at present, which is quite unnecessary.

BEARING-REINS FOR HORSES.

ATTEMPTS of the ignorant and morbid outbreak of sympathy with the woes of Jumbo which has lately afflicted London, Mr. Flower writes to a contemporary that many of the humane folk who went to bid their troublesome pet a last adieu, and do their best to ruin his digestion, were strangely oblivious to the pain that was being suffered by their own carriage-horses. Whilst the humble cab-horses were standing "at ease", with liberty for their heads and necks, most of the carriage-horses were tied up so tightly that they could not lower their heads one inch, and with their lips drawn up most painfully from tight bearing-reins. It is, indeed, singular that the perpetual tossing and turning of their heads to get a little relief from the evident pain and discomfort they suffer, does not induce humane and sensible people to abolish the use of these instruments of daily torture.

POISONING BY "SOUSE" OR BRAWN.

FOR the following details of the recent cases of symptoms of poisoning after eating "souse" or brawn at Woodhouse, Handsworth, near Sheffield, we are indebted to Mr. F. T. Le Tall. A miner partook of "souse" at Woodhouse on Thursday night. He afterwards had violent sickness and diarrhoea, and applied for treatment about 9 A.M. on Friday. The case was treated as one of irritative diarrhoea, etc., and no more was thought about the matter; but on Friday at 4 P.M., when Mr. Le Tall was called to see a family thought to be poisoned, the symptoms being sickness, diarrhoea, etc., he found that they had eaten "souse" from the same shop. He at once gave emetics, warm diluent fluid, etc. A child aged 7, and the mother, aged 50, first began to vomit and be purged about three hours after the meal. A girl aged 10, after being at school, came home, and was similarly affected four hours after the meal. A boy 12 years old "felt queer", and began vomiting, etc., six hours after eating it. Besides vomiting and diarrhoea, the pulse in the cases was feeble, quick, and irregular; there was a sense of prostration, etc., most marked in the mother, who was in a dangerous state of collapse for some time, threatening to prove fatal. At 11 P.M., as the diarrhoea and sickness continued unabated, and the pulse feebly, barley-water, and anything else being retained, Mr. Le Tall gave one grain of opium to the mother, and a quarter of a grain to each of the children, with good results. Stimulants, etc., were retained, and the sickness, etc., suspended; the pulse became

quieter and firmer. On Saturday the children were well; the mother was still suffering from collapse. Eggs, brandy, and beef-tea were borne by the stomach. On Sunday she was much better, but still unable to rise in bed. On Monday, though very weak and prostrate, she was able to sit up; her pulse was normal; she had a sense of "feeling sore all over". Half a pound of the brawn was bought, two-thirds only of which were eaten by the four. The rest was handed, in a sealed jar, along with the vomit, to the police for analysis. Another family—man, wife, and infant—partook of "souse" from the same source. This was followed in a few hours by dimness of vision, "creeping feelings" in the legs, feet, arms, and hands; followed by copious purging and sickness, continuing for some hours, leaving them "feeling poorly". Mr. Le Tall further says: "On putting the case into the hands of the police, we can find twenty-one persons of various ages who have suffered more or less severely as above. Besides containing more fat than common, the 'souse' was said to be as usual. I suggested that it was not fresh made, and that decomposition might have set in, causing it to act as a poisonous (animal) irritant, as borne out by the report of the analyst. Neither vinegar nor mustard, the usual accompaniments, was eaten with the 'souse' by the families under my care."

THE THICKNESS OF THE SKULL.

MR. ROGER WILLIAMS writes to us:—The question was raised, in the recent discussion on "Hats and Heads", whether modern heads are smaller than they used to be. If the following quotation from Herodotus may be relied on, we might naturally expect to hear of such a diminution consequent on the prevalent custom of wearing hats, inducing thinning of the cranial bones. I am not aware of any explanation as to the varying thickness of the skull in different individuals and races; possibly the following quotation may throw some light on the matter. "Here" (Pelusiatic mouth of the Nile), "I saw a very surprising fact, which the people of the country informed me of. For, as the bones of those who were killed in the battle lie scattered about separately (for the bones of the Persians lay apart in one place, as they did at first, and those of the Egyptians in another), the skulls of the Persians were so weak, that, if you should hit them only with a single pebble, you would break a hole in them; whereas those of the Egyptians are so hard, that you could scarcely fracture them by striking them with a stone. The cause of this, they told me, is as follows, and I readily assented: that the Egyptians begin from childhood to shave their heads, and the bone is thickened by exposure to the sun; from the same cause, also, they are less subject to baldness, for one sees fewer people bald in Egypt than in any other country. This, then, is the cause of their having such strong skulls; and the reason why the Persians have such weak skulls is this: they shade them from the first, wearing tiaras for hats. Now, I myself saw that such was the case; and I also observed the same thing at Paprenies, with respect to those who were slain with Achæmenes, son of Darius, by Marus the Libyan." Book III, ch. 12.

THE INFLUENCE OF SEXUAL EXCITEMENT ON WOUNDS.

In a paper recently published in the *Lyon Medical*, M. Poncet draws attention to the evil effects of sexual intercourse when indulged in during convalescence from injuries, operations, etc., and suggests that this may be a not very unfrequent, though unrecognised, cause of some of the mishaps and complications that occur in private practice. The sexual act produces a certain amount of shock which, M. Poncet thinks, may be placed side by side with traumatic shock, and which leaves the patient for a certain time after indulgence in a condition of "least resistance", during which he is especially susceptible to morbid influences. With regard to the impression produced even in health by the act of coitus, some thermometrical experiments undertaken by an interne of the Lyons Hospital are quoted. A thermometer placed in the rectum was carefully observed on nine occasions; and it was found that the temperature was always from five-tenths to six-tenths of a degree Centigrade (nearly 1° Fahr.) lower just after than before coitus. During

the act, the temperature rose slightly above normal. In illustration of his views, M. Poncet gives notes of seven cases observed in his own practice, where complications were ascertained to have followed coitus. Four of these patients had lesions of the hand or finger, and all were going on well up to the time of sexual indulgence, which was quickly followed by pain and swelling of the injured part in one case, and in three others by inflammation of the lymphatics, which went on to suppuration in two. In another case, chronic tetanus was attributed to the disturbing effects of coitus, and in yet another the non-union of a fracture. In the latter case, union took place when the man was removed from his mistress, who had been nursing him. In the seventh case, pyæmia and death are referred to a similar cause. The patient had undergone amputation of the thigh for an injury, and was in the country away from any known septic influences. The wound was healthy and granulating, when, on the eighteenth day after the operation, he had intercourse. Rigors quickly followed, and death occurred five days later. A somewhat similar case is mentioned on the authority of Ollier. Although these cases are all surgical, M. Poncet also refers to the adverse influence of sexual excitement in some other diseases—notably diabetes and gout.

A RARE FORM OF VASCULAR DISEASE.

At the consultation at St. Bartholomew's Hospital, on the 2nd instant, Mr. Thomas Smith was able to exhibit an instance of an extremely rare form of disease. The patient was a young woman, about nineteen years of age, who presented an abnormality of the circulation of one hand and forearm, which is best classed, perhaps, under the head of aneurysmal varix; she could hardly be said to suffer from the condition, as she had been able to discharge her duties as a domestic servant until her comfort was interfered with by a somewhat persistent hæmorrhage from the site of a small abscess in one finger. Large pulsating vessels having the distribution of the veins were to be seen on the back of the hand; the pulsation was accompanied by a purring thrill and a loud buzzing murmur. There were two points about the case which gave it a peculiar interest: first, that there had been no known injury which could have caused a direct communication between the arteries and the veins; there had been, it is true, a severe burn of the hand in early childhood, but there was no reason to suppose that the vessels were especially damaged. The case thus appeared to be an instance of spontaneous aneurysmal varix. The second point of interest was that the thrill and loud buzzing murmur were very plainly to be observed in the brachial artery at the bend of the elbow, and in all the arteries of the forearm. These latter vessels all appeared to be enlarged; and these facts led Mr. Smith to suggest that the case had some analogy to the aneurysms by anastomoses commonly seen on the scalp, and that the free communication between the arterial and the venous circulation of the forearm was effected by way of the much enlarged capillary vessels. In whatever way the case be regarded, it is of singular interest, and probably almost unique.

SELF-MUTILATION IN CHINA.

DR. R. A. JAMIESON of Shanghai has recently presented to the Museum of the Royal College of Surgeons a pair of feet, to which the following remarkable history is attached. Some months ago, a Chinese beggar excited much pity, and made a very profitable business in the streets of the foreign settlement, Shanghai, by showing the mutilated stumps of his legs, the feet belonging to them being tied together, and slung round his neck. Warned frequently by the police, he was knocked down by a carriage one day when scrambling out of the way of a constable. He was brought into hospital, under Dr. Jamieson's care, being slightly injured; and, on recovery from his bruises, he sold to his medical attendant his feet, which otherwise would have been confiscated by the police. He admitted that, for the purpose of making himself as attractive as possible to the charitably disposed, he had, about a year previously, fastened cords round his ankles, drawing them as tight as he could bear them, and increasing the pressure every two or three days. In about a fortnight, the bones were bare, and he had no more pain.

At the end of a month and a half, the bones were quite dry; and, by this time, according to his account, he was able to remove the feet by partly cutting and partly snapping the bones. The feet were quite black and mummified; on the wounded surface of the right foot, the upper aspect of the astragalus was seen, no trace of the malleoli remaining; but the external malleolus lay in its normal position in the left foot, and it had evidently been removed by cutting and snapping, as the patient affirmed. The stumps were perfectly healed, and conical; the ends of the tibia and fibula were apparently fused, and both stumps were covered in with a good cicatrix, puckered at the centre, and admitting of a very considerable amount of pressure before pain was produced. Such instances of self-mutilation appear to be frequent in China; and, when performed for such a motive as in Dr. Jamieson's case, they throw a light on that singular mixture of courage, deceit, and sacrifice of almost anything to advance low enterprise, which characterise the lower orders in that country.

CARRIER PIGEONS AS DOCTORS' ASSISTANTS.

THE *New York Medical Record* gives an account of a method of utilizing the homing instincts of the carrier-pigeon as an aid to country medical men in their practice. It seems that these birds have been made very useful by country doctors in New York State and Pennsylvania. One medical man in Hamilton County, New York, uses them constantly in his practice, and considers them an almost invaluable aid. After visiting a patient, he sends the necessary prescription to a dispensary by a pigeon, or any other instruction the case or situation may demand. He frequently, also, leaves pigeons at places from which he wishes reports of progress to be despatched at specified times or at certain crises. He says that he is enabled to attend to at least a third more business through the time saved him by the use of pigeons. In critical cases, he is able to keep posted up by hourly bulletins from the bedside between daylight and nightfall, and he can recall case after case where lives have been saved that must have been lost if he had been obliged to depend upon ordinary means of conveying information. The idea is ingenious; but it is not new.

MASTECTOMY BY THE SUBCUTANEOUS FLAP OPERATION.

In the *Gazette Médicale de Strasbourg*, Dr. Schrupf of Worms describes a remarkable anomaly of the external organs in a male child. The penis and testes were enclosed in one common sac of integument, a scrotum, with a projection not one quarter of an inch from its upper part, representing the prepuce. The urine issued from a narrow opening in the prepuce. The urethra and cavernosa could be detected on palpation, and appeared to be normal. The case is described as unique; but it is only an unusual form of the fusion of the integuments of the penis with the scrotum posteriorly, a result of arrested development of the genital tubercle. To remedy the defect, when the child was a year old, the integuments were raised from the scrotum with as much integument as possible, which was then severed from the scrotum, and united by sutures. The blood vessels and nerves were ligatured and cut. A circumcision was performed at the same time. The result was quite satisfactory.

REMARKS ON THE PRESENT POSITION.

Low Looan, the superintendent of Vaccination in the H.K. Medical Agency, has, in his report on vaccination for the year 1880, during the year 1880, mentions that the use of cowpox has almost entirely been discontinued. He has found that vaccination with cowpox is not very popular in the colony, he has not very carefully followed. The vaccine virus was used in some cases to vaccinate natives, and the result was the same, was inserted because the nature of a small amount of the virus of a foreign origin. In this country, the use of cowpox for vaccination is not very popular; and the chief reason of their unpopularity is that it is not very popular among the natives, who are necessarily much employed for vaccination purposes.

THE SECRETS OF OUR PATIENTS.

OUR contemporary, the *Journal de Médecine de Paris*, contains a letter from a correspondent detailing a hypothetical case, in which the medical attendant delivers a woman of a syphilitic child, when, to his knowledge, the father is exempt from the disease; and desires to know whether it is the duty of the medical attendant to inform the father of the nature of the disease from which the child is suffering. M. Diday replies to the letter, and maintains that such a case offers no exception to the general rule, that the secrets of our patients are inviolable. He points out that, when the child is born dead, as a rule, no questions would be asked; and, if any were, it would be sufficient to say that there was commencing putrefaction; but when syphilitic symptoms are manifested by the child after birth, he thinks the medical man can easily discover the real state of things; and he believes that it is only necessary for him to insist on the mother nursing the child herself, so as to avoid infecting anyone else; and should she herself show any symptoms of the disease, to submit herself at once to treatment, and to persevere in it actively and to the end. We may add, that we quite agree with M. Diday; any other view is obviously founded on a principle which would make one law for the husband, and another for the wife; for who ever heard of a medical man feeling himself bound to tell a wife that her husband had acquired syphilis?

DEAFNESS AND DUMBNESS.

DR. BOUCHERON lately made a communication to the Medical Section of the Paris Academy, in which he expressed an opinion that the co-existent states of deafness and dumbness so often observed is owing to the compression of the acoustic nerve. This compression is the result of the vacuum existing in the cavity of the tympanum. This vacuum causes the external air to press on the membrane, and thus on the ossicles, and finally on the liquid of the labyrinth and the nerve. By frequent insufflation into the Eustachian tube, M. Boucheron succeeds in restoring the vacuum, and thereby the pressure on the nerve, and restores the hearing. M. Boucheron has resorted to this case, to the apparently deaf and dumb, and even idiots, the faculty of hearing and of speech.

CHOLERA IN THE NORTH-WEST PROVINCES OF INDIA.

From 1875 to 1879, 71,546 deaths were registered from cholera in the North-West Provinces and Oudh, equal to a death-rate of 1.6 per 1,000 of the population, as compared with 0.8 in 1879 and 0.5 in 1878. The mortality of the year seems again to favour the rule that cholera is more prevalent in the eastern portion of the province, which is established by its prevalence in the eastern portion of the province in the months of the hot season, and apparently establish its prevalence in the western portion until the rainy season commences. The previous year, it may be remembered, was an exception to this well-established order of events.

THE MEDICAL EDUCATION OF CHINA.

The medical education in China is attended to by the students, and the high fees they charge, have recently given rise to a recent decree issued by the authorities at Shanghai. This decree, which is a model one for a paternal Government, in which argument, entreaty, oblation, exposition, threats, are all employed to induce the students to use their knowledge for the benefit of the people when people are sick, and to be ready to attend on them when they are sent for, without regard to the hour of the night or the state of the weather. When people are ill, they long for the presence of the doctor, and the doctor should be ready to attend on them. Instead of this, however, the students think that they possess great knowledge, and not only that they are not to be called on to attend on the people, but that they get their pay. If it were necessary to charge the wealthy, it would not be much matter; but the poor have to pay them also. A good practice, the decree goes on, is to be followed, by which doctors will not visit their patients before 1 o'clock in the afternoon; some will even smoke opium and

drink tea until late in the evening. These are abuses, the magistrates say, which they will on no account permit. Doctors must attend their patients at all times: they must, if necessary, visit them several times daily; they must think more of them and less of their fees. Notice, therefore, is given to all officials and people that a physician who does not attend when he is called must only receive half his fees and half his chair-hire. "If you physicians delay your visits, you show your wickedness and sin against yourselves."

SCOTLAND.

AMBULANCE LECTURES IN ABERDEEN.

FOLLOWING up what has been done elsewhere, ambulance lectures have been commenced in Aberdeen. The medical officer of health, Dr. Simpson, is engaged in giving a course of instruction on this subject to the members of the police force. Dr. Hall, assistant to the Professor of Materia Medica in the University, gives a course of instruction in ambulance drill to the members of the Volunteer Engineer corps.

THE GLASGOW OPHTHALMIC INSTITUTION.

THE thirteenth annual meeting of the supporters of the above institution was held on March 13th, when the report was read and adopted. The report shows that, in addition to the large number of patients remaining on the books at the beginning of the year, 3,322 new cases have been admitted, of which number 3,004 were dispensary patients, while 318 were taken into the hospital for treatment. Of the 3,322 new cases treated during the year, 3,170 were cured, 86 relieved, and 66 were dismissed as incapable of further benefit. There has been a decrease in the number of out-door and in-door patients during the past year, but this has arisen in great measure from the institution being shut for some months while alterations were being carried out. By these alterations, additional accommodation has been obtained, so that ten extra beds have been added, raising the number of beds for in-patients to thirty. This will involve an increased expenditure for the support of the institution, but no doubt the extra income will be forthcoming. During the past year, there was an excess of income over expenditure, and a gratifying feature in the report is the large amount of income contributed by the working classes.

PREVALENCE OF MEASLES IN SCOTLAND.

IN many places in Scotland, there is quite an epidemic of measles; in Edinburgh and Portobello, large numbers of children have been seized by the disease, which is not of a virulent type, but which has led to the thinning of many of the schools. In the Island of Skye, the disease has disappeared, and the schools are open again.

SMALL-POX IN EDINBURGH.

WHAT, in the meantime, appears to be a completely isolated case of small-pox has occurred and terminated fatally in Edinburgh. On Tuesday, the medical officer of health reported to the Edinburgh Public Health Committee that, last week, a man living in South Bridge had been removed to the City Hospital, suffering from an attack of small-pox of a malignant type, and of which he died in two days after his transference to the hospital. He had been ill for about a fortnight, having been seized by the disease when visiting a village near Edinburgh, where there has been no recent case of small-pox. So far as can be known yet, the disease has been limited to the deceased.

THE ROYAL MATERNITY AND SIMPSON MEMORIAL HOSPITAL.

AT the annual meeting of the supporters of the Royal Maternity and Simpson Memorial Hospital, held on Tuesday, the secretary submitted an encouraging report regarding the building fund of the institution. Some weeks ago, it was stated in this JOURNAL that, owing to the munificence of the late Dr. Hunter, the debt on the new building had been reduced to £200; this balance has, by a donation of £50 from

Mr. Barbour of Bonskeid, and subscriptions from various parties interested in the hospital, now been wiped out, and the institution is free from debt. During the year, there had been only two deaths in the hospital; 213 patients had been delivered in it, while 442 were attended at their own homes. The Earl of Ilome and Dr. Rutherford Haldane were elected extraordinary directors, in place of the late Sir Robert Christison and Mr. Anderson. The directors have set apart a small ward for the reception of respectable married women, who may be specially recommended to the hospital. The total income for the year was £748, as compared with £435 the previous year.

THE ADMINISTRATION OF SMITHSTON ASYLUM.

FROM time to time, various complaints have been made as to several points connected with the administration of the above institution, one of the chief being that too much liberty was given to the inmates of the asylum. With a view of strengthening their hands in the conduct of the place, the Committee of Management placed before the Commissioners of Lunacy a series of queries as to a number of points; and, following upon these, the Commissioners held an inquiry into the whole question of the administration of the asylum. Their report has just been made public; and, while very voluminous, it is quite explicit, both in the recommendations suggested and in the views expressed. It advises the committee to leave entirely in the hands of the medical officer the decision of the amount of liberty to be allowed to patients, and that on no account should there be any interference with him in this matter; and the report concludes by paying a high tribute to the zeal and ability of the medical officer (Dr. Wallace), and to the efficiency and administration of the governor and the other officials. Such approval must be very gratifying to all concerned in carrying on the trying and arduous duties connected with the management of the asylum; and it is to be hoped the committee will see their way to carry out the suggestions of the Commissioners.

THE ODONTO-CHIRURGICAL SOCIETY.

THE Odonto-Chirurgical Society of Edinburgh, at a meeting held on Monday in Edinburgh, adopted the following resolution: "That, although the Society are of opinion that the three years' mechanical training is, and always must be, the essential part of the training of the dental surgeon, they do not consider it necessary for the dental student to be compelled to pass his preliminary examination in arts prior to his entering upon his hospital and surgical duties." At the same meeting, Principal Williams read a paper on the Dentition of the Horse and other Animals.

THE REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending March 4th, it appears that the death-rate in the eight principal towns during the week was 21.6 per 1,000 of estimated population. This rate is 1.3 below that for the corresponding week of last year, and 1.0 below that for the previous week of the present year. The lowest mortality was recorded in Aberdeen, viz., 16.5 per 1,000; and the highest in Perth, viz., 32.7 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 3.3 per 1,000, or 0.3 below the rate for last week. The most fatal zymotic diseases were whooping-cough, diphtheria, and measles. Acute diseases of the chest caused 144 deaths, or 28 more than the number registered last week. The mortality from these diseases was most marked in Glasgow. The mean temperature was 40.9°, being 5.6° below that of the week immediately preceding, but 10.7° above that of the corresponding week of last year.

HEALTH OF GLASGOW.

FROM the fortnightly report of the medical officer of health, it appears that, for the fortnight ending March 4th, there were 490 deaths registered, giving a death-rate of 25 per 1,000 living. This year there is a diminished fatality of pulmonary diseases, which is partially counterbalanced by the larger fatality of infectious diseases, which were at a minimum point at this time last year. There were 7 deaths from fever,

PROTECTION OF EXPERIMENTAL SCIENCE.

A REPRESENTATIVE and important meeting of the heads of the principal Medical Faculties and Associations, and others, will be held at the College of Physicians on March 28th, to form an Association for the Protection of Science, in respect especially to the attacks which have recently been made on those engaged in the prosecution of research and the advancement of medical knowledge by experiment on animals. The letters of invitation are signed by the President of the College of Physicians, Sir William Jenner; and the President of the College of Surgeons, Sir Erasmus Wilson.

SMOKE ABATEMENT.

THE Lord Mayor gave a dinner at the Mansion House on Saturday last in connection with the Smoke Abatement Exhibition. The guests who were eighty in number, consisted of noblemen and gentlemen who had taken a personal interest in the recent Smoke Abatement Exhibition, and who are aiding in the further progress of the movement. Among the principal guests were the Presidents of the Royal Society, of the British Association, of the Society of Arts, of the Royal Academy, of the Institute of Civil Engineers; Vice-Presidents of the Royal Institute of British Architects, Earl De-la-Warr, and Mr. Shaw Lefevre, M.P., First Commissioner of Works, Sir William Gull, Dr. Alfred Carpenter, Dr. Quain, Dr. Andrew Clark, the Mayors of Manchester, Oldham, Bolton, and Stockport; Sir Frederick Bramwell, Professor Frankland, F.R.S., Professor Abel, C.B., Professor Chandler Roberts, F.R.S., etc. After the usual loyal toasts the Lord Mayor gave the toast of the Smoke Abatement Committee, and referred to the enormous increase in the consumption of coal in the metropolis, which in ten years had risen from five to ten millions of tons; and to the increasing necessity for finding some means of clearing the atmosphere of London from the solid products of imperfectly consumed coal, which at present added to the fogs inherent to the situation of London, and became an additional element of dirt, disease and discomfort. He spoke in eulogistic terms of the rapid progress which had been made by this movement in a short space of time, and expressed the hope that it would be possible to abate smoke without doing away with the open grate, and coupled with the toast the name of Mr. Ernest Hart, chairman of the Smoke Abatement Committee.

Mr. HART, in reply, referred to the striking evidences of the special mortality due to the combination of smoke with fog, as shown by the London tables of mortality, which, in February 1880, rose to 48.1 per 1000 for London, a higher mortality than had been known in the last forty years of civil registration, except in the cholera epidemics of 1849 and 1854. For any similar rise in that period, a week in December 1873 must be looked to, when the death-rate was equal to 37.5 per 1000. A similar sudden rise occurred in the end of last February when the occurrence of thick yellow fogs in London raised the mortality by upwards of 13 per cent., while the provincial mortality underwent no such rise, notwithstanding the prevalence of fogs in other parts of England. This mortality was especially noted among the very young and the very old, and was due to affections of those delicate organs, the lungs. Another equally delicate organ, the breeches-pocket, was not less severely affected. Every day the smoke cloud, which hangs over London like a pall, might be computed to amount to fifty tons of coal, of which the unconsumed particles were floating in the air. The waste of unconsumed carbon, in the form of imperfectly burnt gases, was calculated at least at five times as much; and the annual waste from the 800,000 chimneys of London could not be calculated at less than £1,000,000 sterling. The addition to the washing-bill of London, from the same cause, had been set down by Mr. Chadwick also at a million. It might be safely estimated possibly at half that amount. To this was to be added the cost of the blackening and destruction by soot, and the sulphate of ammonia which it contained, of the surface of public buildings; the injury to works of art, to dress, decorations, furniture, etc. This was the cost of dirt; to it must be added the cost of darkness. An average day's fog in London raised the gas bill of London for that day by £7,000 sterling, causing the consumption of gas in London to be about fifty millions of cubic feet. If to this we added the cost of oil and candles, it was calculated by Mr. Sugg that an average day's black fog caused an expenditure of £20,000 on light alone; to this must be added the less easily estimated cost of disarrangement of business, difficulties of locomotion, extra cost of labour on railways, and other places, where business traffic is carried on. To compensate for this inconvenience anyhow, it might safely be said that it was certain, from the merely economical point of view, that the

saving which would be effected if the dirt and darkness, caused by the present unscientific method of burning coal in our private houses, as well as in our factories, could be prevented, the saving would speedily recoup the total cost of any changes necessary to bring about that object. Mr. Hart announced that the principal documents connected with the report of the jurors had that day been completed, and placed in his hands; and he was able to announce, on the authority of Professor Chandler Roberts and Mr. Atchison, that, in the department of steam-boilers, it had been completely demonstrated, by the experience of the Exhibition, that there was no case in which smoke-consuming apparatus might not be fitted to steam-boilers, with the result of great economy as well as of adequate efficiency. The result of the testing of kitcheners and cooking grates, by Professor D. Kinnear Clark, had been to demonstrate that a large proportion of the kitcheners shown did effectually and economically carry out all they proposed to carry out as cooking apparatus; while they practically abolished, or very nearly so, the emission of smoke. In the department of grates and stoves, he was also able to say that several of the grates shown were quite efficient in the way of consuming smoke, or reducing it to a minimum, without sacrificing the ordinary cheerful appearance of an open fire, and would burn ordinary Newcastle coal. On the other hand, there were also a number of grates in which anthracite or steam-coal could be burnt easily, effectually, and safely; and several minor apparatus were shown, by which existing grates could easily be adapted, either on the one hand for the burning of smokeless coal, or on the other for the burning of the ordinary bituminous coal, without sensible production of smoke.

THE MAYOR OF MANCHESTER, in his speech, referred to the fact that the Smoke Abatement Exhibition of London was about to be transferred to a large extent to Manchester, where a Smoke Abatement Exhibition was in turn to be opened, under the auspices of a highly influential Committee, and for the purpose of carrying on in Lancashire the work begun in London.

SIR FREDERICK LEIGHTON, Pres. R.A., in returning thanks for the toast of the "Arts," in a speech of most polished eloquence, referred to the despairing millions who now groped their darkling way beneath the canopy of smoke, and expressed the most fervent hope that everyone would think it a personal duty in his own household to carry into practice such of the improvements as this Exhibition might show to be adapted, to relieve his household from the reproach of adding to the darkness and gloom of London.

To the toast of the "Medical Profession" Sir WILLIAM GULL and Dr. ANDREW CLARK replied in their own names, and on behalf of Dr. Alfred Carpenter, of Croydon, who has rendered brilliant service to this cause, Dr. Quain, and Dr. Tripe, Chairman of the Association of Medical Officers of Health, who were also present.

SIR WILLIAM GULL said that nothing which affected the health of the community could be indifferent to the medical profession, and he claimed for his medical brethren that in this, as in every other movement aiming at the prevention of disease and the increase of human life and happiness, they had taken a foremost part. It was his pleasure no less than his duty to give any assistance in his power, and to testify to the importance and hopefulness of the movement.

Dr. ANDREW CLARK said that nature was inexorable, and those who chose to disobey its laws by daily creating an artificial gloom which shut off the sunlight, and living as it were under a cloud of their own creation, must suffer daily and continuously, and it was not by any one act, not by the waving of a wand they could be cured, but they must pay the penalty of their offences against nature, and remove the causes. Physicians could not cure them, but they could cure themselves, and they must consent to the sacrifice necessary to remove the cause before they could hope that they would free themselves from the constantly accruing increment of suffering due to their own neglect.

SIR U. KAY SHUTTLEWORTH proposed the health of the Lord Mayor, and said that whoever might hereafter rule over the municipality or over a greater London at a future time, would gratefully recognise the endeavours which the Lord Mayor and his predecessor had made on behalf of this important effort to free London from its greatest source of suffering, loss, and discomfort.

AMBULANCE WORK IN GERMANY.

IF imitation be the sincerest form of flattery, then ought the Saint John's Ambulance Association to be satisfied with its last success. Under the inspiration and active personal direction of Professor Esmarch, whose name is honoured and respected throughout Europe, not only by the members of the medical profession, but also amongst all who desire as far as possible to minimise physical pain and suffering, a centre for ambulance work is being established at Kiel, if even it may

not be considered as an accomplished fact. During the meeting of the International Medical Congress, held in London last summer, Professor Esmarch had an opportunity of seeing the manner in which a knowledge of the best means of affording first aid to the injured was becoming popularised in England. On his return to Germany, he determined to follow an example which had already produced such excellent results: and, a few weeks since, he opened his first Samaritan School (Samariter Schule). Within three days of the announcement of his intention, the distinguished surgeon was besieged by applications from eight hundred and fifty candidates for instruction, and many hundreds more would have joined had the list not been closed. It was quite impossible for any man to conduct such a class without assistance, and it was equally impossible for the Professor to repeat his lectures, as many times as would be necessary, if the candidates were to be formed into working classes of thirty or forty, as in England. He, therefore, divided the number into two sections; and each of the five lectures has been given twice weekly in the large hall of the Kiel University. At the conclusion of this, the class has been distributed in eleven different rooms (the women being separated from the men); and eleven assistant-surgeons, aided by the same number of dressers and some nursing sisters, have superintended and directed the practice indicated by the Professor. The hand-painted illustrations; the articulated models of limbs, showing the various kinds of fracture; and the mechanical and improvised means of giving immediate assistance to wounded, apparently drowned, or other suffering people, were of the most complete and exhaustive character. Dr. Esmarch invited Mr. J. Furley, member of the executive committee and director of stores of the St. John's Ambulance Association, to be present at his last two lectures; and he availed himself of the occasion to bring together some of the highest naval, military, and civil authorities, when steps were taken to establish such a centre in England as will probably soon develop into a great national institution.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall on Wednesday, the 12th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary*,
161A, Strand, London, March 15th, 1882.

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 12th, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, June 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881. FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

BATH AND BRISTOL DISTRICT.—The 33rd meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday afternoon, April 13th, at 4.15 P.M.—A. S. P. R. E. MARKHAM SKERRITT, M.D., Honorary Secretaries. —Bath, March 15th.

SOUTHERN DISTRICT.—A conjoint meeting of the Southern District will be held at the Grand Hotel, Brighton, on Wednesday, March 15th, at 3.30 P.M. Dr. Ewart of Brighton will preside. Dinner will be given at 5 P.M. The following papers have been promised: 1. Dr. I. J. ... 2. Dr. Mackey: On the Treatment of Whooping Cough. 3. Mr. Bernard Roth: On the Treatment of Lateral Curvature of the Spine. 4. Mr. Furner will show an adult man presenting symptoms of Pseudo-Hypertrophy of the Liver. 5. Mr. Baber: Adenoid Vegetations of the Naso-Pharynx. 6. Mr. Noble Smith: Cases of the Vertigo with ... The President: Case of ... Dinner will take place at the Old Falcon at 5.30 P.M.—A. H. B. HALLOWES, Honorary Secretary, 11, King Street, Maidstone.

SOUTH-EASTERN DISTRICT.—A meeting of the above District will be held at the Infirmary, Gravesend, on Wednesday, April 12th, at 3 P.M.; J. C. Armstrong, Esq., in the chair. Papers will be read by Dr. W. M. Ord, on the subject of Aneurysm; Dr. William H. Day, Remarks on Chorea. Dinner will take place at the Old Falcon at 5.30 P.M.—A. H. B. HALLOWES, Honorary Secretary, 11, King Street, Maidstone.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE eighty-second meeting was held at the Cottage Hospital, Ashford, on March 2nd; W. H. COKE, Esq., in the chair.

Papers.—The following papers were read.

Dr. Eastes read a paper on Intussusception. An animated discussion ensued.

Mr. Whitehead Reid read notes of a case of Colotomy, and exhibited morbid specimens.

Dinner.—The members afterwards dined together at the Saracen's Head.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

THE fourth meeting of the session was held on Friday, February 17th, at the home of Dr. Norman Kerr, 42, Grove Road, N.W.

The typhus epidemic in Marylebone.—DR. NORMAN KERR, in opening a discussion on the recent typhus epidemic in Marylebone, said that the fever broke out early in July 1881, and lingered on till January 1882. He had personal knowledge of sixty-three cases, nine of which were fatal. The disease first appeared in the family of a very drunken woman, earning her living at a dust-yard in Paddington, who died. She and her three daughters, who all caught the fever, lived in dirt and filth in a room near Charles Street, Lisson Grove, with 160 cubic feet to each. More than half the cases occurred in three adjoining houses in Charles Street. There were thirty-one cases on one side of this street, and only one on the other side. Most of the cases radiated to the neighbourhood from the three houses in question. The cases were of a severe type. Probably more than thirty more would have died, had not they been removed to the excellent hygienic and curative influences of Homerton and Stockwell. Overcrowding was a potent factor. In one room of one of the three infected houses in Charles Street lived seven persons, with 113 cubic feet to each. In that street were thirty-three occupied houses, with nearly four hundred and fifty inhabitants. At least eleven houses were overcrowded. The contact in the street was unusually close, and there was a densely crowded open market a few yards off every Sunday morning. One woman infected twelve cases. Nothing could be much worse than the unsanitary conditions both of the people and the houses. There was a plentiful presence of drunkenness, squalor, and filth, and an utter absence of ventilation. One room, inhabited by a family, was over a privy, the latter vented through the interstices of the floor into the company above. There was a considerable depth of sewage in the subsoil under the houses, and an intermittent fall in the drains from the houses into the common sewer. For a long time little was done, except by outside agencies, to remove the causes; but, latterly, the sanitary authority had exercised their powers, and removed all cases. Had the sanitary measures been adopted at the first, not more than a few cases would have occurred. The Board have every confidence that the sanitary measures would be promptly and effectively dealt with. The other measures recommended were the institution of inquiries into the residences; thorough and repeated inspection; the creation of a special supplementary health agency in the Hastings Association; and, above all, the compulsory notification of infectious diseases. Had there been an efficient compulsory system of notification, the cases would have been fewer, and the scandalous conditions of the district, that thirty-two out of thirty-three cases of typhus, in Charles Street, had been limited to one side of the street.

and he remarked that such limitation was in accordance with what had been occasionally observed during the prevalence of cholera, and, to a less extent, of other epidemic diseases. He was of opinion that the late epidemic of typhus in Lisson Grove had been very clearly shown to have been connected with the overcrowded state of some of the houses in Charles Street, which were, moreover, from the state of the subsoil, totally unfit for habitation. It was important to notice that the disease had passed over some of the adjoining and worst parts of Lisson Grove, and had spread to many families who were in a position considerably above that of the pauper class. During the great epidemic of typhus in London, which had only ceased in 1871, after having continued without any decided interruption for a period of ten years, the number of patients admitted with that disease, into the London Fever Hospital, had been very close upon 15,000. For four or five years previous to that epidemic, London had been so far free from typhus, in the epidemic form, that serious thoughts had in consequence been entertained of converting the Fever Hospital into a hospital for general diseases. There was, as regards London, a corresponding absence of typhus in the epidemic form, after the subsidence of the great epidemic, which had lasted ten years; and, although sporadic cases occurred from time to time among the destitute classes in overcrowded districts, yet the disease did not, as a rule, exhibit any decided tendency to become diffused in the epidemic form. It must, he thought, be admitted that we were altogether ignorant of the nature of this epidemic constitution, in virtue of which typhus and other similarly communicable diseases, on some occasions, presented themselves in an almost uncontrollably epidemic form; whilst, on other occasions, they occurred only in the sporadic form. Overcrowding, destitution, and filth had been very commonly and very correctly associated with the diffusion of disease; but its epidemic constitution appeared to be primarily due to something independent of their influence.

At the close of the discussion, the following resolution, proposed by Dr. DANFORD THOMAS, and seconded by Mr. WILLIAM SEDGWICK, was unanimously agreed to: "That this meeting is strongly of opinion that the notification of infectious diseases should be made compulsory; and that a copy of this resolution be sent to the BRITISH MEDICAL JOURNAL."

CORRESPONDENCE.

THE DANGERS OF CHLOROFORM, AND THE SAFETY OF ETHER AS AN ANÆSTHETIC.

SIR,—I am greatly pleased to think that my former letter has had some effect in directing particular attention to this important subject. Many of the suggestions, as mentioned by your various correspondents, are most valuable in setting forth the real dangers attendant upon the different anæsthetics in use.

I am quite agreed that a fatal result may follow, no matter what agent is employed. However, what I did assert, and what I still assert, is, that ether is the least dangerous of them all. I am aware that if etherisation be pushed too far (which it occasionally is, quite beyond the necessity of the case), death may follow, as it does during the administration of other agents; but, as far as I know, there is nothing in ether obnoxious to human life, and, when pushed in anæsthesia to its greatest limits, its action appears to affect the respiratory movements only; for in those very cases recorded, where a fatal result followed its administration, it was found death occurred by the failure of the respiration, the heart's pulsations continuing generally for some time after respiration had entirely ceased.

From this it will be seen that ether has a stimulating, not a depressing, effect on the heart, as is the case in chloroform. Furthermore, ether gives warning, as indicated by a weakness of respiration; and, by removing the ether and immediately setting up artificial respiration, the weak point is promptly acted upon; whereas in chloroform the heart has to be acted upon through the respiration, and therefore, in some cases, time is lost in attempting to avert a fatal issue.

As regards the use of chloroform in obstetric practice, my letter in no way conveyed the idea that I wished to withdraw it entirely from the *Pharmacopæia* as a therapeutic agent; I merely alluded to its being used in producing complete anæsthesia during the performance of serious surgical operations, where ether would suit all purposes quite as well.

With the apparent haphazard way of administering chloroform, regardless of quantity or mode of administration, the absence of a fatal result, is certainly very remarkable, as mentioned by some of your correspondents; but, in my opinion, it is no reason why an endeavour should not be made to still observe the greatest caution in administer-

ing an agent like chloroform, which has proved fatal in so many instances, even when it has been given with the greatest care and by the most experienced hands. As regards the best form of ether-inhaler, I mentioned the one made for me by Coxeter, London, as I considered it the best, combining, as it does, so many advantages—viz., simplicity, portability (can be carried in the pocket), ease of administration, small quantity of ether used, besides being very moderate in price.

However, I am quite ready to admit that other ether-inhalers have advantages as well, and no doubt may be quite as efficient. Notwithstanding what has been said about the irritating effects of the ether-vapour, I never saw a patient yet who could not take ether. With a little coaxing, and heating the inhaler before using, so as to warm the vapour, few patients, with management, will refuse to submit to its influence. When the ether-vapour becomes warm, it seems entirely to lose its irritating effects. Mr. Swain of Plymouth speaks in favour of bichloride of methylene. I regret to state I cannot agree with him in the view he has taken regarding its safety. The statistics on the subject prove to the contrary, as will be seen in the table I append, which is the combined result of statistics collected in America by Dr. Andrews of Chicago and those collected in England by Dr. Richardson, as mentioned by the late Professor Morgan.

In this table will be seen at a glance the absolute and relative mortality caused by the several anæsthetic agents as at present administered.

Agent Employed.	Deaths.	Administrations.	Deaths.	Administrations.
Ether	4 in	92,815	Or 1 in	23,204
Chloroform	53 in	152,260	" 1 in	2,873
Mixture of chloroform and ether	2 in	11,176	" 1 in	5,588
Bichloride of methylene.	2 in	10,000	" 1 in	5,000

From the foregoing table it will be seen that chloroform appears to be eight times more dangerous than ether, twice as dangerous as a mixture of chloroform and ether, and, as far as we can judge, more dangerous than bichloride of methylene.

With such facts and figures before one, the surgeon must necessarily incur grave responsibility if he permits, without very good reason, a fellow-creature to be suddenly precipitated into the mysterious sleep of insensibility, never to wake again, by means of an agent that has been proved to be eight times more dangerous than ether. He certainly cannot be said to have given his patient the best chance of recovering from unconsciousness by discarding what statistics have proved to be the safest anæsthetic in use.—I am, sir, etc.,

LAMBERT H. ORMSBY, M.D., F.R.C.S.,

Surgeon to the Meath Hospital, Dublin.

Merrion Square, West, March 8th, 1882.

CHLOROFORM OR ETHER?

SIR,—The main difficulty in the way of our arriving at a satisfactory solution of the question between ether and chloroform, seems to be the impossibility of discovering the relative proportions in which the two anæsthetics are used. One correspondent suggests the proportion as one to two. I should be more inclined to suggest one to fifty. Though it may be regarded as impossible to gain accurate information on the point, some light might be thrown on the subject, if we can ascertain the relative amount of the two drugs sold or manufactured. If, as some assert, ether has largely replaced chloroform, its manufacture and sale must largely have increased during the last few years. Inquiries, directed to one of the largest firms in the kingdom, have elicited the reply that they sell a much larger quantity of chloroform than ether, though they understand several medical men use the latter in preference. This is not very definite. Probably a more satisfactory answer might be got from some large manufacturer. An article, in the *Pharmaceutical Journal* for the 4th instant (page 730), points to a probable cause of some of the deaths lately recorded. It seems that much of the chloroform in the market is impure, or has altered in its composition, owing to some peculiarities in the process of manufacture. This is a subject worthy of grave consideration. Formerly, we always asked for Duncan and Flockhart's chloroform for anæsthetic purposes; but, lately, I fear too many of us have been contented to use anything furnished by the nearest druggist.—I am, sir, yours truly,

Liverpool, March 10th, 1882.

A. H. F. CAMERON.

ON ACUTE TRAUMATIC MALIGNANCY.

SIR,—In his interesting paper on this subject (page 187 of the JOURNAL), Mr. Barwell has expressed a hope that his cases may be supplemented by other similar cases of acute malignant disease, apparently directly due to injury. Among the cases of sarcoma of the bones, which I have collected from various sources, there are several which appear to have arisen as a direct consequence of injury.

Dr. Gross describes a lympho-sarcoma of the humerus, which occurred

What I have written has been in my mind many years : and I believe that, if you can succeed in lifting the whole subject out of the "secret vice" category, and teaching the profession and the public to look at the thing from a rational point of view, you will do more than has ever been done before to stamp out a habit which, together with the denunciations it calls forth, is a source of great unhappiness, and an insidious enemy to the moral, mental, and physical well-being of the rising generation. — I am, sir, your obedient servant,

P. B.

SPECIAL CORRESPONDENCE

GLASGOW.

Royal and Western Infirmarys.—Charity Organisation Society.—Public Health Legislation.—Science Lectures.—St. Andrew's Ambulance Association.

THE Royal and Western Infirmarys of our town are to be congratulated on the financial success which attended the fancy ball held on the evening of the 2nd instant in aid of the funds of these institutions. Some months ago, when it was felt that an effort of a special kind would have to be made to supplement the annual income this year of our two leading charities, it was resolved by a number of influential gentlemen to repeat the experiment made four years ago in behalf of the Western Infirmary, and hold a large fancy ball. Tickets were eagerly taken up, and, that the whole proceeds from this source might be available for the infirmaries, the expenses of the entertainment were defrayed by private subscription. No official statement has yet been issued as to the exact amount of money realised by the sale of tickets, but it is very generally understood that it will not fall far short of £2,400, which will give a sum of £1,200 to each of our infirmaries. Four years ago, when the first effort of this kind was made in behalf of the then recently opened Western Infirmary, £1,400 was the amount raised, and this was all given to one institution. On the present occasion, there is to be an equal division of the money realised, and it must be very gratifying and pleasing to the promoters of this undertaking to find that the public have responded so handsomely to their efforts, and that in so joyous and pleasant a way there has been such a substantial contribution to the funds of our two great charities.

While, however, such undertakings as the above are admirably calculated to meet a temporary pressing demand in the matter of charitable finances, they do not furnish any solution of the problem as to how the ever yearly increasing expenses of our different philanthropic institutions are to be met. In connection with this question of charitable relief, a very important conference was held very recently in Glasgow under the auspices of the Charity Organisation Society of this city. Representatives were present from most of the local benevolent institutions, and the chief point considered during the evening was, how the money of the benevolent might be given to the poor with the least amount of waste to the giver, and without demoralising the receiver. Papers were also read by Dr. Russell and others on the subject of the "overlapping" of the different charities. In the course of the conference, several very interesting facts were brought out, and among them some which show how vast is the amount of money given annually in Glasgow alone in charity, and the great extent to which our charities have increased. Thus, it seems that, in the year 1815, there were about fifty-five public charities in Glasgow, with a revenue of about £104,000; while now there are 221 charitable associations in Glasgow, and the amount distributed by public and private charities is thought not to be less than £1,000,000 *per annum*. This gives some idea of the importance of the subject dealt with by the conference, and the necessity for some reform in our present system of voluntary charitable relief, so that there may be an avoidance of all waste, and that the recipients of charity may be as little demoralised as possible. As to how these objects are to be attained, there were two suggestions put forward by the conference. The first one was the adoption of a system of registration of relief, whereby every recipient of charity should be enrolled on a list, to which access should be had by other societies; and the second one was the establishment of a "clearing-house of relief", similar to that in existence in Boston. This latter suggestion is the more preferable and practical of the two, for by it there would be collected under one roof all the charities of the city, and in this way closer and more cordial relations would exist between them, their administration would be simplified, and imposture on the part of applicants more easily detected. If this idea can be carried out, the experiment will be watched with much interest, and there seems every reason to think it would be attended by the happiest results.

There has been for some time a very general feeling that, while recent legislation for the public health has been carried on with the best aims

and intentions, and has accomplished much good, especially in the way of preventing infectious diseases from assuming alarming dimensions amongst the community, that there are yet many points that want amendment. With the view of improving present legislation on the subject, the Philosophical Society of Glasgow have appointed a committee to take the matter into consideration, and this committee have further subdivided themselves into sections, each of which is to deal with separate points, when eventually a report will be presented to the Society on the proposed sanitary reforms and alterations which they deem advisable. One of the most recent occurrences showing the present unsatisfactory state of the law regarding public health is to be found in the last report issued by Dr. Wallace, medical officer of health for Greenock. It is there stated that, while scarlet fever had considerably abated in the town, there had been recently an extension of the disease in the west end, and that it had been traced to the milk supplied to the locality by a farmer near Inverkip, four of whose children were found suffering from the disease. Steps were of course taken to stop the supply of milk, but the extent of the mischief done may be imagined, when it is remembered that, from the outbreak on the farm on January 19th till February 1st, when the discovery was made, no fewer than eleven families supplied by this farmer took the disease. The offender cannot be proceeded against by the local authorities, as he does not reside within the boundaries of a burgh, and thus his residence in a country district enables him to go scot free. Such a state of matters imperatively demands immediate alteration.

The subject of infectious diseases and their spread had an able exponent in Mr. Dallinger, who gave last week in Glasgow a lecture under the auspices of the Glasgow Science Lectures Association, his subject being, "Further Researches into the Origin and Development of the Least and Lowest Forms of Life." Mr. Dallinger is not a stranger to Glasgow audiences, having already treated of this subject here, but his present effort was as successful as any previous ones, and his lecture was as fresh and interesting as ever. He pointed out that the unity and variety of nature had never been so wonderfully discovered as now, when immense powers of vision had, by means of optical appliances, lifted us almost into a new sense; and then, tracing the life-history of the organisms to be found in a drop of putrescent water (illustrated by a series of beautiful diagrams), he showed that, though these organisms were capable of being destroyed as adults at a temperature of 140° Fahr. in fluid heat, some of their spores were not more than destroyed at a temperature of 262°, the result of which was that we could not infer spontaneous generation in the origin of organisms in a fluid because it had been heated up to the boiling point of water. In concluding, the lecturer pointed out how all these facts had a powerful and important bearing on everyday life, when it was remembered that some of the most terrible diseases by which the human race were afflicted were dependent upon the presence of organisms closely allied to those whose life-history he had just related; and yet he expressed a hope that the time was not far distant when our knowledge of these minute organisms would give us triumphant power over many of these deadliest forms of disease.

The St. Andrew's Ambulance Association, which has recently sprung into existence in Glasgow, has now formally commenced its labours. The objects at which it aims have been already given in the notice which appeared about the association in the JOURNAL. As to the exact status which it occupies, there has been as yet no public announcement; but, from the title it has assumed, it is evidently to be carried on as an independent society, and have no connection with the London one. The gentlemen connected with it have no doubt considered this point well, and have thought it advisable to take up this position; and it is to be hoped that a movement so philanthropic and useful will prove a great success. At the same time, much might be said in favour of the view that it should be merely a centre from the London Association, and carry on its work on exactly the same lines and under its world-wide prestige. Courses of lectures have already commenced, and others are to follow. It appears that Greenock, too, is determined not to be behindhand in this useful work, as it is announced from there that a movement has been set on foot to provide an accident ambulance for the conveyance of injured persons to the infirmary. The idea is that the ambulance, when procured, should be kept in the fire-brigade station, and that the police and members of the fire-brigade should be drilled in its use by a surgeon. Further, it is proposed to establish communication between the large public works and the fire-brigade station. If this simple arrangement can be carried out, it ought to prove of great service in cases of accidents.

VACCINATION.—Mr. W. L. Emmerson has been awarded a gratuity of £5 12s. for efficient vaccination in the Waltham district, Melton Mowbray Union.

[illegible]

the following month Professor Thomson received the honour of knighthood. In 1877 he was appointed to deliver the Rede lecture at Cambridge. He presided over the Geographical Section of the British Association at the meeting held at Dublin, August, 1878, when the University of Dublin conferred on him the honorary degree of D.C.L. He was the author of *Depths of the Sea*, 1872, containing an account of the cruises in the *Lightning* and the *Porpoise*; and *The Voyage of the Challenger: An Account*, giving a preliminary account of the general results of the voyage, during the year 1875, and the early part of the year 1876.

WILLIAM MILLER COULTATE, F.R.C.S.Eng.

We have this week to record the death of William Miller Coultate, F.R.C.S.Eng., aged 68, at Burnley, Lancashire, where he had been in practice since 1836.

The deceased was the son of a surgeon who practised in the same town; he completed his medical studies in Dublin; was possessed of great natural abilities, which he had carefully cultivated; and his information on many subjects outside those relating to his profession was varied and extensive. He was largely endowed with good common sense, was a sound and well informed medical practitioner, and had had extensive experience both in private practice and local consultations; was straightforward in his conduct, trustworthy and uniformly courteous in his intercourse with his professional brethren, who have lost in him an able adviser in difficult cases. He has left them an example in professional conduct calculated to have a lasting and beneficial influence on character. Besides being Vice-President of the Lancashire and Cheshire Branch of the British Medical Association, he was certifying factory surgeon, and, till lately, surgeon of the Fifth Royal Lancashire Militia. He was a borough and county magistrate, and for many years occupied a very prominent position in Burnley and the neighbouring parts of North-East Lancashire; was an alderman, and more than once had the offer of the mayoralty; and was looked up to as the leading spirit in all municipal affairs, to which for many years he devoted his best energies.

About a year ago, his fellow-townsmen presented him with a service of plate, and had two portraits of him painted in oil, one of which was placed in the Council chamber, the other in the Mechanics' Institute, of which he was a trustee. About six months ago, he had an apoplectic seizure, with hemiplegia, from which he in great measure recovered; but, on Saturday, March 4th, after a few days' illness, he had another seizure, which proved suddenly fatal.

His loss to his family, his professional brethren, and to the town of Burnley, is in many ways irreparable; and his memory will be long cherished by those who had the privilege of his acquaintance.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council of the College on the 9th instant, Mr. William Martin Coates, L.S.A., of Endless Street, Salisbury, surgeon to the Infirmary, and Mr. Alexander Harkin, M.D., King's College, Aberdeen, and J.P., of College Square North, Belfast, were elected Fellows, their diplomas of membership bearing date respectively July 26th, 1833, and June 26th, 1840.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 9th, 1882.

Beswick, Robert, Brighton.
Handford, Henry, Atherstone, Warwickshire.
Macaulay, Samuel, Fitzroy Avenue, Belfast.
Salmon, Arthur Gay, Truro, Cornwall.
Webber, Edward Samuel, Abergavenny, Monmouthshire.

UNIVERSITY OF DUBLIN.—At the Hilary Term, or Spring Commencements, held in the Examination Hall of Trinity College, on Shrove Tuesday, February 21st, the following degrees in Medicine and Surgery were conferred by the Senate, under the presidency of the University Caput, the Right Honourable John Thomas Ball, LL.D., Vice-Chancellor of the University; the Rev. the Provost of Trinity College; and the Rev. James W. Barlow, Senior Master Non-Regent.

Bachelors in Medicine.—H. St. John Brooks, J. Craig, T. R. Gillespie, Dawson Henry, G. Chadwick Kingsbury, G. A. Marshall, E. F. Pigot, Rev. Sydney G. Turpin, L. Tarleton Young, Bertram C. A. Windle.

Bachelors in Surgery.—H. St. J. Brooks, J. Craig, J. Gloster, J. W. Gowland, G. C. Kingsbury, G. A. Marshall, P. Neary, E. F. Pigot, T. R. M. Smith, Rev. S. G. Turpin, L. T. Young, B. C. A. Windle.

Doctors in Medicine.—T. A. Baldwin, J. D. Pratt, Rev. S. G. Turpin, J. Waugh.

MEDICAL VACANCIES.

The following vacancies are announced:—

- BODMIN UNION, Cornwall.**—District Medical Officer. Salary, £32 2s. per annum. Applications by March 23rd.
- BRITISH HONDURAS, COROSAL DISTRICT.**—Medical Officer. Salary, £150 per annum. Applications to the Secretary, Colonial Office, London. S.W.
- BRITISH LYING-IN HOSPITAL, Endell Street.**—Honorary Physician. Applications by April 1st.
- CHELtenham GENERAL HOSPITAL AND DISPENSARY.**—Resident Surgeon. Salary, £180 per annum. Applications by April 17th.
- CORK UNION.**—Medical Officer for Ballygarvan Dispensary District. Salary, £120 per annum, with £15 per annum as Medical Officer of Health, registration, and vaccination fees. Election on the 20th instant.
- EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.**—Clinical Assistant. Applications by March 23rd.
- EMPEROR LIFE ASSURANCE SOCIETY.**—Medical Officer. Applications by March 20th.
- EPSOM UNION, DISTRICT OF LEATHERHEAD AND FETCHAM.**—Medical Officer and Public Vaccinator. Salary, £50 per annum. Applications by March 21st.
- ESSEX AND COLCHESTER GENERAL HOSPITAL.**—Member of Surgical Staff. Applications by the 29th March.
- ESSEX AND COLCHESTER GENERAL HOSPITAL.**—Physician. Applications by the 29th March.
- GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.**—Resident Medical Officer. Salary, £80 per annum. Applications by March 22nd.
- GREAT NORTHERN HOSPITAL, Caledonian Road, N.**—Obstetric Physician. Applications to the Secretary by March 31st.
- GREAT NORTHERN HOSPITAL, Caledonian Road, N.**—Surgeon. Applications to the Secretary by March 31st.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.**—Clinical Assistant. Applications by April 1st.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT, St. John Street, Deansgate, Manchester.**—Honorary Physician. Applications by the 31st instant.
- HOSPITAL FOR WOMEN, Soho Square, W.**—Pathologist and Registrar. Salary, 50 guineas per annum. Applications by April 3rd.
- KENT AND CANTERBURY HOSPITAL.**—House-Surgeon. Salary, £80 per annum. Applications by April 6th.
- KENT COUNTY LUNATIC ASYLUM, Chartham Downs, near Canterbury.**—Second Assistant Medical Officer. Salary, £120 per annum. Applications by the 21st instant.
- KNIGHTON UNION.**—District Medical Officer. Salary, £40 per annum. Applications by 29th instant.
- MANORHAMILTON UNION.**—Medical Officer for Workhouse, at a salary of £80 per annum. Election on the 23rd instant.
- NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh.**—Medical Superintendent. Salary, £450 per annum. Applications by the 29th instant.
- NOTTINGHAM DISPENSARY.**—Resident Surgeon. Salary, £200 per annum. Applications by March 25th.
- PARISH OF GAIKLOCH, Ross-shire.**—Medical Officer. Salary, £100 per annum. Applications to the Chairman, Osgood H. Mackenzie, Esq.
- QUEEN'S HOSPITAL, Birmingham.**—Resident Surgeon. Salary, £50 per annum. Applications by April 10th.
- SALFORD UNION.**—District Medical Officer. Salary, £100 per annum. Applications by 21st instant.
- SEAMEN'S HOSPITAL (late Dreadnought), Greenwich, S.E.**—Resident House-Physician. Salary, £75 per annum. Applications by April 6th.
- SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.**—Junior Assistant House-Surgeon. Salary, £50 per annum. Applications by March 22nd.
- ST. LUKE'S HOSPITAL.**—Clinical Assistant. Applications by March 23rd.
- TAUNTON UNION.**—Medical Officer. Salary, £52 per annum. Applications by March 18th.
- TOWCESTER UNION.**—Medical Officer. Salary, £60 per annum. Applications by March 20th.
- WARWICK COUNTY LUNATIC ASYLUM.**—Junior Assistant Medical Officer. Salary, £100 per annum. Applications by 24th instant.

MEDICAL APPOINTMENTS.

- DREWITT, F. G. D., M.B.**, appointed Assistant Physician to the West London Hospital, *vice* Montagu Lubbock, M.D., resigned.
- STEWEN, John Lindsay, M.B. and C.M.**, appointed Pathological Chemist to the Western Infirmary, Glasgow.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

- HARVEY.**—March 13th, 1882, at Craigmore, Blackrock, Co. Dublin, the wife of the late Reuben J. Harvey, M.D., of 7, Upper Merion Street, Dublin, of a daughter.
- TREVES.**—On March 10th, at 18, Gordon Square, the wife of Frederick Treves, F.R.C.S., of a daughter.

MARRIAGES.

- EMERY-JONES—MEW-FRANKLIN.**—On the 9th inst., at Sutton, Surrey, by the Rev. John Booker, M.A., A. Emrys-Jones, M.D., 10, St. John Street, Manchester, to Kitty, the only daughter of the late J. W. Mew, of Hull, and step-daughter of the late Rev. S. Franklin, M.A., Rector of Brierley Hill.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

DOES THE PRESENT SYSTEM OF MEDICAL EDUCATION FULFIL ITS REQUIREMENTS?

SIR,—In answer to your correspondent "Londinensis," I would answer that it depends very much upon what its requirements are considered to be. Of the requirements of private practice, it is evident he knows but little. If there is a screw loose in our medical schools, it is that they do not sufficiently teach what is really wanted. What a man wants in private practice is a good sound knowledge of therapeutics, worldly wisdom, and an acquaintance with the expression of the eyes of those with whom he has to treat or deal; add to this a tolerable manner, and, even though he be but L.S.A., he will supersede the M.D., F.R.C.S. (by exam.), with a knowledge of the optic disc, and none of the world. The requirements of the general practitioner and those of the physician and surgeon are becoming too mixed. The poorer classes cannot afford to be attended by a man who has to add to his fees a percentage on the time and money spent in studying optic discs. I for one know the optic disc, and find the knowledge of very little use. I have made a great deal more capital out of the knowledge that, on arriving at a confinement, if your hands are cold, the quickest way of warming them is to dip them into a basin of warm water—a fact which the present system of medical education does not teach.—I am, sir, your obedient servant,

RURALIS.

M.D. BRUSSELS should communicate with Dr. F. E. Pocock, the Limes, St. Mark's Road, Notting Hill, W.

WANTED, A MODEL HOSPITAL.

SIR,—I venture to think your correspondent, Mr. Wood, will find what he requires at the New York City Hospital. In the centre of that building, opposite the entrance door, is a lift which goes from the basement to the top of the house; here are placed the kitchen and laundry. On either side of the lift are wards, right and left, surgical on one floor and medical on the other. Each ward is oblong, with windows on one side, capable of containing twelve or more beds. The ceilings and walls where they join are rounded, not angular; they are white and silted. In front of the doorway is a brass plate indicating the position for fixing a hose to a pipe connected with a water-supply, so that walls and ceiling may be readily washed down in cases of infection, or for cleansing purposes. The egress air is extracted from the top, and ingress air supplied about four and a half feet from the floor by means of a small engine. There is a central two-branched gas-burner. A mosaic runs round the ward at the foot of the beds; this is a relief to the monotony of the white walls. The bedsteads are of iron, without heads. The waterclosets, urinals, and lavatories, are outside of the ward, with an ingenious plan for checking water-waste; whilst the closets themselves are perfectly sweet. The dead-house and dispensary are in the basement. Behind and adjoining are well-proportioned committee-rooms, residents' quarters, large library, operating theatre, and a museum beautifully arranged. The hospital can accommodate two hundred patients, from each of whom payment is exacted.

I have no doubt further information as to size of wards and other matters would be given by the courteous secretary and resident. I trust, however, I have said sufficient to direct your correspondent's attention to a hospital which rightly may be considered perfect in all its details.—I am, sir, yours truly,

Paris, March 12th, 1882.

CHARLES MOORE JESSOP.

D.—The subject has been more than once under discussion during the last few years, and may probably be undertaken; but the question is, to some extent, one of cost.

AMBULANCE SYSTEM FOR LONDON.

SIR,—Will you allow me to state that I believe that I am the first who suggested a wheeled hospital accident ambulance system for London. A letter by myself, dated March 29th, 1880, on "Help in Street Accidents" (see JOURNAL for April 3rd, 1880, p. 537), was in reply to a statement made by Mr. G. Carrick Stett, contained in his letter on the same subject, in the JOURNAL for the previous week, to the effect that, "beyond the police-stretcher, a cab, or some improvised shutter, no means were available" in London for the easy conveyance home, or to hospitals, of the large number of persons killed or injured.

I now propose: 1. That ambulances should be constructed so that each may be conveyed by either hand or horse, by simply turning up the shafts or handles or some ready detachments; 2. That where it can be shown that it is essentially necessary for a man and horse to be specially employed, at those places only should such be kept; 3. That, when an accident occurs through a passing vehicle, its horse, if suitable, should be required to convey the ambulance to the hospital and back free of charge; and, (4) in all other cases, that the first passing cab-horse, or other suitable horse, should be engaged to take the ambulance to the hospital and back, and for this the driver should be paid. Should proposals 3 and 4 be adopted, they would obviate the necessity of specially keeping either man or horse.

While some accidents allow sufficient time to make arrangements for them to be properly attended to, yet others may occur when the injured need to be laid in a suitable place as promptly as possible. Quite recently, during a rainy day with muddy streets, a man had his leg broken in this neighbourhood, and he was conveyed to the hospital in a cab. To send a telegram to, and wait for an ambulance to arrive from, the nearest hospital, would occupy considerable time, however promptly attended to.—I am, sir, yours faithfully,

16, Bloomsbury Street, W.C., March 6th, 1882.

E. NOKK.

THE HULL DAIRYCOATES POISONING CASE.

SIR,—My attention has been drawn to a paragraph appearing in your JOURNAL of the 18th ultimo, with reference to what is characterised as a strange story relating to the deaths of two children at Dairycoates, near Hull. The report, however, on which your comment is based, is a most unfair and totally incorrect report. So far as I am concerned, my action in the matter was confined to performing the *post mortem* examination, and giving evidence before the coroner; but, although I acted no further, or otherwise, I am in a position to contradict the statements made by your correspondent. In the first place, he states that the children were not attended by a qualified medical practitioner; as a matter of fact, my brother, Dr. Wm. Jackson, did attend them. In the second place, you state that "the evidence showed that the stomachs of the children were inflamed and ulcerated, there being several ulcers in each case;" whereas the most important part of my evidence as to the morbid changes points to a very different conclusion. To enable your readers to judge, not only as to this, but also as to your remark that "no less novel is the idea that all sewer-air causes the above results," I give an extract from my evidence, which is as follows.

"*Post mortem* examination on the body of Susannah Stevenson, aged 5. There were no external marks of violence, but great *post mortem* lividity, extending down the back from the neck to the feet; the lips and tongue were livid. Viscous yellow mucus escaped from the mouth and nostrils. The pupils of the eyes were widely dilated. The fingers were contracted, and the nails blue. The forearms and palms of the hands were rigid, and turned outwards. On opening the thorax, a most offensive odour exhaled from the soft parts; there was considerable effusion of serum in the cavity of the chest. The lungs were congested, and filled with dark liquid blood. The heart contained a little dark fluid blood, and was flaccid. On opening the abdomen, the odour was most oppressive; the liver was gorged with black liquid blood, also the spleen, which was twice its normal size. The kidneys were distended with dark blood. In fact, the black throughout the body was black and fluid; the vessels of the stomach were congested; the coats of this organ were very much softened. The mucous membrane separated with slight pressure; two small places, about a quarter of an inch in circumference, were found denuded of the mucous membrane. They were an inch and a half from the pyloric end of the stomach, and may have been caused in the examination of this organ, as the membranes were so remarkably softened. The mucous membrane of the duodenum, part of the ascending, the whole of the transverse, and part of the descending colon were very much congested, and the vessels filled with dark fluid blood. The morbid changes in the second child were similar, so I need not repeat them.

The symptoms and changes found in these two children coincide with the experience of gentlemen so high in the profession as Mr. Holden, and Drs. Letheby, Murchison, and Taylor.

Dr. Murchison mentions a case which occurred at Clapham in 1829. Twenty out of twenty-two boys at one school were seized with violent vomiting, purging, and prostration, with convulsive twitchings of the muscles and fever, within three hours. One boy had been seized with similar symptoms two days before, and died. Another also succumbed. So alarming was the outbreak, that poisoning was suspected; but, after careful investigation, it was found that the sole cause of the disease was to be attributed to the opening of a drain at the back of the house. The evidence in these cases states: "In one, the mucous glands of the intestines were found enlarged; and, in the other, the mucous coat of the small intestines was found ulcerated, and that of the colon softened."

In Dr. Richardson's work on the *Diseases of Modern Life*, it is stated that the emanations from sewer-air were compounded of several gases, but that the true disease-producing agent was sulphuretted hydrogen gas; and, in the *Lancet* of February 23rd, 1861, Dr. Letheby records a case where four men lost their lives by sewer-gas. The *post mortem* appearances were similar in these two children at Dairycoates. "The eyes and mouth were opened, the lips and tongue livid, the pupil widely dilated, the blood black and fluid, the lungs congested, the heart full of black fluid blood, the right side gorged; and there was a bloody froth in the windpipe; in the brain, the large vessels of the dura mater were full of black fluid blood."

Within a few yards from where the children in question were playing just before they were taken ill, there was about a ton of decomposed organic matter, contents of cesspools and rotten fish, etc. The sewer-openings were most offensive. In the interval of the adjournment of the inquest, another child died close by, after a few hours' illness, having similar symptoms; and, in another house in the immediate district, two more children died, with bilious vomiting, diarrhoea, and convulsions. In this house, at high tide, the atmosphere was so offensive that the family were sick and giddy, and, after the loss of their children, were obliged to leave the house. On careful examination, it was found to be caused by the escape of sewer-gas into the dwelling. Until there are ventilating shafts placed in the sewers, during high tide the sewer-gas will be forced into the houses, especially those which are badly trapped.

Judging from the symptoms of these children before death took place, and the morbid changes found after death, may I ask if it is still, in your opinion, "a novel idea that these children may have died from inhaling sewer-gas"?—Yours sincerely,

THOMAS JACKSON, M.D.

* * Dr. Thomas Jackson states that the children whose deaths were the subject of the inquest at Dairycoates were attended by Dr. Wm. Jackson. The coroner, in his charge to the jury, said: "Mr. Cartwright (an unqualified person) seemed to have been the only person really employed to treat the children, as Dr. Jackson only came in at the finish, when they were dying;" and he further stated that "here was a chemist practising as a medical man, and under a medical man's name; and, when he had a serious case, or there was likely to be a death, he then consulted Dr. Jackson." There was also, he said, a division of profits between Cartwright and Dr. Jackson. We think, then, that we did not go beyond the facts of the case in stating that the deceased children were not attended by a qualified medical practitioner, as Dr. Jackson never really treated the children. We characterised as a novelty the idea that sewer-air had caused an inflamed and ulcerated condition of the stomach, with rapidly fatal illness. Dr. Thomas Jackson demurs to this statement, and quotes cases recorded by Drs. Murchison and Letheby in opposition to our view. In no one of the cases he quotes is there any mention, however, of gastric inflammation attended with ulceration. Moreover, Dr. Bell, who assisted at the *post mortem* examination at Dairycoates, attributed the deaths of the children to the inflamed and disorganised condition of the stomach, probably the result of irritant poison or irritant food.

F. J. THOMAS (Swaffham).—We agree with Mr. Thomas. His emoluments from his office appear to be such that he has no cause to complain. Our remarks applied exclusively to Dr. Milne, and the unworthy treatment of him by his board.

THE LUMLEIAN LECTURES ON INFLAMMATION.

Delivered before the Royal College of Physicians.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College, London.

LECTURE I.—INJURY AND DAMAGE.

I FEEL that I need some apology for coming before the College with a subject which has been frequently discussed already, and about which it may be presumed that I have nothing new to say. I cannot promise that it will not be so; for I have no new doctrine of inflammation to advance, no great discovery to relate.

In what I shall have to say to-day of the nature of the process of inflammation, it will be my purpose to strengthen the position I have taken with reference to the subject on former occasions, and particularly in my essay on Inflammation published in 1870, and in the lectures I gave in the theatre of the University of London seven years ago.* In my second lecture, I intend to enter on a question which, though not new, has attained of late years a significance which it did not before possess—that of the ætiology of inflammation—that is, the discussion of the various agencies which, either as principal or accessory causes, may be concerned in its origin. And, lastly, I desire, in my third lecture, to bring our modern knowledge into comparison and harmony with the teaching of those who have thought and observed best on the subject, from Hunter to our own times.

1. *Inflammation is the Physiological Effect of the Damage done to a Tissue when it is injured.*—The definition which in our epoch has carried more weight and has had more influence than any other, is that given in nearly the same terms, first by Mr. Goodsir (*Anatomical and Pathological Observations*, page 43, Edinburgh, 1845), and subsequently by Mr. Bowman, who, in his well known lectures (*Lectures on the Parts concerned in Operations on the Eye*, London, 1849, page 29), described the effect of an injury of the cornea as “a change wrought in the natural acts of nutrition then existing in the wounded part.” The same conception originated in the mind of these two observers independently, from the study, which the introduction of the microscope and their own anatomical discoveries had rendered for the first time possible, of the textural changes which inflammation leaves behind it. This conception, so thoroughly British in its origin, was soon transplanted into Germany. It was adopted by Virchow with little modification, and became part of that more general doctrine of “cellular pathology” which at one time ruled pathological opinion, and has not even yet lost its influence. The work that Mr. Bowman did about inflammation was, like all the other work he did in those early and fruitful years, complete. The appearances which he described in the cornea as evidence that the “natural action of its nutrition” had undergone a change, are as full of interest to us at the present time as they were to him; and, if we were now to repeat his experiments, we should find the results to be exactly as he said they were. Why, then, should we not content ourselves with the same explanation? Why should we not continue to say with him and with Goodsir, “Inflammation may be described as a modification of existing normal processes”? The answer is that, during the last ten or fifteen years, another step forward has taken place—a step forward in the same direction as the former one, and, as it was, dependent on the acquirement of new methods of observation. These methods may be described as physiological, just as those which led to the brilliant discoveries of the preceding epoch were anatomical. We are now striving to become eye-witnesses of the actual processes of disease at the same time that we continue, with unabated curiosity and vastly improved means, to scrutinise its results. We have thereby learnt that many pathological processes, and particularly the fundamental one which now occupies us, are not quite what, from their anatomical results, they seemed to be. We find, when we actually watch the effects of injury on a living part,

that the old order changes, but does *not* give place to new—that we have before us, not disorder of function, but arrest; not the diversion of the resources of nutrition into new channels of activity, but merely the accumulation of such resources where they are useless, if not destructive, and, consequently, that the restoration of a part to the natural state must be as simple as its departure from it—that the resolution of an inflammation means either that the temporarily arrested processes of normal life simply go on again, or, if the process have proceeded to its ultimate issue—death of the affected part—that what has been destroyed has to be repaired, not (as we used to think) by a continuation of the morbid processes, but simply by the restitution of the normal condition. The principle is the same (if I may be permitted to use so homely an illustration) whether the inflammatory process invade our houses or our bodies. Obviously, no one would think of regarding the destruction of a house by fire as a modification of any normal process, nor would it occur to any one that the damage done would be best repaired by extension of that process, perhaps in a milder form.

I am well aware that this illustration is open to the objection that an inflammation has only the most remote resemblance to a fire; but I use it merely for the purpose of enforcing what I want to say—namely, that, if we confine the word inflammation within the limits of the original definition, and accept as its phenomena those which have been assigned to it by the authority of tradition (which is the only authority that has any claim to be heard in such a question), its essential nature is fully expressed in the word *damage*, and that it has no further relation to the process of repair than that which arises from the universal operation of the physiological law that, whenever part of an organ is destroyed, new growth proceeds from the old, to supply the defect.

2. *Mode of Origin of Inflammation in a Non-Vascular Tissue.* *Keratitis cannot now be understood as a “perversion of the natural acts of nutrition of the part.”*—Keratitis, as I have already hinted, and will endeavour to show more completely in my third lecture, was the point of departure of the cellular pathology. It is, therefore, with the cornea that we must begin, if we desire to re-examine the grounds of that doctrine by bringing to bear upon it the direct teaching of experiment.

Although in the cornea we have to do with a structure which is devoid of vessels—and therefore, in the sense of the classical definition, incapable of inflammation by itself—yet, inasmuch as, in every keratitis, the adjoining vascular structures sympathise—*i.e.*, are also affected by the injury, it is allowable to include what happens in the vascular border as forming part of the process.

When an incised or punctured wound is made in the cornea of the rabbit, of sufficient depth to penetrate below the superficial epithelium and expose the proper corneal tissue, the reaction is exceedingly slight. All that can be seen by the naked eye is, that the wound is surrounded by a haze of opacity, which rapidly disappears; but there is no congestion of the limbus. As an exciting cause of inflammation, therefore, such a wound is inadequate, for none of the objective signs of inflammation are present. To induce them with as limited an injury as possible, the best way is to insert a silk thread as a seton at the centre of the cornea, withdrawing it as soon as it has accomplished its purpose. After several hours, during which no visible effect follows the injury, the cornea is seen to be surrounded by a red border, which consists of the wreath of dilated capillary loops of the episcleral vessels, from which it, for the most part, derives its nutrition. It often happens that the inflammation which has thus begun proceeds further; that the marginal congestion extends and increases until the cornea is surrounded by a ring of tumid and highly vascular mucous membrane; that the surface of the conjunctiva is bathed with pus; that the cornea becomes more and more opaque; and that eventually pus collects in the anterior chamber.

This effect exceeds what is wanted, as much as the others fall short of it. The excess of reaction may be avoided by withdrawing the ligature as soon as the conjunctivitis has begun; in which case it may fortunately happen that the zone of redness is limited to one border only, opposite to which a radial tract of opacity extends towards the middle of the cornea, and becomes continuous with the zone of opacity which surrounds the path of the seton. To understand what this means, it is scarcely necessary to appeal to the microscope. It is plain enough that the central area of opacity is of the same kind as the little cloud which, when the cornea was injured by merely breaking up its surface with the point of the scalpel, as Mr. Bowman did, surrounded the little wound. The other area as evidently comes from the edge, and is a consequence of the surrounding inflammation. Mr. Bowman would have taught us to understand both as results of a “change of the natural acts of nutrition having their seat in the wounded part”; and particularly he would have regarded the central

* The definition which I gave in 1870, in my essay on the Process of Inflammation, published in the *System of Surgery*, was as follows. “Inflammation is the succession of changes which occurs in a living tissue when it is injured, provided that the injury is not of such degree as at once to destroy its structure and vitality.”—*System of Surgery*, 1870, page 720. The definition accepts the characteristics of the inflammatory state as they were stated by Celsus, and connects them with each other by their common relation to the cause which produces them—*injury*. The lectures referred to were not reported or published.

CROONIAN LECTURES ON THE CLIMATE AND FEVERS OF INDIA.

Delivered before the Royal College of Physicians of London.

BY SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE I. PART II.—ETIOLOGY OF FEVERS.

(Continued from page 408 of last number.)

History of Origin of Malaria: Nature and General Characters of Climate.—India represents almost every variety of soil and climate. In the southern and tropical parts, in the forest and jungle districts, on the littorals and deltas of the great rivers, on an alluvial or dark loamy soil, heat and moisture generally prevail; on the elevated tracts and arid table-lands, there is a drier though heated air; whilst on the hills the rarefied, cooled, and tempered air of mountain-ranges is found.

The influence of the monsoons is most marked within the tropics. The temperature of Southern India is comparatively equable, though high; the isothermal lines are influenced by elevation. Except on the higher table-lands and hill-stations, the general character of the climate, vegetation, people, and their surroundings, is tropical, whilst the endemic diseases are of a tropical or malarial type.

North of the Vindyan hills, and along the basin of the rivers of the Punjab, the Indus, Ganges, and Brahmapootra, and on the extensive alluvial plains accumulated by these great rivers, we have many phases of climate, and extreme diurnal range of temperature. Bengal is hot and damp, with a prolonged rainy season and a delightful cold season. North-West India, Oude, the North-West Provinces, and the Punjab, have a climate so cold in winter that frost is frequently seen, but a hot season of great intensity, with dry burning winds, great alternations of temperature and varying states of atmospheric humidity, and a scanty supply of rain; whilst the hill-stations of the Himalayas and other mountain-ranges, at elevations of 5,000 to 7,000 feet, are cool and bracing, and are health-resorts of Europeans. The differences in climate are especially noticeable in the dry heated air of Northern India, as compared with the steamy atmosphere of Bengal and the southern districts, the former being far more tolerable than the latter.

Much might be said on the relative effects of solar heat and light, moisture or dryness, and electrical states of the air, amount of ozone, and of the various soils, excess of vegetation or its absence, of atmospheric pressure, vapour-tension, and the like; but I must pass on to consider the more special causes of disease which we call malaria. They exist in certain regions more intensely than in others. The low-lying jungle-land at the foot of the Himalayas, known as the Terai, abounds in them; also the alluvial basins, silted-up beds and debouchures of rivers, waterlogged soil of land in which watercourses have been obstructed; littoral plains; in some regions the sandy deserts. There are regions that were formerly populous, now deserted, and given up to wild beasts and malaria, which probably desolated them: such are the ancient city of Goa, and cities of which the ruins can hardly be traced in dense jungle.

Much is attributed to climate which is more properly chargeable to defective hygiene and careless mode of living. Malaria prevails almost universally in India; at all events, periodic fevers occur everywhere, and there are extreme vicissitudes of temperature and endemic causes of dangerous disease. But with care, temperate living, and ordinary precaution as regards exposure to heat and to obvious causes of disease, the climate itself is less noxious than may be supposed. Sanitary work has already reduced the death-rate of European soldiers in India from sixty to sixteen per 1,000, and is gradually proving as beneficial to the civil population.

Malaria.—MacCulloch says: "Perhaps the best, as the truest, account of the nature of malaria would be an acknowledgment of utter ignorance" (*On Malaria*, p. 419), and I fear we have not much to add to this description of a hypothetical cause of disease which is of very general prevalence (according to Lombard) between the 65th parallel of north and the 40th of south latitude; and has been estimated to cause half the mortality of the human race, and has been called "the great enemy, the very Destroying Angel to whom the task of keeping man within bounds has been specially assigned" (*MacCulloch On Malaria*, p. 453).

In tropical climates it attains its greatest intensity. It is the cause of several forms of fever, and seems to be intimately connected with the etiology of cholera, dysentery, hepatic disease, bowel-complaints, and other morbid conditions; but in temperate climates, under certain conditions, its effects are manifested. It abounds in Southern Europe, and our own islands are not exempt; though the agues that prevailed in London in Sydenham's time are now, thanks to sanitary science, matters of history; its influence, however, still lingers in certain districts, in the eastern or southern counties, such as the fens of Lincolnshire, the marshes of Essex or Kent; whilst the writings of Pringle, Ferguson, G. Blane, MacCulloch, and others, describe its effects in Europe as being formerly of great severity.

With the view of showing the decline of malarial fever in this country, I have consulted the records of one of our great metropolitan hospitals, and am indebted to Dr. S. Mackenzie for a return which must have cost much labour. The return shows that the prevalence and type, and the quantity as well as intensity, diminished. The same process is going on in India, and there is reason to believe that, as sanitary knowledge becomes more a part of popular education and belief, further decrease of sickness and mortality will be the result.

The table shows a considerable decrease in the number of fever-admissions. In 1770, of 1,483 patients admitted, there were 21 cases of intermittent, with one death. The year 1780 seems to have been unusually unhealthy. There were, among 1,617 persons, 59 cases of intermittent fever, but only one death. 1779, with 1,886 in-patients, had 40 cases of intermittent, with four deaths. The year 1790, with 1,585 patients, there were four cases of intermittent. (The register is imperfect up to 1830.) In 1840, with 3,337 in-patients, there were six cases of intermittent fever; no deaths. In 1870, with 5,218 in-patients, there were only two cases of intermittent. In 1880, with 6,312 in-patients, there were 14 cases, but no deaths.

Before Hippocrates wrote on epidemics, it was known that people who lived in marshy districts were liable to suffer from intermittent fever. But it was not until the end of the seventeenth century that Lancisi, in Rome, wrote on marsh-exhalations, and pointed out their connection with these fevers, and called them paludal or marsh miasmata. The term is still in use, though "malaria" is more generally preferred; that of paludal being apt to mislead, by indicating marshes as the only cause, whereas paroxysmal fevers are often seen on a dry, sandy, and rocky soil. Still, experience teaches that the presence of moisture, organic matter, and a temperature above 60°, are generally requisite. Whatever be the cause, malaria is abundant in India, both in marshy and in arid regions. Since the time of Varro (114 B.C.), Lucretius (95 B.C.), and Columella (50 A.D.), Kircher (1602), and Linnæus (1778), it had been surmised that a low organism might be concerned in its production. In 1866, Dr. Salisbury thought he had discovered it in a palmella associated with cells and sporules of other fungi, to which he gave the name of gemiasma or ague-plants. Mitchell of Philadelphia, in 1859, endeavoured to show the cryptogamic origin of malaria (*American Journal of Science*, January 1866). Balustr also discovered a species of alga in the Pontine marshes (*Comptes Rendus*, tome lxxi, No. 3, p. 235). Niemeyer also ascribed malaria to low organisms. Harkness (*Boston Medical and Surgical Journal*, January 14th, 1869) says that he has found the palmella and spores in snow on the summit of the highest Alps, and says that they may readily become mixed with saliva and urine from without, and have nothing to do with malaria.

Klebs and Tommasi-Crudeli, in 1879, announced the discovery, in the soil, water, and air of the Roman Campagna and marshes, of germs or sporules which are capable, under the influence of warmth (above 68 Fahr.), moisture, and air, of rapidly developing into sporigerous bacilli; and it is stated that the bacilli or spores have been found in the marrow of bones, in the spleen, and in the blood of persons dying of pernicious fever. These bacilli they consider to be malaria, and the results of their investigations stand thus. *a.* Rabbits inoculated with washings of soil, or with fluids in which the bacillus had been cultivated, suffered from intermittent fever, the interval being in some cases eighty hours. *b.* Filtered liquids caused only slight symptoms, even when five times the original quantity was used. *c.* All the animals with intermittent fever had marked enlargement of the spleen, to nine or ten times the normal size. *d.* Many of the spleens contained black pigment, especially those from graver cases, just like spleens of persons suffering from ague. *e.* The bacilli were found in the spleen and marrow of animals, as well as in the soil. They were at first ovoid, mobile, shining spores, which developed in the body, as well as in cultivation-apparatus, into long threads, homogeneous at first, but soon dividing into sections, each of which give rise to a new thread. *f.* These bacilli could not develop without oxygen, and required a richly nitrogenised medium for their growth and cultivation.

The most careful examination has failed altogether to detect any separate active principle, though it has been shown that the air of marshes contains a variety of products that are absent from the normal atmosphere, *e.g.*, excess of carbonic acid (6 to 8 per 1,000 volumes), sulphuretted hydrogen, phosphuretted hydrogen, watery vapour, ammonia, free hydrogen, organic matter, and the microscopical *débris* of vegetable and animal matter. One or other or several of these may be present, but they are not malaria. That some subtle agency, in addition to climatic influences, is at work, seems probable; but whether it be one or more, we know not. The theory of the material nature of malaria is, at any rate, a good working hypothesis; as such only would I receive it, pending more definite information.

A glance at the distribution of fevers in India will show that they occur in districts that present opposite characters, and it would be easy to show that they are sometimes absent altogether where marshes and other conditions presumably favourable to their existence abound; and that in arid regions in Africa, Spain, and on the sandy soil of Walcheren, in Greece, the Island of Ascension, etc., the fevers are often severe.

MacCulloch believed in malaria from a variety of sources: the surface of damp ground; stagnant waters, from the lake to the smallest pool; the dung-heaps and pools at the doors of farmhouses and cottages; from sewers and ditches; from the mud left by the recess of the tide, and at the mouth of rivers; marshy and swampy spots in low situations near woods and on roadsides, or small spots of coppice and brushwood in England. He mentions a case in the West Indies where a number of men were seized with fever from exposure to ground which, by the removal of boxes, was exposed to light and heat. From the mere *malaise* of disordered health which many people feel in certain localities that are damp and ill-ventilated, to the severest form of remittent, he ascribes them all to malaria. We are not wont to call it malaria unless it produce periodic fever, neuralgia, or cachexia; but we do find people recover from a depressed state of health on removal from a damp locality, and in this sense we may call the cause malaria; and the ill effects of such localities on persons who have previously, it may be long before, suffered from tropical fever, are common. I have seen cases, to whom each autumn brought back vague indefinite symptoms of malarial fever, or neuralgia, and rheumatism, restored to health by quitting the locality at that season. Lately, we read of malaria from flower-pots. I have heard of it from watering a flower-bed in India, and of an insidious disease arising from the presence of living plants in the hot damp air of rooms.

Malarial fever is the origin of most of the diseased conditions I have to deal with in connection with Indians who appear before me at the India Medical Board; but I occasionally see cases that present the same appearances, and, indeed, who suffer from periodic fever, who have never been in the tropics, and for whom it is not possible to find a malarial origin for the disease.

The existence of malaria as a particulate thing has not yet been demonstrated, and it is still asked if such a thing exist. It may be so; there are circumstances connected with its action which are difficult to reconcile with a parasitic origin; and, for the present, our attitude with respect to that view, much as we may wish that it should prove true, must be one of reserve; but who that has followed the progress of pathological investigation during the last quarter of a century would venture to assert that, in such researches as those of Pasteur, Burdon Sanderson, Lister, Greenfield, Koch, Klebs, Tommasi-Crudeli, and others, we may not find a complete solution of the problem?

[To be continued.]

DEATH AND DUTY.—We regret to have to record the recent death of Dr. J. T. Gadsby of Mansfield, who died from illness contracted during the performance of his professional duties. It appears, according to the *Nottinghamshire Guardian*, that some weeks ago a serious outbreak of diphtheria occurred at the Mansfield Workhouse, and Dr. Gadsby, as one of the medical officers, devoted much time and labour to prevent the spread of the infection, and to aid the distressed children. When the contagion was at its height, seventeen children and the schoolmistress of the house having caught the disease, Dr. Gadsby contracted the malady, and was obliged to relinquish active duties. He was promptly attended by Dr. Godfrey and Dr. Sparke, and diphtheria presented itself in a virulent form. Medical skill, however, proved unavailing, and he succumbed a fortnight from the date when he received the infection. Dr. Gadsby, who was an M.D. of the University of London, and formerly house-surgeon at Richmond (Surrey) Hospital, was only about thirty years of age, and his loss is keenly felt by a wide circle of friends.

THE GULSTONIAN LECTURES ON PULMONARY CAVITIES: THEIR ORIGIN, GROWTH, AND REPAIR.

By WILLIAM EWART, M.D. Cantab., F.R.C.P.,
Assistant-Physician and Pathologist to the Brompton Hospital for Consumption;
Physician to the Belgrave Hospital for Children; Demonstrator of
Physiological Chemistry at St. George's Hospital.

LECTURE II.—PART I.

AMONG the varieties of pulmonary consumption, enumerated in my last lecture, there is one which, in its history, differs so widely from the rest, that I have ventured to isolate its description from that of other forms. Whereas, in the ordinary cases, the earliest symptoms are trivial, and it is almost impossible to trace with accuracy the beginning of phthisis, in this variety the transition from health to disease is indicated by a striking landmark, never overlooked by the patient nor by the physician. The causal relation implied in the phrase “phthisis ab hæmoptoe” had been accepted from the days of Hippocrates down to modern times—as a self-evident truth, even more than as a dogma. It may be taken as no small proof of the scepticism of the nineteenth century, that Niemeyer’s reassertion of so venerable a statement should have called forth so much astonishment, and so strong an opposition. To what extent Laënnec’s teachings may have assisted towards this effect of novelty, I will not attempt to discuss. Laënnec’s assumption of a tuberculosis preceding and causing hæmoptysis (see *Traité de l’Auscultation Médiate*, vol. i, page 646), reasserted with less reserve by some of his followers, remains to this day unproved, although the *onus probandi* rests with his, rather than with the more ancient, doctrine.

Daily experience teaches us that hæmorrhage forms no essential part of consumption; neither does phthisis invariably follow upon hæmoptysis. Of this, we are reminded by Niemeyer’s first proposition: “Abundant bronchial hæmorrhage occurs very frequently, it is admitted, in such persons who are neither consumptive at the time of hæmorrhage, nor become so afterwards.” (*Clinical Lectures on Pulmonary Consumption*, Sydenham Society’s translation, page 38.) Could there be any clearer proof that, in a large number of cases, tuberculosis is not the prime factor in pulmonary consumption? On the other hand, the time-honoured tenet, “phthisis ab hæmoptoe,” was not adopted by Niemeyer without an important modification. According to him, catarrhal pneumonia forms a necessary link between the hæmorrhage and the phthisis.

To Dr. Reginald E. Thompson belongs the credit of having taken up the subject at this point, and vigorously pushed forward its analytical study. Some of his conclusions so immediately concern the etiology of cavities, that they claim our attention; but, for a full account of his interesting views on the subject of hæmoptysis, I must refer you to his original paper in volume lxi of the *Royal Medical and Chirurgical Society’s Transactions*, “On the Pathological Traces of Pulmonary Hæmorrhage,” and to his work on *The Causes and Results of Pulmonary Hæmorrhage* (London, 1879). The term “hæmorrhagic phthisis,” frequently used by clinical observers, is not free from the reproach of ambiguity. Hæmoptysis, even of recurrent type, occurs from three very different causes: 1. As the result of confirmed phthisis; 2. As an early complication of the congestive forms of the disease; 3. As an event not dependent upon pre-existing phthisis, but capable of producing the latter. The results in the three cases are equally divergent. The first variety of hæmoptysis, commonly due to pulmonary aneurysm, usually terminates in fatal hæmorrhage. The second, supervening in the midst of a pneumonic phthisis, almost invariably leads to serious exacerbations, and to a rapid breaking down. There can be little doubt that the third variety comprises the strictly hæmoptoeic forms of consumption. According to Dr. R. E. Thompson, hæmophilia bears the responsibility of the hæmorrhage in a majority of these cases; and, if I understand him rightly, phthisis and excavation are events subsequent to the local disablement of the lung by the products of hæmorrhage. The stagnation of the residues of hæmoptysis had been mentioned by Morton and by Hoffmann; and Niemeyer had described their infiltration in the alveoli as a factor in catarrhal pneumonia. But Dr. Reginald E. Thompson was the first to emphasise that the worst results

beculæ is effected by a slow superficial necrosis, which I have described as never absent from the internal surface of cavities; it is hastened by all those circumstances which promote the necrotic process, and especially by maceration. As an instance of this last influence, I would point to the excavations situated at the posterior part of the upper lobe, and in the mid-dorsal region, where, owing to the supine posture, fluid secretions are apt to be retained for long periods. Anatomical peculiarities are in favour of a more extensive and of a more persistent trabeculation at the pectoral region than at other parts. In this situation, behind a tolerably shallow layer of spongy tissue, the main bronchial ramifications form a *pes anserinus* of considerable strength, and the larger divisions of the blood-vessels contribute greatly to the resisting power of the district. Thus the normal type of cavities in the pectoral region would be mainly trabecular; the normal type at the apex proper, and especially at the posterior apex, where the bronchial and vascular supply is terminal, mainly the non-trabecular form.

In size and in aspect, trabeculæ differ widely. They may form bands of substantial thickness, or mere cylindrical cords; and they are liable to present every degree of ulceration, but they all agree in possessing a lining similar to that belonging to the cavity. Their destruction usually proceeds with the greatest activity at the point furthest removed from their attachments: and, when disruption has finally occurred, the divided stumps gradually waste and disappear.

The sudden rupture of a trabecula under the influence of strain is probably of less uncommon occurrence than is generally suspected. Dr. Douglas Powell narrates a case of this nature in which the physical signs enabled him to recognise, during life, this event, which was subsequently confirmed by the necropsy.

The exact nature of trabeculæ has been the subject of some divergence of opinion even among competent observers, a circumstance which I am at a loss to understand. By some, the vascular nature of trabeculæ is upheld; and it cannot be denied that blood-vessels often constitute the only bond of connection between the opposite parietes of a large cavity. This is, indeed, the usual appearance presented by completed excavations, due to caseous pneumonia. But the smooth surface, the tough yellowish aspect, closely resembling in colour and consistency the fibro-elastic coat of a large artery, and the mode of branching special to the blood-vessels, constitute as many unmistakable features, which render impossible a confusion between the latter and trabeculæ proper. Trabeculæ have too often been stated to consist of bronchial tubes. From a large number of observations, I am able to affirm that patent bronchi very rarely, if ever, enter into their composition. I cannot recall more than one instance of a bronchus traversing a cavity of some magnitude, and even in this case the tube was the seat of incipient ulceration. With Dr. D. J. Hamilton's opinion that trabeculæ are the remains of interlobular septa, I can partially agree. I am familiar with a form of pulmonary liquefaction in which the lobules are completely dissected; here, neither tubercular fibrosis nor inflammatory thickening of the tissue obscure the simplicity of the pathological process, which is one of moist necrosis. The remarkable honey-combed condition which results is, however, far from being typical of what is usually understood by a trabeculated excavation. In the formation of the ordinary trabeculæ, the fibrous tissue of the interlobular septum undoubtedly constitutes an element of resistance; but the position of trabeculæ is mainly determined by the blood-vessels, and especially by the bronchial tubes. As pointed out by Dr. D. J. Hamilton, trabeculæ commonly are inserted into the side of a bronchus. If the bronchial tube which appears to enter a trabecula be carefully probed, the instrument introduced at the bronchus cannot be made to pervade the trabecula, but issues immediately in a direction parallel to it, clearly showing that the tube has been gutted. In earlier stages, the bronchial tube presents a series of fenestrations in which we readily recognise the orifices of ulcerated bronchioles. The larger air-tubes are gradually overtaken by the same ulceration, but the peribronchial sheath, with its vessels, remains an important constituent of the trabecula, and assists, in no small degree, in its conversion into fibroid tissue.

I have placed before you drawings and diagrams of trabeculæ both in longitudinal and in transverse section, demonstrating the partly alveolar nature of their structure. The sections exhibit the following component parts: 1. Blood-vessels usually contracted and thickened, and occasionally obliterated; 2. A layer of spongy substance always much collapsed; 3. Fibrous elements such as normally belong to the peribronchial sheath; 4. A false membrane analogous to that which lines the cavities. If I understand rightly the mechanism and the formation of trabeculæ, the latter are but bridges of pulmonary tissue which originally separated distinct cavities, and had escaped the influence of the disease until deprived of their air-supply by the laying open of their bronchi. The collapse of the alveolar tissue, and its transformation into a compact layer, tightly fitted around a branch of the pul-

monary artery as an axis, are nothing more than late consequences of the bronchial ulceration.

New vessels, often of considerable size, are abundantly developed in connection with inflammatory changes in the trabecula; but, of the original structures, the only one preserving functional activity is the artery. In this fact consists one of the chief uses, as well as one of the main dangers, special to trabeculæ. The trabecula remains for a considerable time the chief source of nutrition for the segment of lung-tissue into which it is inserted. As long as blood flows to the periphery through the trabecular artery, some risk of hæmorrhage may be said to exist. But, practically speaking, bleeding very seldom occurs from these vessels, which remain well protected by a layer of collapsed alveoli, until finally overtaken by obliteration. Aneurysm is remarkably more frequent in arteries of the wall than in those crossing the cavities. Sooner or later, the lumen of the trabecular vessels lessens in proportion to the contraction and to the thickening of their walls, and finally it disappears.

In their ultimate shape, trabeculæ may be said to consist largely of elastic elements, namely, collapsed alveoli and vascular membranes. The importance of this fact will become apparent when I describe the mechanism of the contraction of cavities, and will afford some excuse for the development which I have given to this part of my subject.

Concerning the blood-vessels which traverse cavities, I need add but little to what I have incidentally stated. In the moister varieties of phthisis, the bronchial and pulmonary divisions are carried away with the general softening; but where fibroid change is active, they survive for a time, and partake in the fibrosis. Of this we have seen a striking instance in caseous pneumonia. In transverse sections of trabeculæ, it is often possible to recognise the blood-vessels belonging to various systems. In the drawings and in the diagrams, which I owe to the skill of Mr. Arthur Grayling, house-surgeon to the Belgrave Hospital for Children, you will notice, in addition to numerous thin-walled and distended vessels of new formation, a central cluster of large blood-vessels undergoing degenerative thickening. The pulmonary artery, the pulmonary veins, and a branch of the bronchial artery, all come into view; and in this instance, the trabeculæ contains in addition, by the side of a lymphatic duct, a smaller bronchial tube completely obliterated by cell-growth. Among these vessels, it will suffice for the present specially to consider the most important—the pulmonary artery.

When finally laid bare by gradual removal of the condensed spongy tissue, the surface of the artery becomes an excellent indicator of the slow destruction which incessantly proceeds within cavities. This secondary ulceration of the blood-vessels constitutes the real danger of hæmorrhage. It was pointed out by Dr. Douglas Powell in his book *On Consumption* (2nd edition, 1878, page 74) that the fibrotic cavities of old standing are most likely to develop aneurysm, and that aneurysm is more especially found on the exposed side of vessels which are partly buried in indurated tissues. I have often verified the correctness of this observation. For the fact itself, the following appears to me to be a satisfactory explanation. Owing to their persistent connection with living lung-substance, the flow of blood within the vessels in question suffers no diminution; but, inasmuch as, in the segment of their wall which is sunk in fibrous tissue, absolute rigidity has taken the place of the elasticity natural to the vascular membranes, the blood-pressure is entirely thrown upon the exposed segments, which are ill nourished and weak. The tendency to bulging once established, becomes progressive. If the cavity be small, its limits may be reached by the vascular membrane, and the danger of rupture averted. The cavity then becomes a blood-space, in which opportunities are afforded for coagulation. Obliteration of an aneurysm may also ensue, as originally pointed out by Rokitsky, even after rupture, from the lateral pressure of the blood effused into the cavity, provided the bronchial orifice be temporarily obstructed, or naturally so small as to be unable to allow the blood to escape before the occurrence of coagulation. Most usually the cavities are too large to render possible either of these events, and, after repeated premonitory hæmorrhages, the final burst occurs with irresistible violence.

A description of those vessels which do not traverse the cavity, but are distributed to its walls, must be deferred until my next lecture; and I will pass at once to the consideration of the relations of *bronchi* to *vomicæ*. As long as the excavation is lobular, the conditions are simple, the vomica is terminal to a single bronchiole. This lobular stage is extremely transient; in most cases, the destruction attacks from the first or in rapid succession several groups of lobules; and the good-sized trabeculated cavity which results intersects the path of numerous air-tubes.

It may be accepted as an invariable rule that all non-cartilaginous bronchi are destroyed at an early date of the excavation; but the same fate sooner or later awaits the larger branches. The difference in the

ABSTRACT OF LECTURES

ON THE

MORPHOLOGY OF THE MAMMALIAN SKULL.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,

Hunterian Professor of Anatomy in the College.

LECTURE V.—THE CHANGES UNDERGONE BY THE ENDOCRANIUM:

a. THE MEMBRANOCRANIUM; b. THE CHONDROCRANIUM; c. THE CHONDROSTOCRANIUM; d. THE OSTEOCRANIUM.

IN its first condition, the cerebral capsule is composed of indifferent tissue, or embryonic cartilage, and is spoken of as the *membrano-cranium*. A layer of this same kind of tissue, which will give rise to the *dura mater*, is formed around the cerebral mass immediately inside the membranocranium proper, and this is continuous with the membranous sheath or *thea vertebralis* of the spinal cord; this layer undergoes no further change than development into a very dense fibrous tissue.

After embryonic or larval life, no existing vertebrate (*Craniata*) has an entirely membranous cranium, but in nearly all the types certain tracts continue membranous for a considerable time, and are never replaced by proper cartilage; at most, they become converted directly from membrane into bone.

The cranium which permanently retains the membranous condition in the greatest proportion is met with in the Myxinoidea, in which group it combines the characters of membrano- and chondro-cranium. It forms a shallow trough of cartilage, the bottom of which is very imperfectly closed with soft cartilage; the hard sides of the trough are not differentiated from the upper parts of the face. Thus half the floor, nearly all the sides, and the whole of the roof are membranous.

A still more simple condition than this is found for a time in the larval lamprey, when the trabeculae are the only cartilaginous parts of the cranium; these meet together behind the nasal sac, but leave a large membranous fontanelle below, the sides and roof being also membranous. Immediately after transformation, the floor of the skull becomes filled in by a cartilage similar to that in the Myxinoidea, and gradually side-walls and even a partial roof are formed. The side-walls correspond to the exoccipital, alisphenoidal, orbitosphenoidal, and lateral ethmoidal regions. A nearly perfect tegmen is formed over the postphenoidal region; this is too far forward to be considered the homologue of the very constant occipital arch. In this type, the upper parts of the face are not differentiated from the basis cranii, the anterior part of which is continued forwards, under and in front of the nasal capsule, as a large shield-shaped plate, emarginate in front (the posterior dorsal cartilage). All this cranial structure, except the very feeble hinder part of the parachordals, is composed of hard cartilage.

The chondrocranium of the larval frog resembles so closely that of the lamprey, that it is best studied before passing to the fishes proper. In the tadpole, the cartilage is of the ordinary hyaline kind, neither so hard as the lateral parts of the basis cranii of Myxine, nor so soft as its partial floor. In this case also, the floor before ossification is partial, the space between the trabeculae being imperfect behind. In the occipital region, the two halves are separated by the notochord, which, in the larger tadpoles at least, is invested with a peculiar form of cartilage. The floor is greatly extended under the auditory capsules, but the roof and upper part of the side-walls are entirely membranous. The emarginate front part of the skull (cornua trabeculae) is as solid as the rest, and the suspensorium is continuous with the basis cranii before and behind.

The perfect chondrocranium of the larval Urodele is also extremely like that of a lamprey, with this difference—viz., that the large parachordal floor is permanently membranous from the notochord to the ethmoid. The intertrabecula, which is present in the forms just described, is here absent permanently. The side-walls extend but little way; the roof is only present behind, and does not belong to the posterior sphenoid, as in the lamprey, but to the occipital arch, as in

the anurous larvæ. The parachordals are two separate cartilages, embracing the membranous elastic sheath of the notochord. The chondrocranium is continuous with the upper part of the suspensorium—an acquired character; but there is no direct connection with it in the ethmoidal region.

These chondrocrania have not, in the stages just described, any calcification in the cartilage. The Selachians, however, have their permanent chondrocranium largely calcified over the surface. The lowest form of Elasmobranch chondrocranium is that of the Chimæroids; their extremely solid skull, which has a cartilaginous tegmen and floor, and an anterior fontanelle, shows a continuity of the basi-cranial region with the large suspensorium of the mandible. But in the sharks and skates, including Cestracion and Notidanus, the suspensorium is quite free from the skull, which forms in sharks an extremely perfect box composed of solid hyaline cartilage, which after a time becomes calcified on its outer surface in tesserae. There is a fontanelle in sharks in front of the large tegmen cranii; but in some cases its position is almost entirely in front of the proper cranial cavity. In skates, two fontanelles are formed on the upper surface.

The chondrocranium of the Dipnoi is formed on the same pattern as that of the Chimæroids, but does not persist absolutely as cartilage, some bone being formed behind.

Above these types, the lower Ganoids, such as the sturgeon, have an extremely solid chondrocranium—far more solid and massive than that of a shark, and without any calcification or proper cranial fontanelle.

The chondrocranium of the bony Ganoids and Teleostei only persists as such for a very short time; but the membranous spaces formed in it are of great interest. In these types, there is a considerable cartilaginous tegmen formed, but independently of the side-walls, so that the orbital space is often largely membranous.

The chondrocranium of the Amniota also remains as such for a short time only; it is constructed in the same manner as in the Anamniota, but generally becomes converted into very perfect cartilage before ossification, and retains one large membranous fontanelle over the anterior and posterior sphenoidal regions.

In the suctorial fishes, there is no bony matter protecting the chondrocranium; but in the larvæ of amphibia the primordial skull is soon converted into what may be called a *chondrostocranium*. Superficial bones very early appear in immediate contact with the chondrocranium. The most important of these are the parasphenoid below and the fronto-parietals above. These are quickly followed by the cartilage-bones which appear, strengthening the nerve-outlets; yet each ossification is not confined strictly to one pair of nerves. About this time, the surface-cells of the cartilage in many places become calcified, not in tesserae, as in the Selachians, but in large irregular patches. In certain places, this passes rapidly into true bone, in the formation of which the perichondrium takes a share. There is no finished floor or roof of bone in the occiput of Amphibia, nor, indeed, in any part of the median line of the skull-base; but outside the emerging glossopharyngeal and vagus nerves, a crescentic tract of bone is formed on each side, the two almost meeting below and above, and giving rise to the exoccipitals; these ossify much of the auditory capsules, in front of which the pro-otics appear related to the fifth and seventh nerves. Outside the emerging olfactory nerves, another pair of centres appear; these belong both to the ethmoidal and to the anterior sphenoidal regions, and in the Anura they soon coalesce to form the girdle-bone or sphenethmoid, but remain separate in Urodeles.

In the Holostean Ganoids and osseous fishes, similar bones appear; but the ossifying sheath of the notochord is more perfectly developed than in any of the amphibia, and forms the exoccipitals. In the Teleostei, a supra-occipital is also formed, and in some species a basi-occipital also.

In the cold-blooded Sauropsida, the ossifications of the skull begin to take on more and more the characters with which we are familiar in the Mammalia; but the fore part of the cranium is to a large extent cartilaginous. The superficial bones also begin to acquire characters similar to those in the hot-blooded types.

In Birds, the development of the centres, both in cartilage and membrane, is very similar to that which is seen in the types below them; but, in their rapid growth, all distinction between cartilage and membrane bones is soon lost, and every suture in the cranium proper becomes obliterated in the highest types. Hence this skull, as well as that of mammals, may be spoken of as an *osteo-cranium*. In all Sauropsida, the ossifications of the auditory capsules are quite independent from those of the chondrocranium.

In the Mammalia, the development is after the same manner; but, as a rule, the bones formed in membrane retain their distinctness, whilst the centres that begin in cartilage are very apt to be fused together. The floor, sides, and roof all become converted into true bone.

RECTAL ALIMENTATION.

By W. JOSEPH TYSON, M.D., F.R.C.S. Eng., Folkestone.

IT seems somewhat strange, considering the frequency of those cases in which food can be retained by the stomach, that more attention has not been paid to the introduction of aliment by the rectum. To show how little this method of feeding is valued, I quote the following paragraph from Wood's well-known treatise on *Therapeutics* (second edition): "The solvent influence of the rectal juices is practically nothing, and formerly the attempt was made to supplement this complete lack of power by the use of soups. It is evident that very little nutriment can be introduced into the system by such a plan; and, consequently, feeding by the rectum has hitherto been a forlorn hope, and has accomplished little good." Here, I take it, the author is speaking of unpeptonised injections of food; but, even if this be so, cases are far too numerous, in which patients have been kept alive by ordinary beef-tea enemata, to allow such a sweeping assertion as the above to pass unchallenged. As one example of good resulting from rectal feeding, the following case is instructive. A. B., aged thirty years, had sickness, which commenced soon after she became pregnant the first time; for eleven weeks, she was fed by beef-tea enemata, a wineglassful being injected every three hours. Nothing was retained by the stomach during the whole time. Subcutaneous injections of morphia were given continuously to allay the constant retchings. At the end of eleven weeks' stomach fasting, premature labour was brought on, because of the serious condition of the patient; upon this, the vomiting ceased.

It must be admitted that many practitioners, even now, so disbelieve in rectal feeding as rarely, or ever, to adopt it; but I trust, with the valuable digestives which we at present possess, that the above mode of feeding will be increasingly had recourse to—not only in those cases where it is used simply to prevent starvation, but as a method of relief, even cure, in many affections of the stomach and bowel.

In dealing with this subject, there are two things which, I think, are often overlooked, and yet have materially to do with it. The first is the length of time a patient is able to live without food; and the second, the absence of wasting which occurs in many cases of chronic vomiting. As regards the first, it has commonly been said that, after a fast of from eight to ten days, a person dies. This statement is doubtless true in some cases; but I am convinced, with our present knowledge, that in many others it is not. What the extent of the fast depends upon many circumstances. A depression of the nervous system seems to be essential to enable a patient to endure a lengthened starvation; and, when we consider that this condition is almost invariably associated with rest in bed to all the locomotor organs, with little or no brain-work carried on, and the temperature maintained to a great extent by the bedclothes, it is scarcely conceivable how little nourishment is needed to keep body and mind in existence. As regards the second point—the little wasting which goes on in many cases of chronic vomiting—it is explained either by the food being retained *in toto*, or by a portion of the food being retained.

I have no hesitation, in asserting, that the mouth itself is capable of a remarkable amount of absorption; and, though this mode of feeding is not generally adopted, it must not altogether be forgotten. In some cases, at least, it has been fairly considered, there is no doubt that the stomach is capable of retaining a considerable quantity of food.

In some cases, indeed, of a case of gastric ulcer, under the care of Mr. Harrison, of the General Hospital, which was fed for some time by the rectum, the patient was able to retain a considerable amount of food in the stomach, and was able to eat and digest.

In some cases, indeed, of the cases which require rectal feeding, the patient is able to retain a considerable amount of food in the stomach, and is able to eat and digest.

In some cases, indeed, of the cases which require rectal feeding, the patient is able to retain a considerable amount of food in the stomach, and is able to eat and digest.

food; and, lastly, the anus itself, although it fails in its duty in some cases, yet in very many others acts effectually as a sphincter, much in the same way as the sphincter at the cardiac or the pyloric end of the stomach.

2. With respect to *absorption*, it has been said that substances known as colloids, such as albumen, gelatin, starch, etc., cannot pass into the system until they are converted into crystalloids; and, as this change has been supposed not to take place in the rectum, the giving of enemata containing colloids, such as beef-tea, eggs, etc., has little or no nourishing effect upon the body; and the brandy, which is frequently added, only tends more to increase the colloid properties of the aforementioned foods, and therefore to render still more nugatory the use of these enemata. Graham supposes the coats of the stomach to dissolve the food during digestion, absorbing the crystalloids and rejecting the colloids—an action favoured by the thick coating of mucus which generally lines the stomach; but Miller, after having quoted the above paragraph, goes on to say that "this suggestion probably requires some limitation—otherwise starch, gelatine, and other colloids, unless previously converted into crystalloids, would be easily absorbed after they had been swallowed". The starch, as far as the stomach is concerned, is converted into a crystalloid by the saliva; and the starch which escapes being made dialysable in the mouth is made so in the duodenum by the action of the pancreatic juice. This is the reason, probably, why sugar has been recommended to be added to nutrient enemata. Whether the rectum has the power of changing colloids into crystalloids, is perhaps doubtful; but results which have and do now follow the use of alimentation by the bowel, are too evident to leave any doubt that the rectum possesses properties by which nutrient injections, if not wholly absorbed, are certainly partially so.

It has been suggested that the secreted intestinal juices which descend from above may dissolve a considerable amount of starch and animal fibre; and lately a theory has been put forward, that the contents of an enema are carried from the rectum to the upper intestinal tract, where digestion and absorption actively takes place; but, as digested meals can now be given to the rectum to a great extent, there will be little need for the rectum, as well as perhaps other portions of the bowel, to act the part of a stomach.

3. The use of aliment by the rectum requires to be carefully and skilfully done. Anyone who has given these injections by means of the ordinary ball-syringe, must have felt the inconvenience of this, the usual mode of procedure. If the ball be not quite full, air will probably be injected into the rectum, to the annoyance of the patient; and, even when the ball is full, great care must be exercised not to spill any of its contents on the bed. The best mode is to take a piece of Indian rubber tubing, two or three feet long. At one extremity fix a small piece of bone, resembling that which is attached to an ordinary Higginson's syringe; to the other end of the tubing attach a funnel. When the injection is to be used, the patient is placed on his side, the tube is carefully oiled, and placed into the bowel, the other extremity of the apparatus oiled, and the prepared enema is now poured into the funnel, and runs easily and comfortably into the rectum; the rate of pressure can be increased or diminished according as the funnel is raised or lowered, or the food can be arrested at any time altogether by simply moving the hand below the funnel by the fingers of the hand holding it. If the rectus be not at hand, a Higginson's syringe is the next best thing. I must hurry, as that the rectum should be empty when a nutrient enema is to be given.

4. In some cases, indeed, of the cases which require rectal feeding, the patient is able to retain a considerable amount of food in the stomach, and is able to eat and digest.

5. In some cases, indeed, of the cases which require rectal feeding, the patient is able to retain a considerable amount of food in the stomach, and is able to eat and digest.

6. In some cases, indeed, of the cases which require rectal feeding, the patient is able to retain a considerable amount of food in the stomach, and is able to eat and digest.

7. In some cases, indeed, of the cases which require rectal feeding, the patient is able to retain a considerable amount of food in the stomach, and is able to eat and digest.

since the introduction of artificial digestives. Pepsine, in its various forms, and hydrochloric acid, were long used in stomach digestion, before their value was recognised in rectal alimentation. Pepsine is now very much replaced by the preparations of pancreatine, the latter possessing the double power of acting on proteids as well as on starch. The two ferments which have the property of changing the proteids into peptones, and the starch into sugar, are called respectively proteolytic and diastatic: and, on account of this double property of pancreas, the preparations of the latter have come very much into vogue.

Two preparations of pancreas for rectal use have been made—one by Dr. Leube, and the other by Dr. Horace Dobell. In the former, one part of finely minced pancreas is mixed with three parts of scraped meat, adding warm water sufficient to make a small injection, and sometimes a slight proportion of fat. Dr. Leube found, by experiments on dogs, that a considerable amount of nitrogen was thus consumed by the body. In the second preparation, a fourth of a pound of cooked beef or mutton is finely grated, to which are added twenty grains of pancreatic powder, and twenty grains of pepsine (pig's); the whole is mixed in a warm mortar quickly, and one tablespoonful of brandy, and enough warm water to bring the mixture to the consistency of treacle, are added, this is injected as quickly as possible after the mixture has been made.

I think that the best pancreatic preparation, and certainly the one most easily tried, is that known as liquor pancreaticus (Benger), strongly recommended by Dr. W. Roberts of Manchester, in his Lumleian Lectures of 1880, "On the Digestive Ferments and the Preparations and Use of Artificially Digested Food". Speaking of the giving of food by the rectum, Dr. Roberts says: "The enema may be prepared in the usual way, with milk-gruel and beef-tea, and a dessertspoonful of liquor pancreaticus should be added just before administration. In the warm temperature of the bowel, the ferments find a favourable medium for their action on the nutritive materials with which they are mixed, and there is no acid secretion to interfere with the completion of the digestive process." Thus, in one thing the rectum possesses an advantage in the use of this preparation over the stomach, in the absence of any acid to interfere with the full action of the pancreatic ferments. In giving these enemata, they should be made of milk, or milk with beef-tea, or of milk-gruel. To a half a pint of the warm enema, a tablespoonful of liquor pancreaticus and half a teaspoonful of bicarbonate of soda should be added. About three ounces of this mixture should be injected every two, four, or six hours, as the case requires.

In a communication to the BRITISH MEDICAL JOURNAL of February 19th, 1881, a nutrient suppository is recommended by Mr. Spencer of York in cases where the nutrient enema would otherwise be used. The suppository is about the size and shape of the old-fashion bullets; it is made of peptonised beef. Mr. Spencer speaks well of its use; but I think some more experience is necessary to test its comparative value. Its obvious gain is the ease with which it can be introduced into the bowel, causing no trouble to either patient or nurse; but a drawback is likely to arise from the solidity of the preparation, the rectum being supposed not to take up food readily in this way. I have used the suppository in one case, and recommended it in another; in the latter, I believe, with fair results. It would seem that the cacao-butter with which Mr. Slinger (the chemist who made them at the suggestion of Mr. Spencer) covered the suppositories, is rather detrimental than beneficial, as opposing somewhat the liquefaction of the meat. Mr. Martindale, of New Cavendish Street, London, made some for me, simply oiling the exterior, and adding to each suppository a fourth of a grain of acetate of morphia; in this form, I found them better retained, and apparently more quickly dissolved. Lastly, enemata of blood have been recommended, and in some cases successfully tried. They were first suggested by Dr. Andrew H. Smith of New York; he found that, when blood was administered *per rectum*, both corpuscles and serum were absorbed. Three or four ounces of defibrinated blood having been injected into the rectum at night, no trace was found in the evacuations the next morning. Ox's blood has generally been employed. It must be fresh and defibrinated before use, and two or three ounces may be injected every two or three hours; but, if there be any stomach-digestion going on, it may be less frequently used. In order that there may be no delay in its use, it can be obtained already prepared, concentrated and preserved in tins. To prepare the injection, the concentrated blood is dropped into the warm fluid to make the enema, a fluid drachm representing a fluid ounce of ordinary blood. The cases so treated have been recorded by Dr. Smith, Dr. Hanks, and Dr. F. W. Brown in America, and Dr. A. Ernest Sansom in this country; they have been those of gastric ulcer, severe uterine hæmorrhage, diphtherit paralysis in a child, pulmonary phthisis, anæmia, and a few others. The success so far attending this novel mode of treatment is certainly sufficient to encourage an extended trial.

In this paper, I have purposely avoided the subject of using the rectum medicinally; yet, surely, the bowel might be more profitably used in this way than at present. We know the great value of administering morphia by the bowel; and there is every reason to believe that other medicines, used in suitable cases, would have an equally good effect.

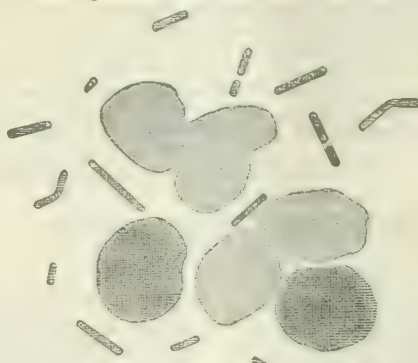
EBERTH'S TYPHOID BACILLUS.

By JOSEPH COATS, M.D.,
Pathologist to the Western Infirmary, Glasgow.

IN the number of this JOURNAL for November 26th, 1881, there appears a short notice of Eberth's discovery of bacilli in typhoid fever. I had recently brought to me a portion of the intestine and mesenteric gland from a case which died in the Belvidere Fever Hospital, Glasgow; and, as the results from this case definitely corroborate those of Eberth, it may be worth while to make a brief note of it.

The case was one of virulent typhoid fever in a young woman, fatal on the ninth day. The mesenteric gland, received from Dr. Prichard, one of the resident medical officers, was enlarged, and presented, on section, a deep reddish-brown colour. The cut surface was scraped with a clean knife, and the material spread on a thin cover-glass, so as to form a fine film. The cover-glass was then exposed for about ten minutes in an oven to a temperature of 120° C. (in order to fix the albumen, according to Koch's method). A large drop of methyl-violet solution was then placed on the film on the cover-glass, and allowed to lie for a few minutes. It was then washed off; the film was dried, and mounted in Canada balsam.

The accompanying woodcut shows the conditions presented under a magnifying power of 1,500 diameters. The drawing was made with the camera lucida with Zeiss's $\frac{1}{8}$ " oil immersion-lens and No. 4 eyepiece. The red corpuscles were abundant, and are represented as



Eberth's typhoid bacilli, drawn with the camera lucida, 1,500 diameters. The paler bodies are red corpuscles, the darker ones the nuclei of lymphatic cells. This does not represent a single field, but representatives from several.

pale flat bodies. The nuclei of the lymphatic cells were deeply stained, and are shown as rounded dark bodies in the figure. There were frequent bacilli of various lengths, and many of them obviously germinating. The identity of these with the organisms described and figured by Eberth is unmistakable. In Eberth's figure, the drawing was made with the same objective, but with No. 5 eyepiece, giving a magnifying power of about 2,000 diameters instead of 1,500 as in ours.

After the gland had been hardened, it was much more difficult to detect the bacilli, the same resistance to the staining with aniline dyes which Eberth notes being experienced. The difficulty was enhanced by the fact that the bacilli do not apparently form definite zoogloea, although they do occur in groups. By diligent search, however, they were found in considerable abundance when fine sections stained with Bismarck brown, and mounted in Canada balsam, were used. The bacilli were found in considerable numbers in some parts, while entirely absent in others. They seemed to have definite centres, in which they were closely set, becoming more sparse in passing outwards; so that, at the peripheral parts, there were isolated rods, extending a considerable distance from the centre, and insinuating themselves between the lymphatic cells. In a very few cases, isolated bacilli were found at a distance from such aggregates, and, where they were met with, they may have been outlying units of groups in a part not involved in the section.

THERAPEUTIC MEMORANDA.

LOCAL APPLICATION OF IODOFORM.

THE method introduced by Mr. Walter Whitehead of fixing iodoform by means of collodion, has been long pursued by me in the treatment of glandular enlargements in the region of the neck, and I can only confirm his experience of its advantages. I have not yet, however, been able to obtain a solution of iodoform in ether in a less proportion than one to eight, and a completely satisfactory one in less than one to ten. It is, however, quite easy to make a clear transparent solution of iodoform in collodion without the addition of ether, by shaking up one part of iodoform with ten parts of collodion, care being taken to add the iodoform to the collodion, and not the collodion to the iodoform.

LENNOX BROOK, F.R.C.S.Eng.

CLINICAL MEMORANDA.

TWO CASES OF TYPHUS COEXISTENT DURING THE LATTER PART OF THEIR PROGRESS WITH SCARLET FEVER.

THE case of typhus fever is perhaps of sufficient importance to interest the medical community worthy of record.

A father and two sons were lately admitted to the hospital, suffering from typhus fever. The father died, and the two boys have recovered. In the father's case, the fever during the latter part of its course was complicated by scarlet fever. The mother was also ill, but recovered. On making a cursory examination of the bodies, in these cases, during the latter part of their progress, I was enabled to find distinct evidences of co-existence of the two diseases. This led me to examine the cases which had been admitted to the hospital as scarlet fever. After a careful examination of the cases, I found that the co-existence was general.

The father's case was complicated by scarlet fever, and the two boys' cases were also complicated by scarlet fever. The mother's case was not complicated by scarlet fever.

The father's case was complicated by scarlet fever, and the two boys' cases were also complicated by scarlet fever. The mother's case was not complicated by scarlet fever.

JOHN S. MANN, M.D.,
Chorlton Union Hospital, Manchester.

SURGICAL MEMORANDA.

ON THE REMOVAL OF THE LATELLA.

IN the BRITISH MEDICAL JOURNAL of March 4th, Mr. Jonathan Hutchinson has expressed his opinion on the removal of the lateLLA. He has expressed his opinion that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement.

Mr. Hutchinson's opinion is that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement. He has expressed his opinion that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement.

Mr. Hutchinson's opinion is that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement. He has expressed his opinion that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement.

Mr. Hutchinson's opinion is that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement. He has expressed his opinion that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement.

Mr. Hutchinson's opinion is that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement. He has expressed his opinion that the removal of the lateLLA is not necessary, and that it is only necessary to remove the lateLLA in cases of extreme enlargement.

narrated by Mr. Hutchinson, the second accident ruptured these adhesions, and thus liberated the joint.

CHRISTOPHER HEATH, F.R.C.S., Holme Professor of Clinical Surgery in University College, and Surgeon to University College Hospital.

RARE DISLOCATION.

A boy, aged 10, was brought to me a fortnight ago, who, his father said, had fallen off a gate and "put his elbow out". On examination, less than an hour after the accident, I found the head of the right radius protruding directly backwards. The skin, tightened over it, allowed its shape and size to be distinctly made out. The forearm was slightly flexed on the arm; the power of pronation and supination of the hand was lost. Reduction was easily accomplished by pressing the displaced head forwards, the bone returning to its normal position with a slight snap, and leaving the contour of the joint in all respects similar to that of the other side. There was little or no swelling. Flexion and extension of the forearm on the arm were now easy; pronation and supination were possible, but painful. The boy is now, a fortnight after the accident, able to make all the movements of the limb without difficulty, and with very slight discomfort.

The dislocation of the head of the radius backward, uncomplicated by other displacement at the elbow-joint, is said by the books to be very rare.

A. BENSON, M.A., M.B. Oxon., M.R.C.S. Eng.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

T. THOMAS'S HOSPITAL.

CASE OF HYSTERIC AFFECTION.

(Under the care of Dr. ORD.)

[From the notes of Mr. BUTLER, late House-Physician.]

M. A., widow, aged 45. Her father died at 60, of hemiplegia, after a long illness, and was buried in the churchyard. The patient married at 20, and had a widow ten years. She had one child, a girl, who was born at 20, and healthy. She had no miscarriages; and there was no history of any kind of nervous affection. She had always been healthy, and had had no nervous affection, and had no history of any kind of nervous affection. She had always been healthy, and had had no nervous affection, and had no history of any kind of nervous affection.

The patient had always lived in England, and had no history of any kind of nervous affection. She had always been healthy, and had had no nervous affection, and had no history of any kind of nervous affection.

the patient having some prominent teeth in the upper jaw on the right side, and none on the left side. The tongue, when protruded, pointed to the left. There was no loss of sensation in the face. Her sight had been failing lately, and she was unable to read small print without glasses; there was no paralysis of the muscles of the eyes. Hearing seemed better on the left side. Taste was normal. Smell and touch were normal. There was loss of power in the arms; but the patient was always weaker after a fit (she had one on this morning). There was no loss of sensation in the arms, and the legs were unaffected. Physical examination of the respiratory and circulatory systems disclosed nothing abnormal. There was no tenderness nor distension of the abdomen, but the recti muscles offered great resistance; the liver-dulness began at the sixth rib, and the organ could be felt in the abdomen at the lower margin of the ribs. The spleen was not enlarged.

On January 1st, the night-nurse reported to the sister that the patient had grown unconscious; beyond this, she had merely noticed some twitching of the arms. She was found in a curious mental condition; she could not be aroused to answer questions or obey directions, but was readily induced to drink when a vessel was applied to her lips. The pupils were equal, and acted to light; there was no strabismus. The eyelids were kept closed; when they were raised by the observer, the eyes, and sometimes the head, were rolled irregularly about. The conjunctival reflex was fairly well marked. No movements of the face or tongue occurred. The limbs were not rigid, but the arms would remain in any position in which they might be placed; thus, having been raised straight above her head, they remained in that position without any support for forty minutes. Occasionally, however, and especially after the limbs had been put in any particular position, a slapping movement of the hands over each other began; the movements grew quicker and quicker, and there was then added some kicking of the legs; finally, she rose into a sitting posture, and uttered a cry. These convulsive movements could be stopped at any time by pressure in the right ovarian region; on the left side, pressure produced no effect. During the fit, the patient foamed at the mouth, and saliva trickled down from the angles. She passed urine under her twice during the day. In the evening, the soles of her feet were tickled, and pricked with a pin; this was followed by the convulsive movements above described: she shrieked, and fell back with the eyes open, and was conscious. In reply to questions, she said she felt drowsy.

Next morning, she was found in much the same condition as on the previous morning. There was no evident loss of sensibility; pricking the soles of the feet, or in the submammary region, induced a fit. On the following morning, the convulsions could not be so easily induced, and were less marked, and in the evening she was quite rational. From this date she improved in general health, and, though her manner was rather strange and shy, she had no fit of any kind until February 3rd. On that day, about noon, she had what the sister of the ward describes as "a regular hysterical attack"; she screamed, threw herself about, talked loudly, and implored the sister to stay with her; these symptoms quickly ceased on dashing cold water over her face.

On February 7th, it was noted that there was an area of distinct hyperæsthesia under the right mamma; both groins were remarkably sensitive, especially the right, and the soles of the feet were hyperæsthetic. There was no distinct anesthesia, but the legs were analgesic. It was difficult to cause the skin to flush in this situation, but a puncture made with a pin bled easily.

DEVON AND EXETER HOSPITAL.

A CASE OF PERFORATING ULCER OF THE STOMACH IN A MIDDLE-AGED MAN: POST MORTEM EXAMINATION: REMARKS.

(Under the care of Dr. DAVY.)

[Reported by A. G. BLOMFIELD, M.B., M.R.C.S., House-Surgeon.]

JOHN D., aged 56, a butler, was admitted on June 24th, 1881, at 5 P.M., suffering from intense abdominal pain and distension, retraction of testes, and shock. The patient lived but a few hours, and was not in a state to give any trustworthy account of the attack.

It appeared that at about 7 A.M. on the day of admission, having for the last few days complained of pain in the stomach, of which he took no particular notice, he was seized with violent pains, like those of colic, in the abdomen, and was doubled up in bed and groaning with pain. The bowels had been opened slightly that morning. These symptoms increased in severity during the day, and his state on admission, at 5 P.M., was as follows: Talking frequently, and fairly rationally; groaning at times and crying out with pain, which he referred to the abdomen generally. Pressure on the abdomen increased the pain. There was slight dulness over the pubes; a tympanitic

note everywhere else; and a marked sensation of resistance (tension), especially in both flanks. The pulse was feeble and small. The pupils were equal and small. There was no vomiting. The feet and legs were warm, but the hands were somewhat cold. The right testicle was very much retracted. Hot fomentations were applied, and small quantities of iced milk were given.

At 7.45 P.M., he was in much the same state; conscious, and calling out with pain in the abdomen. Dr. Davy saw him at this hour, and gave an hypodermic injection of one-sixtieth of a grain of atropia. It was evident that the condition was one of acute peritonitis; from its very acute onset, the symptoms suggested a violent exciting cause, and were certainly such as, without evidence to the contrary, might suggest an irritant poison, or rupture or perforation of internal viscera, or sudden obstruction of the bowels and consequent peritonitis. There was no history of any injury that could in any way account for the symptoms. Dr. Davy was greatly in favour of perforation of the intestine high up in the canal, or of the stomach: from the marked absence of vomiting all through the case while under notice, we later on concluded that the perforation causing the peritonitis was most probably in the stomach; an opinion which the *post mortem* examination verified.

At 10.50 P.M., the pulse at both wrists was imperceptible, and the hands cold; he was quite conscious, and perhaps somewhat quieter; he complained of a tearing pain in the abdomen, and a sensation of forcing about the lower part of the rectum. The rectum was examined, and found empty; and a half-grain morphia suppository was introduced.

The collapse rapidly increased; hypodermic injections of brandy and ether were tried, but had no beneficial effect; at 11.40, he was unconscious, and died at midnight: the whole of the symptoms developed in the course of fifteen hours. The only point in his previous history that could be ascertained was that, about eight years ago, a former employer took him to consult Dr. Budd for violent pains in the epigastrium, which he accounted for by having hurt himself while getting over a stile about this time.

The *post mortem* examination was made fifteen hours after death. The abdomen only was examined. The abdominal walls were very tense, especially in both flanks, with a tympanitic note all over the abdomen. On opening the cavity, a small knuckle of healthy bowel was found at the umbilicus, not strangulated in any way. A quantity of air at once escaped from the peritoneal cavity; the coils of intestine were injected, and to a large extent covered by a recent delicate lymph; in parts, the intestines were matted together; the peritoneum was injected, especially that portion reflected over the diaphragm. On slightly moving the intestines, a large quantity of a yellow fluid (contents of stomach), with no particular odour, at once flowed out. On examining the stomach, the perforation was at once apparent, as a small circular clean-cut opening of the size of a fourpenny-piece, on its anterior aspect near the top, and about the middle of the lesser curvature; when opened, the stomach was empty; the mucous membrane was of an uniform dirty colour, and intensely congested. The perforation was found to correspond to the site of a previous chronic ulcer, the floor of which was extremely thin, and about the size of a halfpenny—the perforation being about the centre; the edges were hard and elevated, and extending but a very little distance from the floor. There was no evidence of carcinoma, nor of any recent active inflammatory change about this cicatrix; the perforation was punched out, as it were; there were no signs of inflammation or raggedness about it. The tail of the pancreas was adherent to the stomach. The liver was of an uniform dark slate colour, hard to the feel, and, when cut, offered a perceptible resistance. There were some white patches in the capsule of the right kidney. Both kidneys were enlarged and red. There was no deposit of any kind, nor enlarged glands along the spine. There was evidence of a recent general acute peritonitis.

REMARKS.—The case is of interest in a medico-legal point of view. Without any previous history, such a case, presenting so rapid and acute symptoms of a violent peritonitis and collapse, might very properly suggest a suspicion of irritant poisoning; more especially if, as in this case, there had been no evident symptoms of gastric or intestinal disease previously to the development of the acute and fatal symptoms.

Dr. Brinton points out, in his work on this form of disease, that the frequency is twice as great in females as in males; in 654 cases of ulcer of the stomach he had collected, 440 were females, and 214 males. The average age was 42.6 years. The situation of the ulcer is governed by no fixed rule, and the size appears to vary from a fourpenny-piece to a crown-piece; and, curiously enough, the smaller ulcer may exhibit all the characteristic appearances of the larger, and prove even more deadly by fatal hæmatemesis or perforation. Devergie states that suppression of urine occurs in perforation of the stomach.

In the above case, a catheter was passed on admission at 5 P.M., and a small quantity of non-albuminous urine drawn off; and the patient stated that he had not passed urine since the attack at 1 A.M., and he passed none afterwards: so that this case, to a certain extent, confirms Devergie's statement. The retraction of the right testicle was well marked, and suggested renal colic. We are not aware that this condition has been noticed in previously recorded cases of perforation of the stomach.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 10TH, 1882.

J. LISTER, D.C.L., F.R.C.S., F.R.S., President, in the Chair.

Cancer of the Axilla.—Mr. GEORGE LAWSON brought before the Society a chimney-sweep, upon whom he had operated for chimney-sweep's cancer in the axilla. The patient had had the disease twice removed, and had been operated upon. He was admitted into the Middlesex Hospital last November. His condition then was this. In the right axilla there was a wound about two inches long, with hanging edges, and from this there was a sanious fetid discharge. The wound was surrounded by a mass of indurated tissue in all directions beneath the pectoral muscle, where there was evidently a large epithelial ulcer. The patient was anxious for an operation, but as it was clear that, in the present state of the pectoral muscle over the ulcer, the mere excision of the growth would not prove satisfactory, Mr. Lawson obtained the sanction of the patient to amputate the arm at the shoulder-joint if, in the course of the operation, it should be advisable. On November 24th, the patient having been anaesthetised, a knife was passed into the wound in the axilla, and the growth was removed. A large epithelial ulcer was then exposed. This was dissected away; but as the disease had encroached upon the vessels close to the axilla, Mr. Lawson felt that if he had not removed the growth, it would have been fatal. He, therefore, tied the artery and vein, and the lesser pectoral muscle, where the artery and vein were healthy, and as the wound was very large, he amputated at the shoulder-joint, and brought the flap, which he had turned up from the muscle, on to the chest. In some remarks on the case, Mr. Lawson said that the pressure which induced him to amputate the arm at the shoulder-joint was, first, the obvious fact that the growth was not removable; and secondly, the fact that the growth was of the epithelial muscle; and next, to preserve the patient's life, the lateral supply of blood to the chest, which was the only supply of blood to the chest, must be preserved. The President then asked if the growth was in any respect different from an ordinary cancer of the breast. Mr. Lawson answered that it was not, in his opinion. He then said that in the case during the early stages, Mr. J. CROFT inquired whether the sheaths of the arteries, veins, or nerves had been found infiltrated.—Mr. LAWSON answered that the arteries and veins were not infiltrated. The President remarked that an epithelial growth of the axilla is a rare case, and expressed a hope for the patient's recovery.

Cancer of the Axilla.—Mr. GEORGE LAWSON brought before the Society a chimney-sweep, upon whom he had operated for chimney-sweep's cancer in the axilla. The patient had had the disease twice removed, and had been operated upon. He was admitted into the Middlesex Hospital last November. His condition then was this. In the right axilla there was a wound about two inches long, with hanging edges, and from this there was a sanious fetid discharge. The wound was surrounded by a mass of indurated tissue in all directions beneath the pectoral muscle, where there was evidently a large epithelial ulcer. The patient was anxious for an operation, but as it was clear that, in the present state of the pectoral muscle over the ulcer, the mere excision of the growth would not prove satisfactory, Mr. Lawson obtained the sanction of the patient to amputate the arm at the shoulder-joint if, in the course of the operation, it should be advisable. On November 24th, the patient having been anaesthetised, a knife was passed into the wound in the axilla, and the growth was removed. A large epithelial ulcer was then exposed. This was dissected away; but as the disease had encroached upon the vessels close to the axilla, Mr. Lawson felt that if he had not removed the growth, it would have been fatal. He, therefore, tied the artery and vein, and the lesser pectoral muscle, where the artery and vein were healthy, and as the wound was very large, he amputated at the shoulder-joint, and brought the flap, which he had turned up from the muscle, on to the chest. In some remarks on the case, Mr. Lawson said that the pressure which induced him to amputate the arm at the shoulder-joint was, first, the obvious fact that the growth was not removable; and secondly, the fact that the growth was of the epithelial muscle; and next, to preserve the patient's life, the lateral supply of blood to the chest, which was the only supply of blood to the chest, must be preserved. The President then asked if the growth was in any respect different from an ordinary cancer of the breast. Mr. Lawson answered that it was not, in his opinion. He then said that in the case during the early stages, Mr. J. CROFT inquired whether the sheaths of the arteries, veins, or nerves had been found infiltrated.—Mr. LAWSON answered that the arteries and veins were not infiltrated. The President remarked that an epithelial growth of the axilla is a rare case, and expressed a hope for the patient's recovery.

collateral circulation. Had the patient been in a less exhausted condition the limb might perhaps have been saved by Syme's operation, even when the sac had given way: but weak as he was, amputation seemed the safer expedient. The silk ligature, after it was thrown off, travelled toward the surface, and could at one time be felt close beneath the skin, and a small shred was discharged through the wound. How it was afterwards disposed of was not known. It never, however, was observed to escape externally. The silk ligature, the author thought, was unsafe, as it was apt to act as a foreign body, and so to produce a dangerous process of ulceration in the neighbourhood of the artery. He should, on any similar occasion, employ the kangaroo ligature, which, so far as present experience had shown, was perhaps the most reliable form now in use.—Mr. CROFT then suggested that silk should always be soaked in wax, and never in oil. It was curious that in this case a portion of the silk had been removed.—Mr. MAWAT thought the ligature had cut through and been found as of old, but only a shred remained.—Mr. C. HEATH was loth to criticise a case which he had not seen, but it seemed that there had been a doubt as to whether the aneurysm had given way. When the vessel was ruptured, then it was surely the recognised practice to open the sac and tie both ends of the vessel. This was what was done in Mr. SYME'S case; still, it had been contested by surgeons of eminence. It was best, however, to obtain complete control over the subclavian in the first instance.—Mr. BARWELL thought that in all probability the aneurysm had given way. He should have liked to know something about the temperature. The danger of tying vessels in the axilla was well known, and was avoided by the use of animal ligatures.—Mr. CROFT asked what was the condition of the limb after the operation. Mr. LAWSON answered that the aneurysm had in this case given way, but even then he did not think that ligature of the main artery was hopeless. He had himself, in two cases of diffuse popliteal aneurysm, cut down in Scarpa's triangle, even through clots, and tied the femoral. This procedure was far more likely to be successful than groping about among clots for the ends of the ruptured vessel. The case was then followed by another example of carbolised silk making its way through the vessel. It was this that originally made him think of catgut. For his own part, he would not use oil or wax, but only carbolised water, for silk; still, he preferred animal ligatures. He had again turned his attention to this, and he had found catgut prepared with water alone worse than that prepared by carbolisation. After use, it showed a more rapid deterioration. But he had found the best to be that prepared in chromic acid and carbolisation. This might be dried, and was ready for use at any time by simply putting in carbolised water. Mr. LAWSON then said that when the case occurred this was the first time he had seen a rupture of the subclavian artery, and he was not sure if he had then the man, when seen, was seen. It was necessary to see the patient, however, before the vessel first ruptured.

Case of a woman with a large aneurysm of the subclavian artery.—Mr. MAWAT showed a case occurring in a married woman, aged 30. Her family history was good. She had been married twelve years, and had had seven children, the youngest of whom was eight months old. The aneurysm of the subclavian artery was discovered at the end of her first pregnancy. She had the usual symptoms of the disease, and her appearance was very characteristic. When first seen, there was great swelling of the lower extremities, which hung like bags containing fluid; her face was generally swollen, her lips were thick, the cheeks pink; the hands were hard, swollen, raw, and painful, and her movements were awkward, and her speech was impaired. There was no pulsation perceptible at the site of the aneurysm; the heart was not enlarged, and the pulse was slow and irregular. The aneurysm was not a true aneurysm, but a false one, and was situated in the axilla. The patient was not aware of the existence of the aneurysm until she was first seen by the physician, who, on examination, discovered the swelling. The patient was then sent to the hospital, and was treated by Mr. MAWAT. The treatment consisted in the use of digitalis, which was given in small doses, and in the use of iodine, which was given in large doses. The patient was kept in bed, and her diet was restricted. The treatment was continued for several months, and the swelling of the lower extremities gradually subsided. The patient was then discharged from the hospital, and was able to resume her usual occupations. The aneurysm was not removed, and the patient continued to live with it for several years.

with nitro-glycerine with the intention of relaxing her arteries, thus reducing, to some extent, the arterial pressure, and increasing the rapidity of her capillary circulation. Severe purgatives, which, she said, afforded her great relief, were administered with the same object.—Dr. CAVAFY said that these cases often improved under the most various treatment. In one of his cases the patient, when seen, was unable to take off her wedding-ring, but afterwards this could easily be done. His second case also improved, especially as regarded the hands. A third case, in a gentleman he had seen, had also improved; and in one on whom Charcot had lectured, the Professor regretted that the patient was so much better that he could not show the marks he desired. In one of Charcot's cases, residence in a warm climate, and a modified milk diet, together with sulphur-baths, seemed to do most good. In his own cases he had given one ergot, the other strychnine, and the third was treated by iodide of potassium. But all such cases varied; especially they were worse in cold weather.—Dr. F. TAYLOR referred to the case he had already shown. The patient was much better. He had used jaborandi.—Dr. HADDEN thought the great thing was to quicken the bodily movements, and to improve the general circulation. Nitrite of amyl would probably be found useful. In Charcot's case the chief agent was heat.—Mr. W. HAWARD referred to a case where the patient had got into a kind of cretinoid condition. There was a history of syphilis, for which he was treated, and after a time he was induced to go out and take more exercise. He speedily began to improve, and now the only thing notable was some slowness of speech. After some remarks from the President, Dr. MAHOMED, in reply, said he had used the nitro-glycerine to diminish tension. It was not common to find degeneration come and go, though congestions might.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 21ST, 1882.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

Report of the Committee on Dr. Goodhart's Specimens of Addison's Disease.—The report, which was read by Dr. CREIGHTON, stated that the suprarenal capsules were very small, but preserved their general naked-eye appearances; the cells were opaque, and the nuclei were invisible; no very distinct alterations in the sympathetic ganglia could be discovered.

Spindle-celled Sarcoma of the Epididymis.—Mr. SWINFORD EDWARDS showed this specimen; the growth was entirely confined to the epididymis. The patient was a young child, on whom the swelling had only been noticed for a very short time. Mr. Edwards supposed that, in a short time, enlargement of the pelvic lymphatics would occur, and that the child would die.—Mr. BUTLIN said that he had only been able to find in literature one case of malignant disease beginning in the epididymis. He agreed with Mr. Edwards, both as to the rarity of the affection and as to the probability of early involvement of the lymphatic glands.—The PRESIDENT said that he had brought a little boy to the Society, some years ago, who presented a considerable tumour of the epididymis; this had disappeared under the use of mercury and iodide of potassium; he inquired if the possibility of syphilis had suggested itself to Mr. Edwards in this case.—Mr. EDWARDS said that there was no probability of syphilis in his case.

Anomalies of the Alimentary Canal.—Dr. NORMAN MOORE showed a large number of specimens, illustrating various abnormalities. 1. An œsophagus, from the anterior wall of which, at a point a little below the end of the trachea, a diverticulum as large as a pea protruded. The specimen was removed from a man aged 49, who, for five months before his death (of bronchitis), had suffered from some discomfort after eating. At the *post mortem* examination, the stomach was found to contain three minute ulcers, and the duodenum one deep ulcer as large as a fourpenny-piece. That simple duodenal ulcer was a rare affection was shown by the fact, that only two such cases had occurred at St. Bartholomew's Hospital in the last fifteen years. As to diverticula of the œsophagus, Quain and Sharpey regarded them as hernial protrusions; but Dr. Moore was inclined to think that they were foetal abnormalities, of the same age and nature as the normal diverticula of the œsophagus, from which the lungs were developed. 2. Eight examples of diverticula from the ileum. In all the examples, the diverticulum was situated within four feet of the ileo-cæcal valve; the diverticula varied much in size, the largest being six inches long, and as wide as the ileum itself. Three of the specimens showed a marked constriction of the gut at the origin of the diverticulum—*i.e.*, on the ileo-cæcal side. Meckel attributed this abnormality to a persistence of part of the omphalo-mesenteric duct; and the fact that the sacs showed tubular glands and epithelium, similar to those of the ileum, confirmed the view that they were derived from the hypoblast. At St. Bartholomew's Hospital, twenty-seven examples had been found in 3,200 *post mortem* examina-

tions; and, in one-third of the cases, the abnormality had been the cause of fatal obstruction. This was produced in three cases by narrowing of the intestine at the origin of the diverticulum; by adhesion of the tip of the diverticulum to the mesentery in three cases; to the umbilicus in one; to an uterine tumour in one; and by the coiling of a fibrous band, proceeding from the diverticulum, round the ileum in one. The symptoms of obstruction in these cases usually began gradually, but not always. 3. The cæcum of a man aged 68, which was without any vermiform appendix, and terminated in a long fibrous band, like the cæca of most of the Felidæ. 4. A specimen in which a small lobule of liver-substance was attached to the gall-bladder, and by only a long pedicle to the liver.—Dr. COUPLAND was surprised to hear the great number of cases in which Dr. Moore had found these diverticula to lead to serious results. He had only met with two such cases. Nearly all of the diverticula had a small mesentery; and, in one of the fatal cases he had seen, strangulation had been produced by a coil of intestine passing beneath the mesentery. In Virchow's *Archiv*, a description had recently been published of some curious cysts connected with the intestine, having the structure of the gut, and apparently having their origin in the same way as the diverticula.—Dr. CREIGHTON had seen a blood-cyst connected with the intestine, apparently having its origin in the vitelline duct.—Mr. ROGER WILLIAMS compared the constrictions in these cases to the constrictions seen in the stomach.—Mr. SHATTOCK observed that probably Dr. Moore's case was an instance of hernia, as the pouch seemed to consist entirely of mucous membrane.—Dr. MOORE admitted the justice of this criticism, but thought the question could not be answered without a microscopical examination; this he would make, and report the result.

Calculus in Ureter.—This specimen, which was removed from a woman aged 45, who died of cerebral hæmorrhage, was also shown by Dr. NORMAN MOORE. The calculus was impacted in the ureter, and had formed for itself a sort of pouch; surrounding this pouch was a great mass of fat. This was, he thought, an instance of fat accumulation due to irritation.

Chronic Rheumatic Arthritis in a Dog.—The specimen, which was exhibited by Dr. NORMAN MOORE, showed bony outgrowths on the carpal and metacarpal bones, with ankylosis. The disease was of long duration. The disease probably caused great pain, and was, he believed, one of the commonest causes of the howling of dogs at night.—The PRESIDENT said that the dogs of the Hospice of St. Bernard were very subject to chronic rheumatism, on account, the monks believed, of their exposure to cold.

Sarcoma of Tonsil.—Dr. SAMUEL WEST said that the specimen was obtained from an old woman who had suffered from "sore-throat" for about two months. The right tonsil was greatly increased in size, and the gland at the angle of the jaw and below this were much enlarged. The tumour continued to grow after admission; the dysphagia became very extreme, but there was at no time any dyspnoea. Extensive ulceration occurred before death, which happened about five months after the commencement of symptoms. At the *post mortem* examination, the tumour was quite unconnected with bone, and there was no implication of other structures; the growth pushed its way between the tissues, displacing the tongue, and preventing closure of the jaw. A small tumour was found above the apex of the left kidney, another in its hilus, and a third nodule in the pericardium. Sections of all the tumours showed the same structure. On referring to Mr. Butlin's lectures, he found that the disease was excessively rare, and that no case in the female sex had been before recorded.—Mr. BUTLIN said that no cases had been collected by him except those which had been examined microscopically, so that his table probably did not by any means show the total number of cases.—Mr. EVE thought that the rapid infiltration of the lymphatic glands might be explained by supposing this growth to be a lympho-sarcoma.—Dr. WEST, in reply, said that he had encountered the difficulty referred to by Mr. Butlin: the absence, namely, of proper microscopical examination. Many cases of tumour of the tonsil were called epithelioma, without proper examination.

Hepatic Abscess.—Dr. TURNER said that, in the specimen, both lobes of the liver showed extensive erosions of the surface, so that large cavities, lined with old fibrous tissue, were formed. The colon showed extensive ulceration, apparently recent. The patient was a ship's carpenter, who first sought advice for pain in the back following a severe fall, and for dysenteric diarrhoea. A few days before admission, he suddenly had the sensation of "something giving way" in the right hypochondrium. He became very ill after this, but the symptoms were at first very indefinite; after about a month, the diagnosis of hepatic abscess was made, and a quantity of pus was withdrawn with a trocar. At the *post mortem* examination, it was found that the liver was adherent to the diaphragm; and, on tearing through these adhesions, a quantity of pus escaped from the cavities above referred to on the sur-

the direct consequence of a cervical laceration. The English school disbelieved this, on good grounds. The diseases alluded to in Dr. Playfair's paper could be seen in their entirety through an ordinary Ferguson's speculum. To apply to them Emmet's operation, which was admittedly not seldom followed by pelvic mischief, would be an act of extreme folly. Ectropion, not ectropion, according to Emmet, was the common result of the lacerations.—Dr. HERMAN had performed this operation in eight cases. All professed themselves benefited at the time they left the hospital. The subsequent history of two of them he did not know. Three were complicated with other conditions. Of the others, one was relieved of her symptoms, although the operation was a failure so far as obtaining union was concerned; in one, the symptoms returned in three or four months; in the other, he believed the operation had checked leucorrhœa. The American literature on the subject consisted mostly of general statements. Few writers had published cases, and the cases were mostly complicated ones. He thought benefit had sometimes been attributed to this operation which was really due to the cure of other concomitant morbid conditions.—Dr. PRIESTLEY was prepared to believe that Emmet's operation would aid materially in curing some troublesome cases. His experience of it was limited to two or three cases; but he could recall others which had resisted all usual modes of treatment, and might probably have been cured by this operation. Ectropion with granular inflammation was not nearly so difficult to cure as endocervicitis in the virgin. He did not think these lacerations were attended with distressing symptoms so often as was represented. The operation was only required in exceptional cases; it was painful, difficult, and sometimes dangerous. He hoped, therefore, that it would not be performed with undue frequency.—Dr. WYNN WILLIAMS did not agree with the paper either as to the simplicity or the risk of the operation. Cases ending in death, metritis, and perimetritis had been recorded. He did not think there were many cases in which it was required. Eversion was not always due to laceration.—Dr. BANTOCK thought there was a field for the operation, but that the effects of laceration and the necessity for operation had been exaggerated. He had met with one case of laceration in which he thought the operation would be required, but the patient completely recovered without it.—Dr. MURRAY called attention to a published fatal case. Operating when there was a suspicion of malignant disease appeared to him a curious idea. The duck-bill speculum magnified any little tear that might exist. Diagnosis was more fairly made by Ferguson's speculum.—Dr. HEYWOOD SMITH agreed with Dr. Playfair as to the importance of the operation, but maintained that areolar hyperplasia often existed without fissure, and could be cured by potassa fusa, or the cautery at a white heat. A raw granulating surface difficult to heal was analogous to malignant papillary dermatitis of the areola and nipple, and often a precursor of cancer; in such, it was important to operate. He asked if any Fellows had operated immediately after labour. It seemed to him that there were considerable difficulties attendant on such a proceeding. He had performed Emmet's operation in many cases with great success, both as to repair of the cervix and relief to symptoms.—Dr. FANCOURT BARNES thought the operation was only necessary in cases of bilateral laceration of the cervix, with ectropion and enlargement of Nabothian glands. In unilateral laceration, thickening of the cervix could be more readily dispersed by ignipuncture.—Dr. CARTER had operated six times with benefit, four of the cases remaining well three or four months subsequently. Slight laceration of the cervix was very common—not so cases requiring operation. He had been struck with the frequency with which displacement of ovaries complicated laceration of the cervix. This was so in two of his cases.—Mr. KNOWSLEY THORNTON called attention to the probability that fissure of the cervix with eversion predisposed to carcinoma, and that Emmet's operation prevented it. If so, a most important field for the operation existed. The specimens exhibited by Dr. Galabin were of great importance as aids towards settling this point.—The PRESIDENT could not concur in thinking tracheloraphy one of the greatest advances in modern gynaecology. It might be an advance; but, admitting all that was said for it, it was a very small affair, compared with the triumphs of laparotomy shown by Dr. Bantock and Mr. Thornton. A split condition of the cervix was said to be attended with protean symptoms and disorders. Not long ago, ulceration, and then displacements, held the same position. He regarded all three as minor disorders, whose attempted cure was often the worst part of them. The protean disorders were accompaniments, not consequences. Nevertheless, the cure of such lesions might be a valuable service to the patient. An ectropion which could only be shown by a special speculum and special manipulations was an artificial ectropion. He did not regard the profession as having hitherto mistaken ectropion for so-called ulceration. Such cases, with or without ectropion, were generally easily cured.

In cases with hypertrophy, a good old plan was the caustic potass. He believed that, if a new laceration were made by cutting out a bit of the cervix, cure would follow just as well as after tracheloraphy. The reference to the frequency with which the cervix was formerly divided as a means of cure was not a *jeu d'esprit*, but a weighty argument. He regarded tracheloraphy as at present *sub judice*, but was not impressed in its favour. He had not done it, but had seen the most exaggerated lacerations of the cervix interfere in no degree with health, comfort, or fertility.—Dr. PLAYFAIR had studied carefully the writings of Thomas and Emmet, and thought that Dr. Savage must have misunderstood their meaning. It was impossible not to see that Dr. Matthews Duncan was prejudiced against the operation; his remarks showed that he was not familiar with the use of the duck-bill speculum and tenaculum in these cases. The tenaculum was used, not to produce ectropion, but to draw the lips together. He thought that, when Dr. Duncan had fairly and impartially studied the subject, he would alter his opinion. This operation was, of course, not to be compared to those to which Dr. Duncan had referred; but, if it were the fact that there were hundreds of women leading lives of constant suffering, who might be cured by this operation, then it deserved to be called a great improvement in gynaecology.

REVIEWS AND NOTICES.

ELEMENTS OF PHARMACY, MATERIA MEDICA, AND THERAPEUTICS.

By WILLIAM WHITLA, M.D., Physician to the Ulster Hospital for Sick Children; Assistant-Surgeon to the Belfast Charitable Hospital. London: Renshaw. 1882.

THE difficulty of writing a really good text-book of materia medica and therapeutics for students is well known. Dr. WHITLA has endeavoured to condense into a small work the information usually found scattered through two or more large manuals. He has departed from the orthodox arrangement, and divides his work into five parts, headed Pharmacy, Materia Medica, Therapeutics, Administration of Medicines, and Pharmacopœial Reactions and Tests.

The first part, devoted to pharmacy, is well done, and deserves careful study. The student is taught the meaning of the different signs and symbols used in prescriptions and dispensing; and is instructed how to weigh and measure, and how to make up various mixtures, pills, and powders. The different modes of preparing emulsions are fully discussed, and much useful information on the point is given. It may not be generally known that a few drops of tincture of senega will emulsify any fat or oil. Dr. Whitla enters fully into the details of various pharmaceutical processes, discussing even the different kinds of paper adapted for sending out powders. The art of folding powder papers is described and illustrated, over three pages being devoted to this subject. The directions for making and coating pills are reliable and explicit. Referring to the gelatine coated pills, now largely employed, the author says: "A strong solution is made by heating one part of gelatine with two of water; and each pill, stuck upon the end of a fine pin, is dipped into the solution—the other end of the pin being thrust into moist sand till the gelatine sets, when the pin is withdrawn, and its mark closed with a little fresh gelatine." We are glad to see that he insists on the necessity for closing the pin-hole by a second coating of gelatine, as this is too frequently neglected, so as to entirely defeat the object of the coating. The chapter on general hints to the dispenser is one of the best in the book. It is to be feared that many prescribers are somewhat lax in their use of official titles, or the following directions would hardly be needed: "When magnes. calc. is ordered, magnesia B.P. should be used; magnes. carb., the heavy preparation, is usually intended. When bismuth or bismuth. alb. is prescribed, the subnitrate is the preparation generally in the mind of the physician; when aqua menth. is ordered, aq. menth. pip. should not be used, but aq. menth. sativ. is the intention of the prescriber." Dr. Whitla says: "Much confusion unfortunately exists in the memory of some prescribers about the mercurial chlorides, and fatal consequences have resulted. The subchloride is often written hyd. chlor., hyd. mur., hyd. submur., and the perchloride is occasionally prescribed as hyd. chlor., or hyd. bichlor." He adds: "If the dispenser finds it impossible to consult the physician in such cases, he will not regret giving the subchloride, if more than one-quarter of a grain is ordered in each dose"—a statement with which most of his readers will heartily agree. The remarks on excipients are useful, and will be eagerly read by those who are unfortunately compelled to dispense their own medicines. As an excipient for carbolic acid (Calvert's pure crystalline), the author prefers wheaten flour, in the proportion of one and a half

grains of flour to two grains of acid. Camphor, after being powdered with a few drops of spirit, makes a good mass with tragacanth paste. Iodide of potassium should be rubbed up, with a few drops of water, into a stiff smooth paste, and then worked into a good mass by the addition of liquorice powder. At the end of the first part, an explanation is given of certain terms and processes used in pharmacy—such, for example, as affusion, ablation, decoction, depuration, despumation, elutriation, granulation, levigation, and trituration.

The second part consists of a list of articles of materia medica, arranged alphabetically. The descriptions are necessarily short; but they are, in the main, correct and to the point. This will be found useful to students who have already obtained some knowledge of the subject from larger manuals. The non-official preparations are printed separately in red ink; but the information concerning them is very meagre, the whole subject being despatched in seven pages.

In the third part, the alphabetical arrangement is continued. The information is given in as few words as possible, and there is little or no room for the discussion of moot points. Under the head of arsenic, the author very properly calls attention to the absurdity of making lavender one of the ingredients of Fowler's solution; and remarks: "Often the red lavender contained in the liquor disgusts the stomach of the patient." Under aqua, a good account is given of the therapeutic uses of water, whether employed internally or externally, including a description of the different baths and packs, and of aquapuncture, or the injection of water under the skin for the relief of pain. A good abstract is given of the therapeutic uses of camphor; but no reference is made to the use of the essence—or saturated solution in alcohol—in the treatment of choleraic diarrhoea, for which it is one of our best remedies. The internal administration of glycerine, for the relief of painful and inflamed piles, is described; but its value as a remedy for flatulence and acidity is not mentioned. Full directions are given for the administration of cod-liver oil in phthisis, and in other wasting diseases; and the method of inunction, as a last resource, is advocated. At the end of this part, the different medicinal agents are classified, and the general characters of the groups are described.

The fourth and fifth parts are devoted to prescription-writing; the composition of a recipe: parsing and syntax; weights and measures; and other subjects of interest to students preparing for examination.

The work contains a great deal of valuable information; and is, on the whole, reliable. It is evidently the result of much care and thought, combined with sound practical experience.

ON DISEASES AND LESIONS OF THE EYE. By J. R. WOLFE, M.D., F.R.C.S.E. London: J. and A. Churchill. 1882.

THIS treatise conveys its information in a very readable and pleasant form, and is in this respect admirably adapted for the use of students, and the study of diseases of the eye. The advanced ophthalmologist will also find in it some useful information, notably with regard to the various methods of treatment of entropion and ectropion. The author favours that by skin-transplantation *without pedicle*, after the principle first introduced by Le Fort in France.

A might be expected in a course of lectures originally addressed to students, many points are omitted which would be of interest and value to the more advanced student or to the practitioner. These especially concern the therapeutical part; for example, there is no mention of kerne in the treatment of corneal ulcers, and even in glaucoma its use is barely alluded to. In the same way, no mention is made of the subconjunctival injection of nitrate of pilocarpine in retinal detachments and vitreous detachment, a treatment so much lauded by French authorities, that it is impossible for us to neglect its trial; nor under atrophy of the optic nerve or retinitis pigmentosa is there any mention made of that most valuable means of treatment, the continuous current. The author attaches very little value to either tony in glaucoma as compared with iridectomy. He believes that the latter operation cures by removing a portion of the nerves which, by their constant contraction, give rise to the tension.

In his chapter on sympathetic disease, he holds to the now almost abandoned doctrine of reflex nervous irritation. He says nothing about sympathetic irritation as distinguished from sympathetic disease, nor does he mention the effect of salts on the vasomotor system of Lacaze, which he considers the most important and characteristic symptom of sympathetic disease.

In his theory of inflammation which he has accepted as now correct, and supported. Indeed, the same may be said in general of his views on the causation and symptoms of the eye. The clinical signs and symptoms of inflammation are well described. They appear to be the same as those of the same kind in other parts of the body. The names of the various forms of inflammation are well recognized, but the list of them is not so complete as it might be. The book is a good one for the student, and for the practitioner.

NOTES ON BOOKS.

WE have received, in a handy and compact octavo form, the eighteenth volume of the *Minutes of the General Medical Council*, containing an official record of the business of the General Medical Council transacted during its thirty-first and thirty-second sessions; with the Minutes of the Executive and Dental Committees, and the English, Scotch, and Irish Branches; also an appendix containing the General Medical Council's Standing Orders, and a complete list of officers and meetings from the passing of the Medical Act in 1858 to 1882. We are requested to state that this volume may be procured of its publishers, Messrs. Spottiswoode and Co., 30, Parliament Street, S.W., at the price of 5s.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW TONSIL FORCEPS.

THE question as to the best means of removing inflamed and hypertrophied tonsils, has been frequently brought under the notice of the profession in the columns of the *BRITISH MEDICAL JOURNAL*; and now many surgeons prefer the use of the knife to that of the guillotine. The chief, and indeed only, danger of the operation consists in the close proximity of the internal carotid artery. Having recently been called upon to excise a number of enlarged tonsils, I have used an instrument, invented by myself, and manufactured for me by Messrs. Arnold and Sons, with the greatest success, of which the above is an illustration. The mode of my operation is as follows. Having firmly



grasped the tonsil, I draw it towards the mesial line: and then, with a curved bistoury, rapidly cut through the tissues, "keeping the blade in direct contact" with the enlarged grasping end of my forceps. The following are the advantages I claim for this instrument. 1. Extreme simplicity and ease of application. 2. By attending to my direction of keeping the blade of the bistoury in contact with the blades of the forceps, all danger as to hemorrhage from wounding the internal carotid is avoided. 3. The instrument can be used on either right or left tonsil. 4. The groove on the edges of the circular blade gives great grasping power.

R. C. STUDDERT, B.A., M.B., M.D. Trin. Col., Dublin,

L.M.S. & C.F.I., Surgeon to the Erith Cottage Hospital, 58, Pier Road, Erith, London, S.E.

MARSHALL'S PATENT SECTIONAL FEEDING-BOTTLE.

THIS bottle differs from the ordinary shape of feeding-bottles, but allows one side to be taken out for cleaning. This allows the bottle to be cleaned at once, as an ordinary teacup. It is quickly taken to pieces and re-assembled. There is an arrangement which allows of its being attached to the elbow, wrist or ear. The bottle fulfils the necessary requirements of a feeding bottle, of being simple, strong, and easily cleaned. It received a certificate of merit at the late Sanitary Exhibition.

MATERIAL FOR SPLINTS.

SIR, Recalling Mr. Fyke's note on "A New Material for Splints" has recalled to my mind one which was designed by myself twenty years ago, and which I used with great success for many years. It was composed of thin corrugated iron, such as is used in the manufacture of the "patent metallic Venetian blinds". Indeed, I used to get them made by a manufacturer of these articles. I found them strong, light, cool, comfortable, and very durable; and, when covered with a coat of two or three of light stone coloured paint, very clean and nice-looking. I do not think that they became generally known, although some of my

friends used them: therefore, probably you might think it worth while to mention them.

I enclose a rough sketch, from which a tolerably correct idea of the invention may be gathered.—I remain, sir, yours truly,

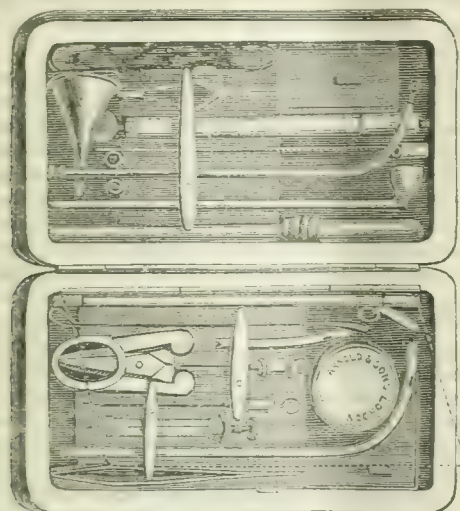
J. P. OATES, M.R.C.S., L.S.A.

Vaughan Lodge, Malvern Wells, March 20th, 1882.

P.S.—The padding is formed of a few layers of thick common flannel, cut to shape, and stitched on through the holes indicated by the dots, so as to have the convexity of the corrugation next the flannel.

SURGICAL POCKET-CASE.

THIS surgical pocket-case has been designed and manufactured by Messrs. Arnold and Sons, for the express purpose of supplying surgeons and general practitioners with a complete, portable, and compact case of really useful and necessary instruments, to be carried during the daily rounds of visiting, as well as when sent for to an urgent and unknown patient. The case contains nearly everything a surgeon can require on an emergency, besides many things of daily utility and necessity; and, instead of pondering over what instruments are to be taken out each round, or to a sudden call, the surgeon has simply to put this case (besides his stethoscope) in his pocket, and thereby save much time, and perhaps gain much credit, by having what he will require with him, instead of having to send or go back for the necessary article.



One side of the case contains a clinical thermometer and caustic-holder (combined), in plated metal case; Corrigian's actual cautery button and director (combined); Bellocq's epistaxis cannula; finger saw; exploring needle, in ivory case, with screw fittings to act as handle to the saw; Toynbee's ear-speculum, holding litmus paper, and constructed to act also as a tracheotomy tube, if desired; bull-dog forceps; straight bistoury; gum lancet; Fergusson's knife and American needle, mounted together in tortoise-shell; and a compartment to hold lamels, discs, and vaccine points.

The other side contains dressing forceps; medium-sized silver-plated catheter, adjustable as male or female; probe (inside catheter); Ches-terman's patent metal measuring tape; hypodermic syringe and needles; aspirating needle, fitting to the hypodermic syringe; folding steel scissors; Imray's double ear-scoop; and a compartment for thread, wire, and surgical needles. In all, there are twenty-five full-sized, efficient, and highly finished instruments, besides the other necessities before-mentioned, all of which are held securely together in their proper places by means of metal pivot bands.

The case measures about five and a half inches in length, three in width, and one deep, shaped and opening like an ordinary cigar-case, with the addition of a thin leather leaf in the middle, useful for holding plaster, lint, oil silk, etc.

SANITARY INSTITUTE OF GREAT BRITAIN.—At the ordinary meeting of the institute, held March 8th—Dr. A. Carpenter in the chair—the prize of £200 for an essay on the Range of Hereditary Tendencies in Health and Disease was presented by the Rev. E. Wyatt Edgell, B.A., to Mr. G. Gaskoin, M.R.C.S., who afterwards read a paper on the subject.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st.

Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 25TH, 1882.

THE VALUE OF EXPERIMENTS ON ANIMALS.

So much has already been published in these pages and elsewhere in demonstration of the fact that results of the highest value to life and health, both of man and of animals, have resulted from judiciously conducted experiments on animals, that it might seem almost supererogatory to say anything more on the matter. That misinformed and misjudging section of the community, however, which sees in "vivisection" nothing but material for abhorrence, not content with the stringent limitation placed on scientific physiological investigation by the Act of 1876, continues its denunciation of experiments on animals; and we therefore hold it to be a duty, as opportunities present themselves, to call the attention of our readers to sources from which they may obtain material wherewith to combat the misstatements and misrepresentations of the antivivisectionists.

The admirable addresses delivered at the International Medical Congress, and the excellent speech of Professor Humphry at the annual meeting of the British Medical Association at Ryde, will be fresh in the memory of our members. We have now before us two other valuable documents bearing on the value of experiments on animals, of which we propose to give a summary.

As our readers will probably remember (see *BRITISH MEDICAL JOURNAL*, February 11th, page 202), the antivivisection party in Germany some time ago presented to the Reichstag a series of petitions in favour of the restriction or prohibition of vivisection. These petitions were referred to a Committee, the majority of whom recommended their rejection. In the debate on the report of the Committee, an important speech was made by Professor Virchow, who, as is well known, is an influential member of the German Parliament. He denied the assertion made by the petitioners, that experiments on animals were performed by students or other persons indiscriminately, and to an extent far beyond the demands of science; he further asserted the statement to be incorrect, that they were used for the purpose of demonstration. As director of a Pathological Institute, he acknowledged that experiments were often performed; but they were done for research only, and the demonstration to the students was made on the dead body. In another part of his speech, he made some remarks on the practical utility of experiment, which we translate with slight abridgment.

"It would seem, on reading the petitions, that we had, in fact, to deal with a charge against medical men of bad character. With regard to this, I would first say, that the charge is really directed against the highest authorities in the empire and in the individual states. Our imperial sanitary department, for example, has just published a thick volume, which in reality contains nothing beyond a mass of observations, all turning on an experimental foundation. These researches contain very valuable material, and they all have relation to matters with which the empire and its legislature are intimately concerned—namely, contagious and infectious diseases. They involve especially the inquiry, to what extent these infectious diseases are to be attributed to certain parasites, minute fungi, or any other circumstance. Allow me to make a brief remark on this matter. The first thing which the legislator against these things always discusses, is the question of disinfection; and here

begins the practical duty of the state. If anyone desire to disinfect, he must first know what he really wants to do. This question, however, although formerly believed to be very simple, has become resolved into a series of subsidiary questions. Are there parasites, etc.? How can the parasites be overcome? How can we render certain injurious chemical matters inactive? What is it against which it is essential to direct the means of disinfection? The whole question of disinfection has anew become the subject of debate and of experiment. No new regulation concerning the mode of disinfection can be issued, that is not founded on the results of such research; and these results, in my opinion, cannot be arrived at without experiment on animals. If the petitioners say coolly that everything might be found out in other ways, from travellers and missionaries, and I know not from what other sources, who will know all that is to be said on the matter, then we shall never succeed in obtaining truly practical regulations. But, at the moment when the public sanitary department publishes a large book, which in fact probably contains the studies preliminary to legislation, and which is throughout based on experimental methods of research, people come here and ask: Is not this an altogether objectionable method?

"We have at the present time in Prussia a subject the solution of which has long been attempted by experiment, for which the ministry of agriculture, as well as that of instruction, is specially responsible. The question has been raised, whether a certain disease which occurs chiefly among horned cattle—*Perlsucht*—may possibly produce tubercle, scrofula, or even consumption in man; whether possibly phthisis can be produced in children by the use of the milk of cows thus affected; whether phthisis is not, perhaps, to a great extent produced in man by the use of products derived from animals thus diseased. The question is one of great importance, and must be closely investigated by means of experiment; but this is so much more difficult than was expected, and is attended with so many complications, that I must say that I do not see that we are near to obtaining a result. Nevertheless, I do not know how any one can come and say to us: As you have as yet arrived at nothing but contradictions, you must desist from experiment. The petitioners find in the contradictory results a proof of the inutilty of the methods employed. But, gentlemen, these contradictory results are the first things that lead to a clearing up of the peculiar difficulties of the question; they lead to the question being stated more correctly, and investigated on a wider base. The more contradictions arise, the more distinctly is it shown that the question is by no means so simple as it has appeared to be, and that it must be resolved into a host of subsidiary and preliminary questions."

"We have a series of inquiries, which fortunately are somewhat more advanced—those concerning splenic fever (*Malaria*). Yet, what did we really know about this disease, before we undertook to investigate it by experimental methods? And now we are brought face to face with regard to splenic fever, that there is scarcely any other infectious disease regarding the details of the symptoms and course of which we have more sufficient information. In this way, we arrive at being able to formulate the means for the prevention and cure of the disease, and to present material material for legislation, much more accurately and sufficiently than was formerly the case."

"The whole of the knowledge which we at present possess with regard to the transmission of the parasites of living animals, and the destruction of tapeworm with various kinds of chemicals, and the doctrine of trichinae, is founded on experiment. Every important advance in this history has been made by research on animals; and what remains still to be done with regard to trichinae will certainly be done in no other way than by a continuation of experiments. The results already furnished the practical labours which have to be undertaken for the protection of men. As regards trichinae, we are aware of the whole process of their development in the rabbit. It was formerly said, that there are merely trivial matters, that we cannot cure a case of trichinae, but must leave it to nature. But we have

learned that it is possible to protect against trichinae; and we have arrived at the result of being able to accomplish practical results in the larger towns."

"I will limit myself to these instances; I could cite an endless list. I will only yet refer to the question, under what circumstances inflammation can be produced in man. We are all at any moment exposed to this danger; every individual man may at some time be affected with inflammation; and we have, therefore, an interest in knowing positively under what circumstances inflammation is produced. The research assumes entirely special forms. Thus the questions arise: Is not the cause to be sought in microzoa or in microphytes? Should we make our investigations entirely on man? That would be an endless inquiry, which would probably not be completed for generations. If we would arrive at a practical result, no course remains for us but to take animals, and allow influences producing inflammation to act on them under the most varied circumstances, sometimes very severe ones; as, for instance, in the inquiry whether inflammation in the interior of bones can only take place in the presence of bacteria. These are painful proceedings, but they must be undertaken, if we desire to bring the inquiry to a practical result. This being obtained, an effect useful also to mankind will soon follow. The fact that the petitioners desire to contradict the value of the experimental method in medicine, only shows the greatest ignorance."

"In support of what I have said, I must refer to the proceedings of the recent great International Medical Congress held in London. At this Congress, where I myself had the honour of delivering an address on this subject, the whole civilised world was in fact assembled with the chief representatives of the medical profession. Now, gentlemen, do not give yourselves up to the idea, expressed here and there in the petition, that medical men, especially professors, pursue these practices for mere pleasure, that it is in a measure a passion with them, a gratification of a certain brutal inclination of their heart, to torture animals. The medical men who assembled in London to the number of more than 2,000, decided, without contradiction that science cannot do without the experimental method. If, however, reference be made to the fact that the English Parliament, in a moment of precipitation, took a step which most seriously endangered the progress of medicine in England, I may tell you that one of the most prominent men whom England at the present time possesses, Sir John Lubbock, has already in the present Parliament made an attempt to give effect to the resolution of the International Congress, and to procure the withdrawal of the Act. In fact, if the Act remain in force, medical men in England apprehend that it will in future become impossible to carry out in that country a great and almost the most important portion of researches; that it will become the rule that—as already happens—English investigators will have from time to time to come to the continent to carry out their researches."

To the English literature of the subject, must be added a paper on "The Influence of Vivisection on Human Surgery" read last month by Mr. Sampson Gamgee at a meeting of the Birmingham and Midland Counties Branch. Before further noticing it, we will once more return to Professor Virchow's speech, for the purpose of quoting from it some remarks expressive of his views on the relation of English surgery to vivisection.

"In England, there are two principal classes of practitioners—physicians and surgeons. The surgeons, who are educated quite differently from the physicians, have always been the supporters of physiology; and this is reasonable. . . . That English surgery has made so great an advance during the last century, depends on the fact that the surgeons have made experiments, and kept themselves in constant connection with the progress of knowledge regarding life and the vital processes."

Mr. Gamgee's essay has for its object the proof of the statement that "Without experiments on living animals, Scientific Surgery could not have been founded, and its present humane and safe practice would be impossible." Without attempting to make good this statement in all its bearings by a comprehensive review of the history of surgery and of

the departments of medical science with which it is connected, he contents himself with adducing some authentic and cogent instances of the valuable aid which experimentation has afforded to surgery since the middle of the last century.

He quotes two examples from the memoirs of the French Academy of Surgery; than which, it was said by Sir Benjamin Brodie, "there is no richer mine of surgical knowledge". In 1778, the Academy published an essay written by M. Saucerote on a subject which had been given out for competition for a prize—"To establish the theory of injuries of the head by *contre-coup*, and the practical conclusions to be derived therefrom". Saucerote's essay, to which the prize was awarded, was based on literary research, clinical observation, and twenty-one experiments on living animals. Again, an article in the memoirs of the same Academy relates the experimental proofs of a statement that amputation at the hip-joint had been performed safely on dogs; and, Mr. Gamgee says: "Amputation at the hip-joint, the direct outcome of vivisections, has resulted in saving many valuable lives which otherwise must infallibly have perished."

Among the examples in surgery adduced by Mr. Gamgee as affording proof of the value of experiment on animals, are the evolution of subcutaneous surgery from John Hunter's experiments on the union of the divided tendo Achillis in dogs; the demonstration of the possibility and utility of the ligature of arteries, by experiments conducted by Hunter, Astley Cooper, Lawrence, Jones, Travers, and with these must be associated Scarpa of Pavia, who laboured successfully, with the aid of experiments on animals, to demonstrate and extend Hunter's teaching on aneurysm; the demonstration of the value of torsion as a hæmostatic by Amussat in Paris, Costello, Porta, Simpson, Beale, Henry Lee, and Bryant; the operation of transfusion of blood, the way to the performance of which was prepared by the experiments of Lower, Boyle, and Blundell; the improved treatment of wounds of the intestines, founded on experiments on animals made by Shipton, Travers, A. Cooper, Jobert (de Lamballe), Gross of Philadelphia, and Bouisson of Montpellier; the removal of cancerous portions of the human subject by Péan, Billroth, Czerny, and others; the invention of the *éclaireur*, the utility of which was first proved on animals; etc. Our space does not allow us to quote at greater length from Mr. Gamgee's interesting and most convincing list of instances in which operative procedures, resulting in the saving of an incalculable amount of human life and in the relief of much suffering, have been founded on the results of experiments on animals; but we would strongly recommend our readers to purchase his essay, and study it for themselves.*

In concluding his essay, Mr. Gamgee makes some observations on the manner in which the Vivisection Act is administered. If, he says, it is to be administered in the spirit which has obstructed Professor Ferrier and Dr. Lauder Brunton in their experimental inquiries, by the formalities of the necessary legal licence, "there is an end to the British school of experimental and comparative physiology, pathology, and therapeutics, on the lines of investigation which give the greatest hope for the progress of human medicine and surgery." He does not, however, desire that the Act should cease to exist, but that a compromise should be made, and the Act administered in a judicious and forbearing manner.

"No one denies that experiment is the very essence of physical research, and no valid reason has been adduced why animal physics should be an exception. Under anæsthetics, it is possible to carry out the majority of scientific experiments on living animals without pain; but how is it supposed that operating surgeons can practise their difficult, delicate, and most anxious art without inflicting pain upon, and sometimes at the cost of the life of, human beings? It is surely wise economy and enlightened charity to sacrifice a few guinea-pigs and rats, if it be thereby possible to spare pain and life to some of God's best and noblest creatures.

"The love of animals, which is one of the prime movers in the

breasts of those who oppose vivisection, is deeply to be cherished. As Englishmen, we yield for it to no nation. The alleged horrors of Alfort and of the Florence laboratory are not practised in Great Britain. We hold that scientific experiments on animals are indispensable. Let us reassure all kindly persons, by giving every possible guarantee that only essential experiments shall be performed, and in the most humane manner possible. Vivisection might be restricted to licensed public institutions, such as medical schools or other scientific colleges; and then under the control of their teaching and governing bodies. If, in something like this spirit, a truce be agreed upon, and the Act temperately administered, I feel quite confident that the medical profession will act in the matter in the same spirit of benevolence and honour in which they discharge all their public duties. But, if spies are to track every scientific inquirer, and such prosecutions as the recent one of Dr. Ferrier are to be renewed, I would venture to make an observation. Laws which are too stringent and uncompromising inspire their own violation. Smugglers are the outcome of oppressive fiscal laws, as body-snatchers were of prohibited human dissection.

"When philanthropists outside the medical profession evince so much anxiety for the prevention of cruelty to animals, and by implication, if not explicitly, accuse us of being indifferent to it, they may be reminded that the discoverers of vaccination and anæsthetics, the chief promoters of sanitary reforms, and the founders of conservative surgery, have one and all been members of the medical profession, without rivals beyond its pale. The duty of sometimes inflicting pain for the relief of greater suffering, or for the prolongation of life, is an unfortunate necessity. But in what spirit, with what success, that duty is discharged by those on whom it devolves, may be inferred from the fact that the humanity of our operating surgeons is scarcely ever called in question. A great part of their practice is in public. Wards full of men and women witness their procedure; and it may safely be stated that in every city and town in the empire, in the army and in the navy, no men are more popular with the masses, none enjoy more fully the confidence and respect of the thoughtful, than operating surgeons. Are such men not to be trusted to perform scientific experiments on brutes, with the minimum of suffering, when they consider them essential to obtaining information for the saving of life, or for demonstrating the means of saving it to those who adopt the medical profession as their vocation? The predominant judgment of history and of the civilised world answers in the affirmative."

We shall have another opportunity of referring to the admirable series of papers, in the current number of the *Nineteenth Century*, on this subject, by Sir William Gull, Mr. Fleming, and Dr. Lauder Brunton. The latter, especially, will be found to be a valuable storehouse of facts in relation to the additions to the knowledge of practical medicine contributed by physiological experiments. These essays will be read with particular interest in connection with the formation of the Association for the Advancement of Medicine by Scientific Research, which we announced in our last week's impression, and with its first general meeting, which will take place next week. This Association will, it is to be anticipated, include the whole force of the medical profession, and will avail itself of its combined influence to arrest the lamentable perversion of intelligence and human sympathies which the societies for the prevention of experiments on animals are organised to bring about, and in which object they have to some extent succeeded.

PHYSIOLOGICAL TESTS IN CRIMINAL TRIALS.

THE adequacy or inadequacy of physiological tests as proof of the presence of vegetable alkaloids has been again brought prominently before the medical profession and the public by the trial of Lamson; and the occasion is one which cannot be neglected in the present state of the vivisection controversy. We may remind our readers that the Cruelty to Animals Act, 1876, better known as the Vivisection Act, makes express provision in criminal cases for dispensing with the ordinary tardy and vexatious mode prescribed for obtaining a certificate to experiment upon animals; and allows an application to be made to a judge,

* It is published by Messrs. J. and A. Churchill of New Burlington Street; price sixpence.

law upon the subject, as it is not proved by the Supreme Court of Massachusetts; but it forms a precedent which will probably be followed, as it coincides with the general opinion of the lawyers of that State. But in other States of the Union there appears to be a conflict of authority on the question.

According to English law, although it does not generally give a witness any right to compensation for his loss of time whereby a promise to pay for such could be enforced, it has been held that there is a difference between the case of a person who sees a fact and is required to prove it in a court of justice, and that of a man who is selected by a party to the cause to give his opinion on a matter upon which he is specially competent to speak with weight and authority from the nature of his employment or vocation; and therefore, while the former is bound as a matter of public duty to give testimony concerning a fact which happens to have fallen within his knowledge, the latter is not under such an obligation, and consequently the party who requires his evidence must pay him for such.

From this decision—and as it is the practice of the Masters of the High Court of Justice, in taxing costs in litigation, to allow expert or scientific witnesses very liberal fees beyond those which are paid to ordinary witnesses of the same profession—we have no hesitation in saying that not only was the ruling in the Boston case just and equitable, but are surprised that there is any contrariety of judicial opinion in other courts in the United States on this question, considering that the principles of express and implied contracts recognised in the tribunals of that country and our own are almost entirely the same.

THE first German medical congress will be held at Wiesbaden at the end of April.

ON April 18th next, a congress of Greek physicians and naturalists from all parts of the world will meet at Athens.

THE contributions to the Virchow testimonial fund amount to 76,612 marks (£3,830 12s.).

WE understand that there is a vacancy for Lecturer on Public Health at Guy's Hospital; Dr. F. Taylor having resigned this course, which he has held for some years.

MR. THOMAS METCALFE SMITH, formerly a corn and wine-merchant of Lincoln, has bequeathed £10,000 to the Lincoln County Hospital and £5,000 to the Dispensary.

DR. ZUCKERKANDL of Vienna has been appointed Professor of Anatomy and Superintendent of the Anatomical Institute in the University of Graz. He has a high reputation as a skilful and learned anatomist.

THE honorary degree of Doctor of Medicine has been conferred by the College of Professors of the University of Vienna on Herr Ludwig, the Professor of Chemistry in the University, in recognition of his eminent services to science and to education.

MRS. DOMVILLE, the widow of the late popular and highly esteemed Inspector-General Domville, who fell a victim to typhoid fever caught when in charge of Haslar Hospital, has been authorised by Her Majesty to occupy Mrs. Wyndham's suite of apartments at Hampton Court.

THE following gentlemen have been nominated as the Select Committee on Police and Sanitary Regulations:—Mr. Blennerhasset, Mr. H. H. Fowler, Mr. Garnier, Sir G. Goldney, Mr. Hastings, Mr. M'Laren, and Mr. Sclater Booth.

THE Prince and Princess of Wales have accepted an invitation to open the Convalescent Home at St. Leonard's-on-Sea during the summer. His Royal Highness will also preside at the festival dinner of the Victoria Hospital for Sick Children, on Wednesday, March 29th, at Willis's Rooms.

THROUGH the generosity of Mr. R. H. Wood, J.P., the town of Rugby is shortly to be possessed of a free hospital for the poor. This gift, which is of the estimated value of £30,000, is to include a freehold site of ten acres just outside the town, a new hospital for thirty beds, and ample endowment to maintain the institution in proper working order. Both in the style of its architecture and in the completeness of its internal arrangements the hospital, of which Mr. Waterhouse is to be architect, will be constructed on an elaborate scale.

MR. C. S. LOCH, Secretary of the Charity Organisation Society, sums up, in the current number of the *Sanitary Record*, the conclusions which he has drawn from the prolonged investigations by committees of that Society, of the working of the Industrial Dwellings Act, and the desirable means of remedying their defects.

A WELL worded petition against the total abolition of vivisection has been drawn up in Hereford, signed by all the practitioners in the town. The full petition, *with its signatures*, has been published in the local journals, and affords a striking protest and statement of medical opinion which must affect favourably public opinion in the neighbourhood.

THE precise title of the new association which will be founded at the meeting of representatives at the College of Physicians on the 28th instant, will be Association for the Advancement of Medicine by Scientific Research. It is intended that the by-laws to be proposed shall provide for the representation on the Council of all the leading associations and corporations.

WE regret to record the death of Dr. J. C. Reid of Newbiggin-by-the-Sea. The deceased gentleman, who was sixty-seven years of age, and a Scotchman by birth, held for a considerable time the position of medical officer to the Newbiggin Local Board of Health, and was well known and highly respected in many parts of the north-east coast of Northumberland.

AN exceptionally low death-rate is reported at Eastbourne during the past year, the total deaths (269) being equal to a rate below 13.0 per 1,000 of the population. The matter is one of importance, having regard to the increasing popularity of the town as a health-resort; and, in this connection, it deserves to be mentioned that one-fifth of the whole mortality happened in persons over sixty years of age.

IN connection with the Jubilee Meeting of the British Medical Association at Worcester, we are asked to state that the annual museum will be held in the large music-hall, which will be devoted exclusively to the purposes of a medical, surgical, sanitary, and pathological museum. The total floor-space of this building is about 4,000 square feet, applications for which should be addressed to the Secretary, Mr. J. Randle Buck, 26, Sidbury, Worcester.

MISS JOANNA HASTINGS of Malvern, the eldest sister of Sir Charles Hastings, the founder of the British Medical Association, completed the hundredth year of her age on Tuesday, the 14th instant. Although somewhat infirm in body, her mental faculties are, it is said, still vigorous, and her health is good. On her birthday, she received numerous congratulations, and dined with a large number of members of the Hastings family at the residence of her nephew, Mr. George Hastings, M.P., of Barnard's Green, where she responded in well-chosen and vigorous words to the toast of her health. The father of Sir Charles Hastings, the Rev. James Hastings of Martley, was above a century old at the time of his death in 1855.

SOME remarkable revelations were recently made at Wolverhampton, in the course of a prosecution, under the provisions of the Sale of Food and Drugs Act, of a milk-seller for selling milk adulterated with water. It was stated by the wife of the wholesale dealer, from whom the milk was obtained, that she rinsed out her milk-cans with water obtained

the inspector bought the flowers from the poor creature, and sent the sick man to hospital; but, as the woman had been selling these bouquets on previous days in the public thoroughfares, it would be hard to say how many apparently mysterious cases of small-pox may not yet appear in Nottingham. The utility of a house-to-house visitation, and of removal to hospital, in time of epidemic, was perhaps never more conclusively demonstrated.

THE INTERNATIONAL MEDICAL CONGRESS.

WE have received from Claudet's photographic studio, 107, Regent Street, a handsome and serviceable photographic album, containing a very fine series of cabinet portraits, executed for the purpose by Mr. G. Gerrard, of the President of the International Medical Congress held in London last year, and also of the Secretary, and of the Presidents and Vice-Presidents of the various Sections. The first page contains the portrait of H.R.H. the Prince of Wales. The series of portraits, which are all of full cabinet size, are among the most remarkable successes of the art of photographic portraiture which we remember to have seen. The likenesses are exceedingly good. The point of view has been selected in each case with remarkable intelligence; and the likenesses of Paget, Mac Cormac, Flower, Turner, Michael Foster, Hutchinson, Burdon Sanderson, Gull, Quain, Wilks, Bristowe, Pavy, George Johnson, Erichsen, etc., are singularly life-like. It is a most interesting volume; and such a selection of portraits of eminent medical men, so grouped in connection with the memorable event they commemorate, will certainly be treasured as a valuable and delightful memento by those who are fortunate enough to be able to acquire it.

THE NOTIFICATION OF INFECTIOUS DISEASES.

THE Bill which has been framed by the Irish Medical Association and the Dublin Branch of our Association, to provide for the notification of infectious diseases in Ireland, was down for second reading on Tuesday, and again on Wednesday last, but was not reached on either occasion. Mr. Gray, who has himself a Bill on the subject similar to that which he introduced last year, has given notice of opposition to the first Bill, which is backed by Mr. Meldon, Mr. Maurice Brooks, Mr. Findlater, and Mr. Moore. Mr. Gray's own Bill was itself down for second reading on Wednesday, but the other business on the paper prevented its discussion. The Bill introduced by Mr. Hastings and others, for the extension of the system throughout England and Wales, has the second place amongst the orders of the day for Wednesday next. Mr. Thomasson, the member for Bolton, has given notice of his intention to move the rejection of all three of these Bills.

THE CASE OF MR. T. A. SMYTH.

AT the adjourned inquest held by Mr. Langham on March 17th, on the body of the Rev. Matthew Campbell, late curate of All Saints', Surrey Square, Camberwell, Mr. T. A. Smyth was committed for trial for manslaughter. From the evidence, it appeared that Mr. Smyth had been practising as a medical man without having a qualification. He had a plate with "Surgeon" engraved upon it, on his street-door. The widow of the deceased stated that, on Saturday, February 25th, she told Mr. Smyth that her husband had not passed water for three days. Her husband was under the impression that Mr. Smyth was a fully qualified practitioner, and that he was connected with the staff of St. Thomas's Hospital. She told Mr. Smyth that she thought her husband was in a dangerous state, and asked him if he had instruments to draw the water. He said he had none, and that there was no immediate danger. On the 28th, Mr. Smyth called again, said there was no danger, and that he would return in two hours, and relieve Mr. Campbell, but he never returned. On March 1st, Dr. Channing Pearce was sent for, who said the case had been neglected, and advised him to be sent to the hospital. Mr. Pitts, resident surgical assistant at St. Thomas's, stated that deceased died from extravasation of urine, caused by non-attention, the redness and inflammation of the parts having extended up the loins when he was seen in the hospital. He was operated upon, but died. The claim to medical knowledge pos-

sessed by the defendant was that he had been a student at St. Thomas's Hospital. After the defendant had been committed for trial, some of the junior students of St. Thomas's Hospital remained behind, and expressed their disapproval of Mr. Smyth by pelting him with stale eggs. After a scene of great disorder, an extra force of policemen appeared on the scene, and put an end to what at one time threatened to be a serious riot. It is much to be regretted that medical students should so far forget their position in relation to the hospital to which they may belong, and their own personal dignity; and the hospital authorities should, we think, take serious notice of this misconduct. One element of disorder in most inquests is that they are usually held at public-houses, as was the one in question, which deprives the proceedings of much of the dignity of a court of justice. Nothing, however, can justify such misbehaviour. There is only too frequent a tendency to fix unjustly upon medical students of the present day a general charge of roughness and disregard of the proprieties of conduct. Such a mode of exhibiting a justifiable indignation will gratify the detractors of their class, who will not trouble themselves to inquire into the circumstances which roused the students to a righteous anger, seeing that it vented itself in an unseemly manner.

THE SALE OF POISONS.

PAULINE LARKWORTHY, wife of a druggist, has been charged at Brentford Petty Sessions with selling ammoniated mercury, commonly called white precipitate, contrary to the Sale of Poisons Act (31 and 32 Vict., c. 121). The poison had been sold to a woman who attempted to commit suicide with it, and was only resuscitated with great difficulty after the use of the stomach-pump. Defendant said she only did the same as other chemists who used the word "Poison" without the name and address. The police said the Act was being constantly violated. A fine of 40s. was inflicted.

THE WOLVERHAMPTON GENERAL HOSPITAL.

A CORRESPONDENT writes: At the annual meeting of the board of governors of this charity, held on Tuesday, March 14th, Lieut.-Colonel Thorneycroft in the chair, a report was read from the committee which stated that the out-patient department had grown too large for the existing staff, and recommended the appointment of "two honorary assistant-physicians and two honorary assistant-surgeons, such assistant-physicians and assistant-surgeons not to be restricted in their private practice, and to possess the qualifications which are respectively necessary for the office of honorary physician and honorary surgeon." In the discussion which followed the reading of this report, great exception was taken to the proposal to allow the assistant-physicians to engage in general practice, as this was regarded as calculated to deteriorate the medical status of the charity, and was withholding from the poor the advantages to which they were entitled. Ultimately, an amendment recommending the appointment of a third physician, to be paid an honorarium of £100 a year, was carried by a large majority. It is certainly somewhat surprising that a report emanating from the committee of the hospital should have been so ill supported, and defeated so easily by an amendment which made only partial provision for meeting the difficulty, as the surgical out-patients are altogether unprovided for by it. It is no doubt desirable that, so far as possible, hospital appointments should be held by those who limit their practice to one or the other of the great divisions, medicine or surgery; but it is found quite impracticable to do this everywhere. Specialism in practice implies residence in a large centre, and only large centres can support many specialists, so that it may well happen that the town of Wolverhampton, for example, should be unable to support as many practising physicians as may be required to perform the duties of the medical staff at the hospital. Under these circumstances, there are only two alternatives: either the staff remains insufficient, in which case much of the work that should be performed by the senior and responsible officers actually falls to the house-physician, or it must be increased by appointing general practitioners to the out-patient offices. In the interests of

Any member of the British Medical Association who is acquainted with such premises would oblige if he would send particulars to Dr. Norman Kerr, 42, Grove Road; and all gentlemen willing to assist the measure may do so by joining the Association, and thus helping forward an establishment which is urgently needed.

A MUNIFICENT BEQUEST.

ONE of the most munificent of modern bequests to hospitals has fallen to that admirable institution, the Royal National Hospital for Consumption, Ventnor, Isle of Wight. This hospital, founded by a distinguished member of our profession, Dr. Arthur Hill Hassall, on the cottage system, will receive a sum of nearly £200,000, under the will of the late Mr. John Jones of Piccadilly. There is not a more beneficent and useful institution in the country than this, which is the youngest, and is the most intelligently devised and constructed, and one of the most ably administered, of our voluntary hospitals. The members of the British Medical Association had recently the opportunity of inspecting and appreciating its merits, under the guidance of Dr. Sinclair Coghill, visiting physician.

NEPHRECTOMY.

THE two patients on whom nephrectomy has recently been performed by Mr. Knowsley Thornton, at the Samaritan Free Hospital, are both proceeding favourably; the second patient, who underwent the operation on Wednesday, March 15th, having suffered but very little shock, although the removal of the cystic kidney, which was in a state of supuration, discharging through an opening in the loin, and the precautions necessary for securing the pedicle and cleaning the peritoneum, were tedious and prolonged proceedings. We are informed, on the operator's authority, that these cases will be very shortly reported before the Royal Medical and Chirurgical Society. In both, the abdominal incision was made not in the middle line, but along the outer border of the rectus muscle. We also learn that Mr. Adams's case of nephrectomy is progressing favourably.

LUNATIC GRIEVANCE.

A GENTLEMAN, discharged last year from the Barnwood Lunatic Asylum at Gloucester, has complained to the Commissioners in Lunacy that all his letters, written when in a state of insanity, were duly forwarded to their destination. He is indignant that epistles bearing evident traces of mental disease, which he addressed to numerous friends, were punctually transmitted to them, and that he was thus, as it were, permitted to make a fool of himself in public. The complaint has hitherto been that letters are intercepted in asylums; and we can well believe that those who are in charge of the insane are sorely puzzled what to do with the correspondence of their patients, as whether they forward or detain letters they are equally liable to give offence.

CREMATION AND EXHUMATION.

THE case of *Williams v. Williams* was tried before Mr. Justice Kay in the Chancery Division of the High Court of Justice, on the 8th instant. The circumstances were as follows. It appears that the late Dr. Henry Crookenden had not only formed a strong opinion in favour of cremation as a way of disposing of human remains, but had resolved that his own body should be cremated, if possible. Either because he doubted whether the members of his own family, to whom he bequeathed his property, would carry out his wishes in this respect, or for some other reason not explained, he entrusted the execution of the crematory rites to his friend Miss Eliza Williams. By a codicil to his will, he directed that, within three days after his death, or as soon as conveniently might be, his body should be given to her, to be dealt with in such manner as he had directed in a private letter left in her hands. In the letter referred to in the codicil, he preferred what he termed his "little request", to the effect that she would see his body burnt on, or rather under, a pile of wood; and he even entered into some details as to the process to be adopted; his idea being that the corpse should be laid on a layer of dry faggots, and covered with a

mass of fuel, called "cord wood", which, if tolerably dry, would burn fiercely for hours, and consume whatever was combustible. His calcined bones and ashes he desired to be subsequently collected and put in a favourite Wedgwood vase, which was to be ultimately buried with Miss Williams, or otherwise disposed of as she might think best. On the death of Dr. Crookenden, his wife, family, and executors, in spite of the protests of Miss Williams, caused him to be buried in the Brompton Cemetery, in the usual way; but that lady was not thus to be prevented from fulfilling her pious trust. Three months after the interment, she applied to the Secretary of State for his licence to remove the body for the purpose of cremation, or for reburial in consecrated ground, Dr. Crookenden having been a Roman Catholic, and having been laid, not in consecrated ground, but in a grave which was simply blessed by the officiating priest. The Home Secretary declined to permit exhumation for the purpose of cremation, but he inquired to what burial-ground it was proposed to remove the remains; and being informed that it was to a parish churchyard in Montgomeryshire, he issued the required licence. The body was accordingly raised; but, instead of being carried to Wales, it was conveyed to Milan, and there cremated at a cost of £321, which Miss Williams now sought to recover from Dr. Crookenden's executors. Mr. Justice Kay gave judgment against Miss Williams's claim to this sum, holding that the removal of the body to Italy to be cremated there was an illegal act, and a fraud on the licence. Absolving Miss Williams of any intention to do that which was improper, and believing that she thought herself under a paramount obligation to carry out the wishes of the testator, he decided that her action was illegal, and that she could not recover the money which she claimed. Mr. Justice Kay laid down the law that there can be no property in the dead body of a human being, that a man cannot by will dispose of his own body, and that the cremation of a human body is not lawful in this country. Many nervous persons will possibly be alarmed by this revelation of the facilities offered for the removal of bodies from what is fondly believed to be their last resting-place, without the cognisance of those who had most affection for "the silent dust".

SCOTLAND.

FAREWELL DINNER TO PROFESSOR CUNNINGHAM.

DR. D. J. CUNNINGHAM was entertained at a farewell dinner on St. Patrick's Day, before leaving Edinburgh to undertake the duties of Professor of Anatomy to the Royal College of Surgeons in Ireland. Professor Turner occupied the chair, and Professor Douglas MacLagan and Mr. John Chiene acted as croupiers. Among those present were the Rev. Dr. Cunningham, of Crieff, father of the guest; the Rev. Wm. Browne, of Beith, his father-in-law; Professors Macnamara and Stokes, of Dublin; Professors Balfour, Grainger Stewart, Annandale, and Dickson, of the University of Edinburgh; Principal Walley and Professors Aitken and McFadyen, of the Royal Veterinary College; Drs. Wyllie, James, Bramwell, A. Thomson, Cathcart, Hart, Murray, etc. A very enjoyable evening was spent.

INFECTED MILK AND SCARLET FEVER.

IN consequence of a renewal of the outbreak of scarlatina at Greenock, Dr. Wallace, the medical officer of health, has been led to make a rigid inquiry into the circumstances of the extension. He ascertained that the disease prevailed in a number of families who obtained their milk-supply from the same dairy-farm; and, on an inspection being made, it was found that no fewer than four of the dairyman's children were stricken with the disease. The milk-supply was at once stopped, and the sufferers removed to a neighbouring empty house. Upon the farmstead and its appurtenances being disinfected and cleansed, and the milking of the cows done by persons not connected with the establishment, the milk was again allowed to be sold to the public. Dr. Wallace adds that, between the 19th of January, when the disease broke out in the farmhouse, and the 1st of February, no fewer than eleven families

supplied with milk by the farmer were invaded by the disease, the number of individual patients being twenty. These epidemics of infectious diseases due to the drinking of polluted milk appear to be now becoming so common, that no notice is taken of them. It must not, however, be lost sight of that every single case of disease thus caused is absolutely preventable by precautions, of which the thoroughly practicable character has now been conclusively proved on a large scale in London, and also in Bristol, Glasgow, and elsewhere. The negligence which can permit such a state of things to occur as that described would probably be amenable to a substantial fine or imprisonment, if it were felt that omission to comply with the requirements of the law would certainly be punished by prosecution; and every such case ought, in the public interest, to be brought before the law-courts, if only as a wholesome warning for the future.

ROYAL INFIRMARY, EDINBURGH.

THE active connection of Dr. G. W. Balfour with the Royal Infirmary, Edinburgh, concludes this month. Remembering the valuable contributions Dr. Balfour has made to practical medicine by his clinical studies (especially in cardiac diseases), this intimation will be received with regret; and if a prolonged term of office could have been afforded him (without injury to those who necessarily look for promotion on the retirement of a physician), it would have given satisfaction to all in the profession. By his retirement, Dr. Wyllie, the senior assistant physician, is advanced to a physicianship; there is thus a vacancy for an assistant physician, which will shortly be filled up. So far as we are aware, the candidates (who must all be Fellows of the Royal College of Physicians of Edinburgh) are: Dr. James, Lecturer on Physiology, Surgeons' Hall, Edinburgh; Dr. Byrom Bramwell, Lecturer on Practice of Physic, Edinburgh Medical School; Mr. J. Murdoch Brown, M.B., Clinical Medicine Tutor in the University of Edinburgh; and Dr. A. G. Brown, Lecturer on Physical Diagnosis and Medical Anatomy, Edinburgh Medical School.

ACROBATIC PERFORMANCES.

A man has been in the operating-theatre of the Glasgow Western Infirmary, by Professor George Macleod, on the 15th instant, who went through some remarkable feats. With the exception of the elbow, he had the power of dislocating voluntarily any joint of the upper or lower extremity, and afterwards reducing them. He also went through some acrobatic feats, which were very extraordinary. He seemed to have a maximum of muscular power with a minimum of ligamentous resistance. We shall give some further details next week.

IRELAND.

THE following account of the Am. J. W. Balfour, M.D., is a very interesting one. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject.

THE following account of the Am. J. W. Balfour, M.D., is a very interesting one. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject.

VACCINATION FEES.

DR. WOODS, medical officer of the Monaghan Dispensary, has furnished an account to the guardians for over £100 for vaccination fees for persons vaccinated within the past fortnight. It was, however, contended that the list of those vaccinated, which had been supplied by Dr. Woods, contained the names of people who were well able to pay themselves, and the guardians have remitted the account to the Local Government Board for their advice as to whether the ratepayers are liable in these cases.

LISMORE UNION.

IN consequence of the prevalence of fever in Cappoquin district, the Local Government Board have requested Dr. Redmond, dispensary medical officer, to furnish them with a special report in reference to the matter. Dr. Redmond is also expected to supply a report on the sanitary condition of the town of Cappoquin.

THE QUEEN AT MENTONE.

WE have been informed on the best authority that Her Majesty, who reached Mentone after a journey of eighteen and a half hours only from Cherbourg, was quite well and in good spirits, and has continued so ever since. The arrangements of the Villa des Rosiers have been found most satisfactory by those who surround her; and Her Majesty expressed herself much pleased with her residence, the climate, and the scenery. On the evening of the day of arrival, Dr. Henry Bennet had the honor to see Her Majesty in the large of his Mountain Garden and Saracenic Tower at Grimaldy. At Mr. Charles Henfrey's request, some weeks ago, Dr. Henry Bennet offered his picturesque property to Her Majesty's representatives during her residence at Mentone, as a mountain retreat, and it was accepted. The well-known garden is one of the most picturesque spots in the Mediterranean, about a mile from the town, on the Italian side of the frontier. It is situated on the side of a high mountain, is 300 feet above the sea, and is composed of terraces rising one above the other, planted with olive trees, orange and lemon trees, and the flora of the southern hemisphere. The mountain on which the Villa des Rosiers is situated is called the "Fighting Terrace," at the summit of the Saracenic Tower; it is, in fact, more conical, and more rising, than from any other point. The air on the mountain is pure, fresh, and invigorating; and Dr. Henry Bennet attributes his own recovery of health, in a great measure, to all his leisure hours having been spent there, between the earth and the sky, for the last twenty years. The property is very extensive, far exceeding that of any other villa in the Mediterranean, and is a most beautiful and interesting view of the town of Mentone, and the surrounding country.

The weather continues magnificent, and the sea is as calm as a lake. The weather continues magnificent, and the sea is as calm as a lake. The weather continues magnificent, and the sea is as calm as a lake. The weather continues magnificent, and the sea is as calm as a lake. The weather continues magnificent, and the sea is as calm as a lake.

THE CONTAGIOUS DISEASES ACTS.

THE following account of the Am. J. W. Balfour, M.D., is a very interesting one. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject.

THE following account of the Am. J. W. Balfour, M.D., is a very interesting one. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject. It is a full and complete history of the disease, and is a very valuable contribution to the literature of the subject.

establishment of "homes" and "institutes", and the providing of suitable places for amusement and recreation within barracks. But against this ought to be set the fact that a much greater amount of leave is now granted in the services, by day and night, thereby giving greater opportunities for dissipation; and the men are, as a rule, much younger than the soldiers and sailors of former times. Moreover, Mr. Wreford failed to explain satisfactorily the rather curious coincidence that the improved condition of the town and the greater activity of the local police have been noticeable only during the past fifteen years; that is to say, practically, since the Contagious Diseases Acts came into force. He felt no doubt that the Acts had a deterrent effect on young girls, and prevented a great many from entering a career of vice.

Evidence to a similar effect was then given by Mr. Lynn, Superintendent of the Devonport Borough Police, who was examined by Dr. Cameron and Mr. William Fowler.

Both witnesses spoke highly of the character of the special police, and of the tact and ability with which they discharged their difficult duties; while neither of them was aware of a single authenticated case of injustice or oppression towards the unfortunate women who came within the jurisdiction of the Acts.

The Committee met again on Friday, the 17th, when Captain Brutton, Superintendent of the Devon County Police, was called in and examined by Mr. Stansfeld. The witness said he thought the statements of Inspector Annis quite the reverse of accurate, as to the effect of the Contagious Diseases Acts on the brothels of the district. He put in a return showing the number of brothels of all kinds in Stonehouse, and the number closed between 1865 and 1882. The majority of such places were beer-houses, and were formerly licensed by the Inland Revenue; but, in 1869, the Beer-house Act came into force, and they had to obtain licences from the magistrates: twenty-four of the licences were opposed, and the opposition being successful, most of the houses were shut up altogether. These proceedings were taken by his own county constabulary, quite independently of any assistance from the Contagious Diseases Act police. He agreed with the previous witnesses in thinking that the improved condition of the streets of Plymouth and Devonport as regards prostitution was not due so much to the working of the Contagious Diseases Acts as to other causes, such as the early closing of public-houses, the reduction of public-houses and beer-shops used as brothels, and to the prosecutions undertaken by himself and his staff. With regard to the Acts themselves, Captain Brutton considered they had been of the greatest service in checking the spread of disease, and in exercising a deterrent influence on young girls. Moreover, far from having any complaint to make of the way in which the Acts were carried out, he thought the special police were an excellent body of men, and had not heard a single authenticated case of harshness on their part, or of interference with respectable women.

Evidence of a similar character was given by Mr. William Coster, Superintendent of the Borough Police of Portsmouth.

CAMBRIDGE LOCAL EXAMINATIONS.

THE following notice respecting the Cambridge Local Examinations has been issued.

"The University of Cambridge has established an additional local examination, to be held in September. This examination is undertaken at the request of the General Medical Council, to meet the convenience of those who desire to register as medical students in October, for whom it will serve as the Preliminary Examination which all such students are required to pass. Those who intend to enter into articles of clerkship with attorneys and solicitors can avail themselves of this means of satisfying the preliminary requirements of the Incorporated Law Society. It will be convenient also for those who intend to enter the University in October, and desire exemption from the Previous Examination ("little go"). For these three classes of candidates there is no limit of age. The examination will commence on Monday, September 4th, and will be held in the same subjects as those for the Examination for Seniors in the December following, and the usual Senior Certificate can be obtained by students under the age of eighteen, on September 1st. The centres of examination already announced are Cambridge and London, for which centres applications for entry must be made to the Rev. G. F. Browne, St. Catharine's College, Cambridge, and R. St. J. Corbet, Esq., 10, Portman Street, London, W. The examination may be held at other centres, if there appears to be sufficient demand."

The Syndicate would, we believe, be willing to endeavour to make arrangements for an examination in any place where there are twenty-five candidates.

The examination for the certificates, which exempt from the Previous

Examination at the University, is somewhat more difficult than the Previous Examination itself; but the students who succeed in obtaining the requisite certificates, especially if they include that exempting from the "additional subjects", will save time, and will derive considerable advantage throughout the whole of their University course. This will be particularly the case with those who intend to study medicine and natural science.

COLLECTIVE INVESTIGATION COMMITTEE.

MEMORANDUM ON ACUTE PNEUMONIA, ESPECIALLY WITH REGARD TO ITS ETIOLOGY AND EPIDEMIC PREVALENCE.

By OCTAVIUS STURGES, M.D., and SIDNEY COUPLAND, M.D.

THE object of this inquiry is to collect evidence from those who are best able to afford it, bearing on the natural history of acute pneumonia as observed in this country; and especially its etiology. Upon this latter question opinion is much divided, and while in other countries valuable material has been collected respecting it, little has been done in our own. It is now desired that an impartial investigation should be made upon the disease, in the hope that information of great value may be elicited. Such an investigation might reasonably be expected to be of service in the promotion of particular measures of prophylaxis, and probably also in the establishment of a rational therapeutics in this disease.

At the present day, two views are commonly held, concerning the etiology of an attack of primary acute lobar pneumonia in a previously healthy individual. They may be concisely summed up under the terms: 1. Exposure; 2. Infection. The first view is that generally accepted; the question is, What grounds exist in favour of the second? That this latter form of pneumonia does exist, possibly to a far greater extent than is admitted, seems likely, not only from the records that appear from time to time upon "epidemic" and upon "contagious" pneumonia, but also from the well-attested facts of the ordinary course of the disease. All clinical observers are agreed that the fever characterising many of the best marked cases of acute pneumonia does not run parallel with the physical signs of the pulmonary inflammation; that it does not, in other words, coincide with the latter in degree or in duration. For instance, high fever usually accompanies a small tract of inflammation, when this is seated at the apex of the lung instead of at the base; and again, it not uncommonly happens in an ordinary case of basic pneumonia that the fever subsides rapidly (by crisis), some days before the local signs indicate a corresponding improvement in the damaged organ. These are but two examples out of several which might be quoted, as affording *prima facie* support to the view that in the disease we call "pneumonia" there is something over and above the mere condition of an inflamed lung; some influence, call it septic, or what not, which, attacking the whole organism, has its local and manifest expression in pulmonary inflammation. Have we, in a word, in the inflamed lung, a condition related to some underlying influence (at present unknown), in a manner analogous to the bowel-affection characterising typhoid fever; or, to the cutaneous inflammation of facial erysipelas; or, on the other hand, is pneumonia simply a local disease, solely due to "exposure", like catarrhal affections?

We have here, however, not to deal with speculations, but only to ask for facts. The facts supplied may go far to show that an "epidemic" of pneumonia means nothing more than a great prevalence of the disease due to atmospheric conditions, to which the term "epidemic" is no more applicable than it is to bronchitis, when that happens to be prevalent. The Collective Investigation Committee invite the profession to aid them in determining a question, the solution of which will materially further the progress of scientific and practical medicine.

The main points to which attention is directed are given in the accompanying schedule. They do not involve detailed statements, and most of them can be answered by a mere affirmative or negative, or by the erasure of certain words. A few brief explanations will suffice to show the purport of the questions.

The answers to the questions concerning *occupation* and *habits* will point to the existence or not of any factors peculiar to the individual, which may operate in rendering him susceptible to the disease. From them it will be learnt whether his life, passed in the counting-house, factory, or workshop, or in the farm or mine, be sedentary or active; whether the occupation, in short, be one likely to expose him to unsanitary or miasmatic influences, to changes of temperature, to

great physical fatigue or mental effort, or to other conditions whereby his general health may have suffered, or his liability to "take cold" be enhanced; while, as to habits, it may be expected that some light may be thrown upon the extent to which impoverished diet, and especially *absence of exercise*, conduces to the determination of pneumonia.

Then follow a series of questions specially intended to elicit facts bearing upon the existence of epidemics of pneumonia, and the conditions under which they arise. The *locality and situation* of the patient's dwelling, whether this be in an elevated position, isolated and exposed, or sheltered in a valley, or buried among trees, or in the heart of a thickly peopled town, together with the nature of the soil on which it stands.

It should be explained that, under the next heading, *atmosphere*, *prevailing* at the time of the attack or epidemic, it is only intended to ask for such general statements as "dry", "damp", "wet", "cold", "hot", "changeable", and the prevailing wind—such as come naturally under the head of "weather"—without any detailed "meteorological" data being required; as these could be supplied, when necessary, by reference to the records of the Meteorological Office.

The next query requires a single word in answer from the practitioner. Are there *other cases of pneumonia* in the patient's house or in the surrounding district? If there be other cases, and an outbreak of pneumonia be generally prevalent, the observer's returns upon *each* of the cases that come under his notice will afford the chief evidence of the presence of "epidemic pneumonia," so far as his practice goes. To make the information complete, it is to be hoped that, whenever pneumonia is unduly prevalent in a district, every practitioner concerned will take part in this inquiry. In this way the Committee would be placed in possession of a mass of facts of the greatest value accumulated by independent observers.

It is also of great importance to learn whether, at the time of the prevalence of pneumonia, there be concurrently an undue prevalence of the *typhoid*, *typhoid*, *scarlatina*, *diphtheria*, *erysipelas*, etc., as it may happen that conditions liable to produce such diseases in some individuals may favour pneumonia in others. It must be understood that examples of pneumonia occurring as a complication in the course of a specific fever are not required. Where, however, as sometimes happens, pneumonia occurs in the *initial* stage of a specific fever—notably *typhoid*—such a case should be recorded in this inquiry. In like manner, information is asked for as to any concurrent undue prevalence of the *mild febrile conditions*, to which the terms *catarrhal* and *catarrhal fever* are applied, with the view to ascertain whether they also arise under conditions existing at the time when pneumonia prevails.

The next question applies to a different branch of the subject. In asking for a return of the concurrent prevalence of *catarrhal fever*, it is intended to ascertain how far an "epidemic" of pneumonia may be accompanied by the occurrence at the time of meteorological rather than "epidemic" conditions. If, for instance, the returns show that pneumonia and *catarrhal fever* are both unduly prevalent in a particular district, where there is no reason for suspecting any unsanitary influences, but at a time when cold and damp weather is in the ascendant, then surely it may fairly be concluded that the pulmonary and *catarrhal* disease have in this instance the same cause—the *weather*; whereas, on the other hand, if pneumonia largely prevails, and *catarrhal fever* be at a minimum, there will be ground for concluding that the meteorological variations were not alone, if at all, to be ascribed to the cause of the pneumonia.

Next, the inquiry is made as to the extent and nature of *catarrhal fever*, which, it is well known, may be a very light, or a severe, or a fatal, or a chronic, or a recurrent. It may be observed, for instance, that, when several members of a household have been in the same way affected by the disease, but at the time generally confined to the chest, the disease may be an ordinary *catarrhal* fever, and not *pneumonia*; but, on the other hand, if the disease be severe, or other persons be affected, the probability is, that, if an epidemic is here concerned, cases in the present inquiry of the *catarrhal fever* are not likely to be common, and, if so, the inquiry will be of little value.

The question now refers solely to the *typical* and *characteristic* features of the disease, and the *typical* features of the disease. From the returns, it will be possible to learn whether there is any connection between the extent and extent of the pulmonary inflammation, on the one hand, and the *typical* features of the disease, on the other.

It is to be explained that, in the inquiry, the term "typical" is used in a very general sense, and there is no need for the practitioner to be very exact in his answers; but he will find that the returns will be made without the expenditure of much time. Even more are asked

for, and those neither numerous nor abstruse; but they should be plainly and simply stated, unbiassed by views or opinions; and, so presented, they will be collated and analysed, with a view to the solution of one of the many vexed questions in medicine.

Form of Card to be filled in.

Initials of patient	M. F. A.	Sanitary condition of house—good, bad, indifferent.
Married.	Widow.	
Occupation.		
Temperate.	Intemperate.	Total Abstinence.
Food—sufficient, insufficient.		
Place of Locality—high, low, damp, dry, exposed,		Family history of lung-disease.
History of previous attack.		
Weather—damp, wet,		Onset of rigors.
		Date.
		Premorbid condition.
		Onset.
		Parts of lungs affected. R. base, apex.
		Expectoration—blood, rusty, white, none.
		Course—gradual.
		Other infectious dis.
		Remarks on any special features of the case.

N.B. Information and assistance given to the Committee in this and other investigations will be duly acknowledged.

UNION OFFICERS' SUPERANNUATION (IRELAND) BILL.

Several resolutions in favour of this Bill have been presented to Parliament from medical and other bodies in Ireland. Amongst them, Mr. Martin, a senior member for Dublin, presented one last week from the President and Council of the Dublin Branch of the British Medical Association. Petitions are being prepared in virtue of a resolution passed at the last meeting of the Parliamentary Bills Committee, which will be issued on behalf of the Committee, and of which the Bill will be forwarded and recommended for signature to all the Branches of the Association.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION: FIFTIETH ANNUAL MEETING.

THE Fiftieth Annual Meeting of the British Medical Association will be held at Worcester, on Tuesday, Wednesday, Thursday, and Friday, April 2nd, 3rd, 4th, and 5th, 1882.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Dr. James Thompson, F.R.C.S., Consulting Surgeon to the Worcester Infirmary.

Coghill, M.D.; Arthur W. Edis, M.D. *Secretaries:* C. J. Cullingworth, M.R.C.P., 25, St. John Street, Manchester; Tom Bates, L.R.C.P., Worcester.

SECTION D. PUBLIC MEDICINE.—*President:* Alfred Carpenter, M.D. *Vice-Presidents:* Alfred Hill, M.D.; Horace Swete, M.D.; E. T. Wilson, M.D. *Secretaries:* Geo. Haynes Esbroke, jun., M.R.C.S., Bidford, Redditch; Francis Edward Atkinson, L.R.C.P., Settle, Yorkshire.

SECTION E. ANATOMY AND PHYSIOLOGY.—*President:* George M. Humphry, M.D., F.R.S. *Vice-Presidents:* S. S. Roden, M.D.; Frank Payne, M.D.; Gerald Yeo, M.D. *Secretaries:* J. B. Haycraft, M.D., Mason's College, Birmingham; James Shuter, M.B., F.R.C.S., 58, New Broad Street, London.

SECTION F. PATHOLOGY.—*President:* J. Hughlings Jackson, M.D., F.R.S. *Vice-Presidents:* W. R. Gowers, M.D.; H. T. Butlin, F.R.C.S.; Wm. Smith Greenfield, M.D. *Secretaries:* Sidney Coupland, M.D., 14, Weymouth Street, London; F. Treves, F.R.C.S., 18, Gordon Square, London.

SECTION G. OPHTHALMOLOGY.—*President:* James Vose Solomon, F.R.C.S. *Vice-Presidents:* David Everett, F.R.C.S.; F. Mason, M.R.C.S.; Edwyn Andrew, M.D. *Secretaries:* Geo. Edwin Hyde, L.R.C.P., Worcester; J. A. Nunneley, M.B., 22, Park Place, Leeds.

SECTION H. OTOTOLOGY.—*President:* W. Laidlaw Purves, M.D., London. *Vice-Presidents:* Geo. P. Field, Esq., London; A. H. Jacob, M.D., 23, Ely Place, Dublin; Cresswell Baber, M.B., Brighton. *Secretaries:* J. J. Kirk Duncanson, M.D., 22, Drumsheugh Gardens, Edinburgh; Peter McBride, M.D., 20, Alva Street, Edinburgh.

Honorary Local Secretaries: George W. Crowe, M.D., Shaw Street, Worcester; H. C. Moore, M.R.C.S., 7, King Street, Hereford.

TUESDAY, AUGUST 28th.

2.45 P.M.—Meeting of Committee of Council.

3 P.M.—Meeting of the Council of 1881-82.

4.15 P.M.—Short service in the Cathedral, with sermon by the Dean of Worcester.

8 P.M.—General Meeting. *President's Address;* Annual Report of Council, and other business.

Tea and Coffee after the Meeting.

WEDNESDAY, AUGUST 29th.

9.15 A.M.—Meeting of Council of 1882-83.

11 A.M.—Second General Meeting. *Address in Medicine.*

1.15 P.M.—Luncheon given by Worcester and Hereford Branch to Members of the Association, and afterwards presentation of bust of Sir Charles Hastings to the Mayor and Corporation of Worcester.

1.45 P.M.—Sectional Meetings.

6 P.M.—Dinner.

THURSDAY, AUGUST 30th.

9 A.M.—Meeting of the Committee of Council.

10 A.M.—Third General Meeting. *Reports of Committees.*

11 A.M.—Lectures in Surgery.

1.15 P.M.—Sectional Meetings.

6.30 P.M.—Public Dinner.

FRIDAY, AUGUST 31st.

9.30 to 11.30 A.M.—Sectional Meetings.

11.30 A.M.—Concluding General Meeting. *Reports of Committees.*

3 P.M.—Garden Party.

COMMITTEE OF COUNCIL:

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall on Wednesday, the 12th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, March 15th, 1882.

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 12th, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, June 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881. FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

BATH AND BRISTOL BRANCH.—The fifth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday afternoon, April 13th, at 4.15 P.M.—R. S. FOWLER, E. MARKHAM SKERRITT, M.D., *Honorary Secretaries.*—Bath, March 1882.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The next meeting will be held at Tredegar towards the end of April. Members desirous of reading papers, etc., are requested to send titles to either of the undersigned within a week, in order that they may be inserted in the circulars convening the meeting.—ALFRED SHEEN, M.D., D. ARTHUR DAVIES, M.B., *Honorary Secretaries.*—March 14th, 1882.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, March 30th, at five o'clock. The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner: "What is your Experience of the Complications and Sequelæ of Scarlet Fever?"—W. M. KELLY, M.D., *Honorary Secretary.*—Taunton, February 28th, 1882.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 29th, at 3.30 P.M. Dr. Ewart of Brighton will preside. Dinner will be provided at 5.30 P.M.; charge, six shillings (exclusive of wine). The following communications have been promised. 1. Dr. Lee: Practical Remarks on the Treatment of Infantile Paralysis; 2. Dr. Mackey: On the Treatment of Whooping-Cough; 3. Mr. Bernard Roth: On the Treatment of Lateral Curvature of the Spine; 4. Mr. Furner will show an adult man presenting symptoms of Pseudo-Hypertrophic Paralysis; 5. Mr. Baber: Adenoid Vegetations of the Naso-Pharynx; 6. Mr. Noble Smith: Caries of the Vertebra, with cases; 7. Dr. Treutler: Case of Spinal Meningitis.—T. JENNER VERRALL, *Honorary Secretary East Sussex District.*—95, Western Road, Brighton, March 15th, 1882.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—A meeting of the above District will be held at the Infirmary, Gravesend, on Wednesday, April 12th, at 3 P.M.; J. C. Armstrong, Esq., in the chair. Papers will be read by Dr. W. M. Ord, on Diagnosis of Thoracic Aneurysm; Dr. William H. Day, Remarks on Chorea and its Treatment; etc. Dinner will take place at the Old Falcon at 5.30 P.M.—A. H. B. HALLOWES, *Honorary Secretary,* 11, King Street, Maidstone.

CORRESPONDENCE.

THE ILLNESS OF THE DUCHESS OF CONNAUGHT.

SIR,—I hope and believe that the letter of Dr. Playfair will assist in calling the attention of the public to a matter of extreme importance, and that thereby it will assist in lessening the number of cases of which the responsibility and sometimes the blame has to be borne by the members of our profession. However, as far as my opportunities have enabled me to form an opinion, I should consider that our profession, as a body, are more alive to the importance of attending to the drainage in respect of the lying-in woman than Dr. Playfair would think, and indeed, the recognition of this importance is the natural outcome of the advance of sanitary knowledge and the frequent discussions on puerperal fever, pyæmia, and other abnormal conditions attending the lying-in; and as far as I have discussed the question with my brethren it seemed to me that they have pretty generally understood that the law which was applicable to the wounded, to those about to undergo or undergoing operations, and to those smitten with illness of all kinds, was equally applicable to the women about to be delivered, or lying-in; namely, that unhealthy surroundings of various kinds all tended to interfere with recovery in various degrees, even to its total impossibility, and that bad drainage stood foremost among the evil influences, either indirectly as a producer of zymotic diseases, or directly as an irritator of septic changes, and all the immediate and secondary phenomena resulting.

So long ago as 1870 I called attention to this subject in a paper read before the Obstetrical Society of London (vol. xii), in which I examined eighty-nine cases of so-called puerperal disease after simple labour in respect of the "causes". This was five years before the discussion alluded to by Dr. Playfair (in the seventeenth volume of same *Transactions*), a few remarks from which it may not be out of season to quote.

"But however frequently the cause of puerperal diseases may be owing to zymotic influences, still it is easy to understand that imperfect drainage, close rooms, and bad dwellings, would be sufficient, by continued action, to produce such a state of constitution as would tend to effusions, suppurations, pyæmia, and peritonitis." "But I believe the truth may be thus stated:—That in ordinary health, and with freedom from deteriorating influences, injuries and local disturbances done by parturition, or by assistance given to it, are recovered from; but if any poison or depressing influence invade the pregnant or labouring woman, then, in addition to the direct influence of a poison, inflammation or suppuration of the parts occur, which, by the local distress they cause, may set up pyæmia, thrombosis, etc."

"There is one fact not mentioned in the reports, but which is worthy of notice, namely, that I have found the whole class more frequent in newly built than in older houses. It might be that the frequency of puerperal diseases in primiparæ may account for this, inasmuch that the newly married more usually take newly built houses. But it is also a fact that the inmates of new houses are more liable to be attacked by

be worked consistently with the advance which has been made in medical science, and with the change of opinion which is taking place regarding the administration of medical charity. 6. That it is desirable to make more use than is at present made, in the education of medical students, of the materials contained in the numerous hospitals and dispensaries now administered by the Poor-law Department and the Metropolitan Asylums Board; and that there should be more intimate communication between these and the general hospitals. 7. That the operation and constitution of the numerous special hospitals and dispensaries demand inquiry, in order to inform the public as to the advantages and disadvantages of such institutions. 8. That it is desirable that a uniform system should be devised and adopted of keeping the books of accounts and registers of disease in all hospitals."

THE PLAISTOW HOSPITAL FOR SMALL-POX PATIENTS.

THE first annual report of this hospital has recently appeared. The institution was opened for the reception of patients in May 1881. Since that date, 120 cases have been admitted. Of these, 5 were sent by the City of London Union, 6 by the Vestry of Bethnal Green, 8 by the Poplar Union, and the remainder from the Poplar district; 112 were discharged cured, and 8 died. The severe and fatal cases occurred amongst the unvaccinated, or those whose marks were slight and unsatisfactory. Of the 37 confluent cases, 8 proved fatal—4 females and 4 males. The hospital is said to be in perfect condition, and the staff fulfil their duties in a satisfactory manner.

BEDFORD PROVIDENT DISPENSARY.

THE report of this institution for 1881 gives so little information, that it is difficult to form an estimate of the position of the dispensary. Thus, we are not told how many members there are on the books, or how many visits were paid by the medical officers. Indeed, the report is occupied much more with the honorary subscribers than it is with the provident members. It appears, from the balance sheet, that £571 were divided among the six medical officers.

KENT AND CANTERBURY HOSPITAL.

THE annual meeting of this institution was recently held, and it was shown that the general condition of the hospital was satisfactory. It was suggested, however, that, in future, the medical staff should present an annual summary of the cases that had passed under their hands, together with such particulars as might have a bearing upon the sanitary condition or expenditure of the hospital. But the most important question raised at the meeting related to the application of Mrs. Goreley's bequest. During the past year, the dividends arising from this source were carried to the general fund; but the opinion of the governors seemed to be that the bequest should be applied to some specific purpose, which would be a permanent improvement to the hospital, such as the erection of a children's ward.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

BACHELOR OF SURGERY.—The new statutes for the University of Cambridge, which have been approved by the Queen in Council, provide for a degree of Bachelor of Surgery in the University.

UNIVERSITY OF OXFORD.

EXAMINATIONS FOR THE DEGREE OF B.M.—Examinations for the degree of Bachelor of Medicine, both first and second, will be holden in Trinity Term, on days to be hereafter notified. Candidates for either of these examinations are requested to send their names, on or before May 1st, to the Regius Professor of Medicine, Medical Department, Museum, Oxford.

TESTIMONIAL TO DR. HEWITT, LATE OF WINKFIELD.—After over twenty years' practice at Winkfield, Dr. Hewitt, who was alike popular with all classes of patients and friends far and near, who had the pleasure of his acquaintance, has left his arduous country practice, and has established himself at Cheltenham, where we wish him every success, which we have no doubt he will obtain. A very handsome testimonial has been presented to Dr. Hewitt, subscribed for by his late patients and friends at Winkfield, Ascot, Sunninghill, and Bracknell, which comprises a grand clock, with all the latest improvements, for hall or consulting room, and a very handsome balance in the form of a cheque.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS, Friday, March 17th.

Suspected Poisoning.—Mr. ST. AUBYN asked the Secretary for the Home Department whether, in cases of suspected poisoning, when an analysis was directed to be made, he would consider whether it would not be more satisfactory that the suspected person should have an opportunity of being represented professionally at such analysis.—Sir W. HARCOURT: The subject is one well deserving of consideration; but the question was only put upon the paper last night, and, before giving any definite reply to it, I should wish to consult the official analyst on the subject.

Army Medical Service.—Mr. GIBSON asked the Secretary of State for War whether, with regard to the Warrant of January 1880, which directs that "(8) A public and open competition shall be held twice in the year for the admission of qualified medical candidates as probationers, and that the number of appointments so competed for shall not be less than half of the number of vacancies which shall have arisen in the last completed half-year ending on the 30th of June or 31st of December," and that "(9) Not less than half the number of vacancies shall be filled up by competition," he could state how many medical vacancies occurred in the half-year ended the 31st of December 1881, and how many of such vacancies were filled up by competition at the last examination; and whether the terms of the Warrant and the engagements it held out to the candidates had been satisfied.—Mr. CHILDERS: Formerly, when the medical service was not so popular as it is now, and it was difficult to fill its ranks by competition, it was considered desirable that the Secretary of State should have the power to allow some of the first appointments to the medical department to be made by selection through the principal medical schools; but it was provided by the article, that at least half should enter by competition—the word "vacancies", of course, meaning the number of appointments which it was requisite to fill up. As a matter of fact, this power of nomination has never been exercised, and all vacancies have been filled by competition—so that, in the direction of the right hon. gentleman's question, we have gone far beyond what the Warrant required. I may add, that there were in reality no vacancies at the end of the December half-year, thirty medical officers having been thrown on our hands from India; and the gentlemen who succeeded at the last examination will be appointed to vacancies as they occur from time to time. In reply to the second question, it is evident that the terms of the Warrant have been more than satisfied.

MILITARY AND NAVAL MEDICAL SERVICES.

THE death is announced of Deputy Inspector-General William Ruffell Dalton, R.N., aged 69.

DEPUTY Surgeon-General J. L. Holloway, C.B., principal medical officer at Colchester, and late in medical charge of the Forces in South Africa, obtains promotion to Surgeon-General, in succession to the late Surgeon-General Fasson, M.D. It is expected that he will succeed the deceased as Principal Medical Officer at Aldershot.

A SECOND vacancy on the list of Surgeons-General of the Army Medical Department will be created on the 27th March, when Surgeon-General M. F. Manifold, principal medical officer at Netley, attains his sixtieth birthday and has to retire. The vacancy will be filled by the promotion of Deputy Surgeon-General James Sinclair, M.D., who has recently returned home from South Africa.

MILITARY SURGERY.

A REGULATION introduced five years ago in the German military medical service, and systematically enforced since that time, might be copied with advantage in other countries. Twice yearly, in the spring and autumn, there are carried out courses of practice of operations on the dead body at the Royal Charity Hospital at Berlin, for the use of military surgeons. A number of surgeons-major and assistant surgeons-major are detached from garrison service to go through one of these practical courses of instruction. Each course lasts three weeks, and each is followed successively by fresh detachments of medical officers. By these means, the surgeons of the German army are not only prevented from losing familiarity with operative proceedings, and that manual dexterity the possession of which becomes so extremely important on occasions of sudden emergency, but they also acquire a knowledge of the improvements which are introduced from time to time

[illegible]

One of the complaints in question comes from the medical officer of a workhouse infirmary; the other, from the assistant medical officer of a similar institution. These gentlemen, having been required to make *post mortem* examinations, and give evidence under his warrant, were subsequently refused the customary fees, on the assumption by Dr. Thomas that Section 5, 6th and 7th Guelph IV, c. 39, a. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

"Provided also, and be it further enacted, that, when any inquest shall be holden on the body of any person who has died in any public hospital or infirmary, or in any building or place belonging thereto or used for the reception of the patients thereof, or who has died in any county or other lunatic asylum, or in any public infirmary or other public medical institution, whether the same be supported by endowments or by voluntary subscriptions" [workhouse hospitals are rate-supported only; an essential difference], "then, and in such case, nothing herein contained shall be construed to entitle the medical officer whose duty it may have been to attend the deceased person, as a medical officer of such institution, as aforesaid, to the fees or remuneration herein provided."

Now I hold that Dr. Danford Thomas, albeit a member of an Inn of Court, and thereby claiming to be a legal expert, is altogether in error in the construction he has thought fit to put on this clause; for, having in my youth had the opportunity of conferring with the late Mr. Thomas Wakley, to whom the profession is indebted for the inception and passage of the Act, I am in a position to assert that the clause on which Dr. Thomas relies was introduced when the Bill was in Committee, and was intended to meet a fear that possessed the minds of members of the House of that day, "that the physicians and surgeons of our voluntary hospitals would be multiplying *post mortem* examinations and coroners' inquisitions for the sake of fees, a suspicion which was at once insulting and degrading to the members of an honourable profession."

I further contend that the wording of the clause does not convey, nor does it admit of the interpretation put upon it by Dr. Thomas; for, if this latter be correct, then the late Mr. Wakley, Dr. Lankester, and Dr. Hardwicke, all Coroners for Central Middlesex, were in error; not to mention Mr. Bedford (attorney) for Westminster, and a host of others in all parts of the kingdom, who have paid fees to medical witnesses under exactly the same circumstances as those which have been refused by Dr. Thomas. Apart from all views entertained by other coroners, I contend that no such institutions as workhouse hospitals, or infirmaries distinct from workhouses, were then in existence, or were even contemplated; and consequently the clause on which Dr. Thomas relies as his justification for refusing payment to Poor-law medical officers, does not apply to rate-supported establishments; added to which, the fact exists that, in fixing the stipends of these ill remunerated officials, boards of guardians invariably take into consideration the possible incidence of fees, whether derived from coroners or otherwise.

I further learn from my correspondent that Dr. Thomas alleges, as an additional ground for this refusal, that the Middlesex magistrates object to his payment of the same. I have been at the trouble of making a special inquiry, and learn, as I expected, that Dr. Thomas has been misinformed, the question in this shape having never been raised at all.

What adds to the injustice in one of the cases reported to me is this, that the medical witness, doubtless with a view to the coroner's convenience, was called on to travel two miles to give his evidence, and that without payment. My correspondents asked, Shall we be justified in declining to make *post mortem* examinations and to give evidence in future under Dr. Thomas's warrants, unless we obtain some security we shall be paid? I do not care to give advice on this point; but for myself, I will state that, were I in the same position, I should certainly ignore the coroner altogether.

Dr. Thomas, I understand, has referred the complainants to the Home Secretary for redress. I should make shorter work of the matter. If it were my case, I should apply to the nearest county court judge, who, I feel pretty satisfied, would speedily decide that the coroner was in error.—I am, sir, yours obediently,
H. S.

OBITUARY.

STANHOPE HUNTER FASSON, M.D.,

SURGEON-GENERAL, ARMY MEDICAL DEPARTMENT.

SURGEON-GENERAL S. H. FASSON, M.D., principal medical officer of the Aldershot division, whose death occurred very suddenly on the 11th instant, at his official residence in the camp, was a distinguished and very highly esteemed member of the Army Medical Department. He was born on the 6th of March, 1824, and had therefore just entered upon his fifty-eighth year at the time of his decease. His services were of a very varied description. Nearly all the early period of his military life was passed with the Royal Artillery. He commenced as an assistant-surgeon in April, 1846, and was promoted to surgeon's rank in March, 1855, while in the Crimea, and to that of surgeon-major in April, 1866. He entered the administrative grade as deputy surgeon-general in September, 1875, and attained the position of surgeon-general in January, 1881. Dr. Fasson was actively employed in the field both in South Africa and the Crimea. He served in the Kafir wars of 1847 and 1851-2, and was present at the engagement with the Basuto tribes at the Berea on the 20th of December, 1852. He went with the first troops that landed at Old Fort in the Crimea at the outbreak of war with Russia in 1854, and served throughout the campaign, including the battles of Alma, Balaklava, and Inkerman, and all the siege operations until the fall of Sebastopol. For these services he received the Crimean and Turkish medals, and the decoration of Chevalier of the French Legion of Honour.

Surgeon-General Fasson was much respected as a medical adviser, and endeared himself by his personal qualities to all the officers and men who had relations with him. Many old friends and comrades

came from a distance to attend his funeral. He had suffered from symptoms of angina pectoris for a considerable period, and had had a very severe attack on the day prior to his decease. On the morning of the 11th instant he rose apparently as well as usual, but, after partaking of breakfast, syncope suddenly supervened, and very speedily proved fatal.

As the deceased officer died while on full pay and actively employed, his remains were interred in the Garrison Military Cemetery with the full military honours due to his rank. Representatives were present from every regiment and corps in the garrison. The funeral procession was under the command of General Spurgin, C.B., and consisted of eleven guns of the Royal Horse Artillery, three squadrons of cavalry, two battalions of infantry, and the whole of the Army Hospital Corps, and medical officers stationed at Aldershot. The corpse was carried on a gun-carriage drawn by six horses of the artillery, and surrounded by the pall-bearers, among whom were General Sir D. Lysons, K.C.B., commanding the station; Major-General Sir F. FitzWygram, commanding the cavalry brigade; and other general officers. The day was a beautiful one, with a clear atmosphere and bright genial sun shining, so that a large mass of spectators was gathered along the line of march to witness the imposing procession as it slowly wended its way from the deceased surgeon-general's quarters to the Military Cemetery; while in the vicinity of the cemetery itself every little eminence was taken advantage of by persons anxious to catch a glimpse of the final part of the ceremony. At the conclusion of the funeral service the horse artillery, who had moved to Gun Hill, being communicated with by signal, fired eleven minute guns, after which the troops left the ground to return to their quarters and the vast assemblage separated. Among the many officers and friends who followed in the funeral cortege were Surgeon-General Dr. Shelton, and Deputy Surgeon-General Dr. Irvine, of the Director-General's office in London, who attended to represent the Director-General, Sir William Muir, on the sad occasion.

It is understood that the vacancy at Aldershot caused by the death of Surgeon-General Fasson is to be filled by Deputy Surgeon-General J. Sinclair, who has recently returned to England from South Africa, and who is on the eve of promotion to the higher rank of surgeon-general.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 16th, 1882.

Gravely, Frank, Newick, Lewes, Sussex.

Stewart, Rothsay Charles, Clifton Gardens, Maida Vale.

The following gentleman also on the same day passed the Primary Professional Examination.

Smith, Henry Strode, Royal Infirmary, Bristol.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, March 6th, 7th, 8th, and 9th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—Charles Granville Clarke, John Bryce Dunlop, Charles Joseph MacCormack.

For the Licence to practise Medicine.—John Edward Snow Barnes, Arthur Kennedy, George Cardwell Porter, William Christopher Thompson.

MEDICAL VACANCIES.

The following vacancies are announced:—

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Salary, £150 per annum. Applications by April 15th.

BRITISH HONDURAS, COROSAL DISTRICT.—Medical Officer. Salary, £150 per annum. Applications to the Secretary, Colonial Office, London, S.W.

BRITISH LYING-IN HOSPITAL, Endell Street.—Honorary Physician. Applications by April 1st.

CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY. 41, Sloane Square, S.W.—Surgeon. Applications by March 30th.

CHELTEMHAM GENERAL HOSPITAL AND DISPENSARY.—Resident Surgeon. Salary, £180 per annum. Applications by April 17th.

CHILDREN'S HOSPITAL, Birmingham.—Assistant Resident Medical Officer. Salary, £40 per annum. Applications by April 13th.

DENHOLME AND DISTRICT.—Qualified Practitioner. Applications to G. R. Selby, Denholme, Roxburghshire.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Member of Surgical Staff. Applications by the 29th March.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by the 29th March.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Resident Medical Officer. Salary, £20 per annum. Applications by March 22nd.

GENERAL INFIRMARY, Leeds.—House-Physician. Salary, £100 per annum. Applications by April 4th.

GLASGOW OPHTHALMIC INSTITUTION—Ophthalmic Surgeon. Applications by April 8th.

GREAT NORTHERN HOSPITAL, Caledonian Road, N.—Obstetric Physician. Applications to the Secretary by March 31st.

GREAT NORTHERN HOSPITAL, Caledonian Road, N.—Surgeon. Applications to the Secretary by March 31st.

HACKNEY UNION—Medical Officer. Salary, £80 per annum. Applications to the Clerk.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Clinical Assistant. Applications by April 1st.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT, St. John Street, Deansgate, Manchester.—Honorary Physician. Applications by the 31st instant.

HOSPITAL FOR WOMEN, Soho Square, W.—Pathologist and Registrar. Salary, 50 guineas per annum. Applications by April 1st.

HUDDERSFIELD INFIRMARY.—Second Junior House-Surgeon. Salary, £40 per annum. Applications by April 3rd.

KENT AND CANTERBURY HOSPITAL—House-Surgeon. Salary, £80 per annum. Applications by April 4th.

KNIGHTON UNION—District Medical Officer. Salary, £40 per annum. Applications by the 1st instant.

MERE UNION.—Medical Officer for First District. Salary, £105 per annum. Applications by 27th March.

MERE UNION.—Medical Officer for the Workhouse. Salary, £10 per annum. Applications by the 1st March.

NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh.—Medical Superintendent. Salary, £450 per annum. Applications by the 20th instant.

NOTTINGHAM DISPENSARY—Resident Surgeon. Salary, £200 per annum. Applications by March 25th.

PARISH OF GAIRLOCH, Ross-shire.—Medical Officer. Salary, £100 per annum. Applications to the Chairman, Osgood H. Mackenzie, Esq.

PIETERMARITZBURG LUNATIC ASYLUM, Natal.—Resident Surgeon. Salary, £400 per annum. Applications to the Crown Agents for the Colonies, Downing Street, S.W.

QUEEN'S HOSPITAL, Birmingham.—Resident Surgeon. Salary, £50 per annum. Applications by April 1st.

SEABOROUGH FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £200 per annum. Applications by April 15th.

SEAFIELD HOSPITAL (late Broadnought), Greenwich, S.E.—Resident House-Surgeon. Salary, £75 per annum. Applications by April 6th.

UNIVERSITY OF GLASGOW.—Examiner in Surgery. Salary, £40 per annum. Applications by April 1st, to Dr. Anderson Kirkwood, 145, West George Street, Glasgow.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—House-Surgeon. Applications by the 1st instant.

YORK COUNTY HOSPITAL—Honorary Physician. Applications by the 11th April.

MEDICAL APPOINTMENTS.

BARRETT, L. I. F. C. P., appointed Medical Officer to the Manchester Dispensary, District of the Deansgate, London, and W. J. O'Keeffe, L.R.C.S. (F.I.), appointed.

BROADBENT, John, M.R.C.S. Eng., L.S.A., appointed Surgeon to the Hulme Dispensary, Manchester.

CRIMM, P. J., M.D., appointed Assistant-Physician to the North Charitable Infirmary, London, and J. R. C. C. M.D., appointed Physician.

DEAN, Charles, M.D., C.M., appointed Medical Officer to the Coventry Provident Dispensary.

DEAN, F. G. D., M.B., appointed Assistant Physician to the West London Hospital, Hammersmith, and M. Lubbock, M.D., appointed.

DEAN, J. J. V., M.D., M.R.C.S. Eng., appointed Surgeon to the Hulme Dispensary, Manchester.

GREEN, C. R. O., M.R.C.S., appointed Resident House-Surgeon to the Fulham Hospital, London, and T. E. Turner, M.D., appointed.

GREEN, J. D., M.D., appointed Honorary Surgeon to the Fulham Hospital, London.

GREEN, J. M., M.B., appointed Surgeon to the Western Ophthalmic Hospital, London.

JONES, R. F., M.D., appointed Honorary Surgeon to the Gloucestershire and Avon Hospital, London.

JONES, Thomas, M.D., appointed Honorary Surgeon to the Gloucestershire and Avon Hospital, London.

MERRITT, P. M.B., appointed Medical Officer to the North Devon Dispensary, Devon.

MERRITT, G. M.B., appointed Honorary Surgeon to the North Devon Dispensary, Devon.

MILL, W. M.D., appointed Honorary Surgeon to the Gloucestershire and Avon Hospital, London.

OSGOD, G. A. I. F. C. P., appointed Medical Officer to the West London Hospital, Hammersmith, and T. E. Turner, M.D., appointed.

PETER, William, I. M.B. M.R.C.S. (F.A.), appointed Surgeon to the Gloucestershire and Avon Hospital, London.

PETER, H. M.B. M.R.C.S. (F.A.), appointed Surgeon to the Gloucestershire and Avon Hospital, London.

PETER, A. K. M.B., appointed Honorary Surgeon to the Gloucestershire and Avon Hospital, London.

PETER, J. E. M.B., appointed Honorary Surgeon to the Gloucestershire and Avon Hospital, London.

WILLIAMS, M.A. M.D., appointed Honorary Surgeon to the Gloucestershire and Avon Hospital, London.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

HELMES—LEES.—On the 15th March, at Wesley Chapel, Hill Top, by the Rev. W. George, James Milner Helme, M.D., The Firs, Rusholme, Manchester, to Lydia, younger daughter of the late John Lees, Hill Top, West Yorkshire.

LONGEVITY IN IRELAND.—During last quarter, among the deaths registered was one at 100, two at 102, and two at 103 years respectively.

EASTBOURNE must be regarded as exceptionally healthy. During the last twelve months the death-rate there has been only 13 per 1,000.

FLEET-SURGEON WILLIAM ANDERSON, principal medical officer at the Royal Marine Depot at Walmer, died at his official residence on the 15th instant from acute rheumatism.

THE STATE OF THE THAMES.—Professor Rogers, M.P., at a recent meeting, stated that he was hopeful that before long they would get an inquiry from the Government on the state of the Thames. The superintendent of the *Warspite* told him that the stench from the river was at times sickening to the boys. It was impossible to believe that, if there were an organisation for the whole of the metropolis, such a state of things could exist.

DENTAL HOSPITAL OF LONDON.—The report of this Hospital, read and adopted at its recent annual meeting, speaks satisfactorily of the progress of the institution as regards the funds, which show a considerable increase in the income compared with that of last year. 30,799 cases had been treated during the year 1881. The managing Committee strongly impressed upon the governors and the public that if the dental practice in England is to retain its position, the educational facilities of this hospital must be largely increased. Owing chiefly to the costly nature of the materials, this can only be done by a large expenditure of money. The Hospital is unendowed, and increased funds would enable it greatly to extend its usefulness.

HEALTH OF FOREIGN CITIES.—Trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities are afforded by the following figures, deduced from a table in the Registrar-General's last weekly return. According to the most recently received official weekly returns, the annual death-rate in the three principal Indian cities averaged 36.2 per 1,000, and was equal to 31.9 in Calcutta, 34.4 in Bombay, and 44.1 in Madras. Cholera caused 50 deaths in Madras, 27 in Calcutta, and 10 in Bombay, showing a decline from the numbers in previous weeks: 67 deaths resulted from measles in Bombay, and fever fatality showed the usual large excess in each of these Indian cities. The death-rate in Alexandria declined to 26.6, from the higher rates in previous week: 17 fatal cases of typhoid fever were, however, recorded. In twenty-one European cities, the death-rate averaged 32.7, and exceeded by no less than 0.6 the mean rate prevailing last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 56.9, and showed a further increase upon the rates in previous weeks; 53 deaths resulted from typhoid and typhoid fevers, 24 from scarlet fever, and 20 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 24.8; in Copenhagen, 28 of the 126 deaths were fatal cases of measles, and the death-rate was equal to 26.3. In Paris, the death-rate was 28.4, showing a decline from the rates prevailing in the three preceding weeks; the deaths included 60 from diphtheria and croup, 30 from typhoid fever, and 16 from small-pox. The death-rate was equal to 27.3 in Geneva, and 20.8 in Brussels; in the latter city, 8 fatal cases of whooping-cough were reported. In the three principal Dutch cities, the death-rate averaged 27.5, and was almost identical in each of the cities; the 178 deaths in Amsterdam included 7 fatal cases of typhoid and typhoid fevers. The Registrar-General's table includes returns from nine German and Austrian cities, in which the average death-rate was 33.3; it ranged from 21.6 and 27.3 in Berlin and Hamburg, to 47.4 and 44.5 in Buda-Pesth and Munich. Small-pox caused 22 deaths in Vienna, and 10 in Buda-Pesth; and diphtheria showed excessive fatality in Berlin, Dresden, Munich, and Trieste. The death-rate was equal to 31.0 in Turin, and 26.6 in Venice; 5 deaths from typhoid fever and 12 from diphtheria and croup were reported in Turin. Neither Rome nor Naples contributed the usual returns. The average death-rate in the four American cities was equal to 22.5, the rates ranging from 23.0 in Philadelphia, to 18.5 in New York. Small-pox caused 17 deaths in New York, and 7 in Philadelphia; scarlet fever was fairly prevalent in New York and Brooklyn, and typhoid fever caused 16 deaths in Philadelphia.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.
FRIDAY.....	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.	
GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 1.30; Skin, Tu. F., 12.30; Dental, 1u Th. F., 12.	
KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th., 1; Throat, Th., 3; Dental, Tu. F., 10.	
LONDON.—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.	
MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.	
ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.	
ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.	
ST. MARY'S.—Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Eye, M. Th., 1.30; Ear, M. Th., 2; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, W. S., 9.30.	
ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.	
UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.	
WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.	

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Radcliffe Crocker will exhibit two examples of Lichen Planus affecting Mucous Membranes. Dr. Robert Lee will describe a new and enlarged form of Inhaling Machine. Dr. Gilbert Smith will give the clinical record of a Pulmonary Cavity that ulcerated through the Intercostal Spaces. Mr. A. Pearce Gould: On the Advisability of Enucleating the Axillary Glands in the Removal of Scirrhus Mammæ.	
TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. S. Fenwick: On the presence of Bile in the Saliva, and on the Variations in the Amount of Sulphocyanide of Potassium in the Saliva of Persons affected with different Diseases. Mr. Thomas Bryant: On a case of Excision of a Stricture of the Descending Colon through an Incision made for a Left Lumbar Colotomy.	
THURSDAY.—Harveian Society of London, 8 P.M. Dr. Morton: Two Cases of Meningitis. Dr. Ferrier: On the Pathology of Lead Palsy.	

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL ATTENDANCE ON THE ARTISAN CLASSES.

SIR,—Permit me to suggest to "A Young Practitioner", and to others whom it may concern, a method of remuneration for medical services which seems to have escaped his notice: I refer to private medical clubs. The provident principle is—as I have pointed out with some persistence—the only true one both for rich and poor, not only on account of the recognised value of providence in the abstract, but also by reason of the beneficial relation it establishes between the medical practitioner and his clients.

Let "A Young Practitioner" have some cards of membership prepared, and let him propose to those of the artisan class who come to him that they should pay him a certain sum *per annum*, (say five shillings) in half-yearly (or quarterly) instalments, payable in advance; provided always that those who are in need of attendance at the time of application shall pay an additional year's or half-year's fee, and that midwifery and surgical operations shall be extras. I can assure "A Young Practitioner" from my own experience that, from a given number of the working classes, he will obtain at least as much money as by any other system, and that with more dignity and less trouble. The popularity of medical aid associations, of hospitals and free dispensaries—to say nothing of bad debts—is mostly the result of, and a well deserved punishment for, the short-sighted neglect by the profession of the reasonable wants of the working classes.

If "A Young Practitioner" should care to communicate with me, I shall be happy to send him a specimen copy of the cards I use for the working classes.—I am, etc.,

St. Mary-Bourne, Andover, Hants, March 13th, 1882.

W. F. PHILLIPS.

RULES FOR A DISPENSARY.

SIR,—Will you kindly insert the following rules for a dispensary in the JOURNAL? They are intended for a dispensary in a purely agricultural village of about 300 or 350 inhabitants, which is seven miles away from the market town. I shall be glad if it induces the expression of opinions from members who have such a scheme already at work.—I remain, yours, etc.

NEMO.

Dispensary: 1. This dispensary is for the benefit of farm labourers, their wives and children. 2. Members will be able to see the medical officer at the dispensary on Mondays at 11.30 A.M., except in the weeks having public holidays, when he will attend on the corresponding Tuesday. 3. Members will be visited at their own homes, if prevented by illness from seeing the medical officer at the dispensary. 4. Members will be able to obtain ordinary medicines at the dispensary on Mondays or other week-days at reasonable hours. 5. An entrance fee will be charged only to persons who wish to join again, after allowing payments to fall into arrear; or who wish to join during an illness. 6. The entrance fee for readmission will be two quarters' payments; for admission during illness, it will be three quarters' payments; both being in addition to the quarter due. 7. The payments for membership will be at the following rates: 5s. *per annum* for one member alone; 4s. 6d. for each if three of one family join; 4s. each if four join; 3s. 6d. each if five join; 3s. each if six or more of one family join. 8. Membership payments must be made in advance, will be due on quarter-days, and may be made in quarterly instalments. 9. If two quarters' payments be owing, the membership will cease, and an entrance-fee will be required on readmission. 10. Members will pay one penny for each bottle of medicine, embrocation, or lotion, or for each box of ointment or pills, they obtain at the dispensary, as they will be saved the expense of sending to the market town. 11. Members of other medical societies having the same medical officer will be given the advantages of the dispensary without payment, except for medicines, under Rule 10. 12. The medical officer reserves the right of admitting people of a different class on this or a different scale, or of refusing the payments of anyone.

SIR,—Could you tell me of any book which would do as a handbook for a course of elementary lectures to ladies on Hygiene? We want to impart a little practical information to district visitors, etc. Any books I have seen are too advanced.—Yours faithfully,

E. MACDOWEL COSGRAVE, M.D.,

Member British Medical Association.

24, Gardiner's Place, Dublin, February 23rd, 1882.

* Professor Corfield's lectures, entitled *Health* (C. Kegan Paul and Co., 1880), would probably answer the object intended. The *Health Manuals* of the Society for the Promotion of Christian Knowledge might also be useful.

PHTHISIS AND ARCHERY.

SIR,—I should feel much obliged by some opinion in the following case. A lady with some tubercular (inactive) deposit in the right apex, asks me if the exercise of archery would prove injurious to her. I had forbidden any special exertion, such as singing and dancing; but, as she assured me that archery did not affect her breathing unless she were shooting for prizes, I gave it as my opinion that so far it could not have any prejudicial effect. Drawing the bow appears to me a muscular exertion of the arms only, quite unconnected directly with the organ affected, or indirectly with any general exertion which could hurry the action of the respiratory organs.—I am, etc.,

RECREATION.

"PROTECTED" SCARLET FEVER CASES.

SIR,—I believe the solution of the question of so-called "protected" scarlet fever cases is simple. Are they not merely mild cases of scarlatina without eruption, consisting of simple primary fever of two days' duration, followed by the characteristic congested and ulcerated tonsils, and quite as likely to spread the disease as the other forms of scarlatina? As such I have always looked upon them. If so, it is misleading and a misnomer to style a person suffering from scarlet fever as a "protected" person.—I am, etc.,

M.B., M.A.

CHINOLINE (SCHERING'S).

SIR,—Oblige me with further information concerning the above alkaloid, which was referred to in the JOURNAL for March 14th. I am desirous of knowing—1. What dose of chinoline is equivalent to one grain of sulphate of quinine? 2. How the chinoline is to be administered, in solution or pill; whether it is soluble in water without acid; and what correctives are required in dispensing it?—Your obedient servant,

* The ordinary dose of Schering's pure tartrate of chinoline is from five to fifteen grains. It is best given in a mixture. It dissolves readily in water without the addition of acid. Its taste may to some extent be covered by spirits of chloroform or tincture of orange-peel.

PRACTICE IN THE COLONIES.

SIR,—I believe that some restrictions as to the practice of medicine by men only holding British degrees exist in some Canadian provinces. Are these restrictions in force in Manitoba and other western provinces? and if so, in what do they consist, and how may they be met?—Yours truly,

M. B. EDIN.

THE LUMLEIAN LECTURES ON INFLAMMATION.

Delivered before the Royal College of Physicians.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College, London.

LECTURE I. PART II.—INJURY AND DAMAGE.

4. *The local disorders of the circulation, on which the objective signs of inflammation depend—namely, increased supply of blood with diminished velocity of the blood-stream, dilatation of the blood-vessels, exudation, and stasis—may all be explained either as direct or indirect results of a damaged condition of the vascular wall; but no satisfactory explanation has as yet been given of the mechanism of emigration of the colourless blood-corpuscles.*—In what has been said up to this point, I have endeavoured to present a general view of the effects of injury as they may be judged of, without making any effort to investigate them minutely. But we must not forget that these are made of finer details, to see which it is necessary to come nearer and to penetrate below the surface.

Our forefathers judged that inflamed parts were hot by feeling them; we know how hot they are by the thermometer. So as regards the other two Celsian characteristics. We know how a part swells and becomes red, by watching the process under the microscope. Without its aid, our knowledge of inflammation would be as vague as was Harvey's of the capillary circulation. Microscopical investigation has, no doubt the disadvantage that, the nearer we approach to our object, the narrower becomes our field of vision; and some people imagine that this is apt to associate itself with a corresponding narrowness of intellectual scope. If such a danger exist, the way to avoid it is not to change our method with our instrument. Whether we look at large things or at small—whether we occupy ourselves with general characters or with details—it is alike necessary to bear in mind that our business is with the pathological process itself, not with its results. The history of pathology, from the time of John Hunter to the present, seems to show that a great many of the mistakes that have been made may be attributed to neglect of this principle. The method which consists in inferring from the pathological anatomy of a disease its essential nature cannot be dispensed with; for, in many cases, it is the only method within our reach, but it is an imperfect and uncertain one; for, if we interpret our facts wrongly, we have no means of finding out our mistake. The only certain way of determining the nature of a diseased process is that which is employed in physiology. It consists in getting as close as we can to the seat of action—in taking care that our view is not obscured by surrounding objects, and of watching what happens with the utmost attention of which we are capable. I need not say that, as regards inflammation, this was the method employed by John Hunter, and, more recently, by the elder Thomson, C. J. B. Williams, Wharton Jones, Lister, and indeed more or less, along with the other method, by all who have worked to good purpose. That in later times, and particularly during the last ten or fifteen years, its relative importance has become so much greater, is due partly to the better appliances which we now possess for this close scrutiny of vital processes, partly to the more sceptical spirit of the time, which refuses to accord to inferences, however well founded, the same value as to direct observations.

As affording an excellent illustration of the method to which I have been referring, as showing how clear a view can be obtained at once of all the constituents of a pathological state or process, I would ask your attention to what may be learnt by the microscopical observation of a serous membrane under conditions which, although they apparently approach closely to the normal, yet depart from it sufficiently to determine inflammation. For this purpose, it is necessary that, during the whole period of observation, the membrane to be observed (the mesentery or omentum of a carnivore or a rodent) should be immersed in a liquid which represents as nearly as possible that of its own normal secretion; and that the temperature of this medium should be that of the body. I shall not describe the details of the experiment, but will content myself with stating that the arrangements are similar to those employed by Professor Stricker (*Handbook for the Physiological Laboratory*, p. 231) and myself in 1870; but that the *modus operandi* has

been since brought to much greater perfection by Professor Thoma, of Heidelberg ("Ueber entzündliche Störungen des Capillarkreislaufes bei Warmblütern," Virchow's *Archiv*, vol. lxxiv). As a result, he has been able to see the mammalian circulation in a state of unimpaired activity; the velocity of the blood-stream in all the blood-vessels being such, that even in the veins the axial blood-stream appears as a continuous thin red line, with a prismatic border perfectly free from corpuscles.

But, in a very short time, the inevitable changes which are the signs of damage present themselves. If the attention be fixed on a vein, the blood-stream in it seems to flag almost suddenly. At once, the colourless corpuscles "fall out", like tired soldiers on the march, leave the mid-stream, and loiter against the vein-wall, afterwards sticking to it, just as Dr. Williams described the process for the first time in his *Gulstonian Lectures* in this College in 1841. We know now that the proximate cause of this loitering of the leucocytes against the internal surface of the vascular wall, is the retardation of the current: first, because, by the well known experiments of Schklarewsky ("Ueber das Blut und die Suspensionsflüssigkeiten," Pflüger's *Archiv*, vol. i, p. 603), it is shown that, from the relation which exists between the specific gravity of these bodies and that of the blood, this result is certain to happen; and, secondly, because, by altering the rate of flow, we can produce or abolish the phenomenon at will.

If this were a mere barren problem in vital physics, or even if I could tell you no more about it now than when, nearly forty years ago, Dr. Williams first described it accurately here, I might hesitate in doing more than to make a passing reference to it.

But we now know that it is most intimately connected with the central phenomenon of inflammation, the exudation from the slowly flowing blood-stream of corpuscular liquid. To show this, let me return to the narrative of what happens in the mammalian mesentery. There are three phenomena which demand our attention. The first is, the emigration of the colourless corpuscles. From the moment when these bodies cling to the walls of the veins, in the peculiar way that has been so long familiar, they begin to escape. How it happened that—to as good observers as any who now occupy themselves with the subject, aided by as good microscopes—this wonderful process remained hidden until both it and its meaning were brought to light by Cohnheim, we need not stop to inquire. To the student of the present day, to whom emigration presents itself as a commonplace and elementary fact in pathology, which is shown to him in the course of his first practical lesson on the subject, it seems incredible that it should have been overlooked; while older men, whose microscopes have perhaps remained under their glass shades for a generation, find it equally incredible that what they or their teachers failed to see thirty or forty years ago, can possibly be true now. Both err, in forgetting how slow and gradual is the process by which we come to a right understanding of objective facts. Let us be prepared to give equal credit to the past and to the present, accepting what is new, without losing sight of, much less rejecting, what is old.

The second of the three phenomena to which I referred just now is that of the accumulation of coagulable liquid on the surface of the inflamed membrane, and the separation of its fibrin; in other words, the inflammatory exudation. In other kinds of inflammation, the exuded liquid is discharged from the veins and capillaries into the intervascular parenchyma, where it accumulates or not, according as the mechanism of absorption is adequate or inadequate for its removal; the most important of the three objective signs of inflammation being the expression of defective drainage, or, what amounts to the same thing, excessive leakage from the blood-vessels. But, in inflammation of a serous membrane, no such drainage is wanted; the liquid exuded accumulates, not in the tissue, but in the serous cavity, and finds its way back to the circulation by the lymphatics (situated chiefly in the diaphragm), with which the peritoneal cavity is in communication. For this reason, the study of peritonitis under the microscope affords an opportunity, not elsewhere to be met with, of studying the nature of exudation, and of its relation to what precedes it. If the part of the membrane which is under observation be surrounded by a ring of glass, which rests upon its upper surface, the exuded liquid, instead of being washed away by the constant stream of warm liquid with which it is irrigated, collects on the surface, and soon forms a gelatinous clot, which adheres feebly to the surface of the membrane. You have, in fact, before you, in its simplest possible form, a croupous process.

If you remove this soft coagulum from the membrane and place it under the microscope, it exhibits the characters of blood-plasma which has undergone the same change: nor can there be a moment's doubt that the reason why it coagulates is the same in the two cases—namely, that a certain number of the leucocytes which have escaped undergo disintegration; in doing so, are dissolved in the liquid in which they

are suspended, and thereby communicate to it the property which it did not before contain—that of producing fibrin.

The third of the three microscopical phenomena which presents itself in the mesentery is that of capillary stagnation or stasis—a phenomenon which the earlier microscopical observers (as, e.g., Dr. John Thomson) rightly regarded as of great importance. They were right in so regarding it, for two reasons: first, because it always occurs in inflammations which are of sufficient intensity; and, secondly, because it is in it that the process culminates—by destroying the life of the tissue in which it has its seat.

To avoid confusion, it is necessary to regard the process as consisting of two stages: the first transitory; the second definitive. Transitory stasis is only a local exaggeration of that general retardation of the progressive motion of the blood which we have already studied. Permanent stasis is, as everyone who has watched the circulation in the transparent parts of the frog knows, associated with two other changes in the capillaries. One of these is what has unfortunately been called diapedesis—namely, the often sudden extravasation of a number of coloured blood-discs from a capillary; the other is that strange adhesion of the coloured discs to each other inside the capillaries, so that they look like rods of red coral, which was carefully studied by Mr. Lister twenty-five years ago. Of the truth of the principal conclusion to which these researches led Mr. Lister—namely, that stasis is not due to alteration of the circulating blood, but to a change in the channels through which it has to pass—there can be no doubt; for, in addition to his own most ingenious experiments, it has been since shown that when, in the living animal, corpuscular liquids, such as milk, are substituted for blood, stasis occurs in injured parts, in a similar manner and under similar conditions. I shall have again, in my third lecture, to refer to these facts in their historical relations; for there can be no doubt that, as I have had occasion to state before, they led their discoverers to some of the advances which have been made since. What I would now desire to emphasise about stasis is not so much the antecedent changes which give rise to it, as its effect on the tissue which surrounds the obstructed vessels. Stasis is the mechanism by which inflammation kills, and thereby gives occasion to further pathological changes, of which necrosis is the starting-point.

Time does not admit of our studying other examples of inflammation microscopically. I trust that this one instance, in which I have endeavoured to give a clear account of what happens as I could, will suffice to show that, just as to the naked eye the visible effects of injuring a vascular part are heat, redness, and swelling, so these have their microscopical counterparts in vascular dilatation and exudation, and in the escape of the fibrin-forming elements of the blood; and that these culminate in capillary stasis. From it, all the destructive after-effects of inflammation have their point of departure. What I have now wished to show that all these separate results of injury are—not so much by virtue of the injury itself, as each other as by their common relation to one and the same proximate cause—like the naked-eye phenomena, not direct effects of the injury, but simply signs of damage.

As to the retardation of the circulation. As no reason can be given why there should be any general retardation of the blood-stream, the condition which determines the local retardation must also be local; and, if so, it must depend on changes of diameter of the blood-vessels, or on obstruction to the passage of blood from other causes in the capillaries. As regards the former, we know by direct observation, first, that there is a local narrowing either of an artery or of a vein; and, secondly, that the obstruction to the quantity of blood which will flow through the vessel is, in the initial stage of the process, very moderate. It has been proved by exact experiments, that the blood-stream in an injured limb may exceed the normal flow in the proportion of three to four to one. It follows, therefore, that the retardation of the circulation in the injured part is not due to a general slowing down of the blood-stream, but to a local obstruction to the flow. As regards the latter, we know by measurement that capillary vessels in the early stages of inflammation are much wider than normal, and that they remain so until the vessels which were before normal have become so again. It is clear, therefore, that the retardation of the circulation in the injured part is not due to a general slowing down of the blood-stream, but to a local obstruction to the flow.

If we now consider the question, Why do the blood-vessels in the injured part become so much wider than normal? we must, as everyone who has read the works of John Hunter, know, refer to the fact that the vessels in the injured part are much wider than normal, and that they remain so until the vessels which were before normal have become so again. It is clear, therefore, that the retardation of the circulation in the injured part is not due to a general slowing down of the blood-stream, but to a local obstruction to the flow.

Next we come to the question of escape of leucocytes. We have

already seen how the retardation of the stream, particularly in the veins, is a condition *sine quâ non* of emigration. As regards leakage, we have also seen that, on the large scale, leakage is an immediate result of injury; that, in injured parts, the blood-vessels begin to leak at once—i.e., immediately after the injury; so that the element in the act of exudation which remains unaccounted for is the penetration of the vascular wall by the semifluid protoplasm of the leucocyte. Now there are two senses in which a vital phenomenon may be said to be explained or accounted for. The best and most satisfactory is, when we can deduce it from the operation of those properties of matter which are operative outside of the organism. From attempting this we are precluded by want of knowledge, or, more accurately, by want of the means of investigation. We have, therefore, to fall back on the less perfect method, which consists in placing the fact along with others which it resembles. In the present instance, we refer the penetration of the vascular wall of injured parts to the more general fact (of which the examples are very numerous) that leucocytes themselves, and other animal bodies which resemble them, possess the power of intruding their own substance into that of dead tissue, and, indeed, of any material capable of imbibition with which they are brought into contact in an active state. The mechanism by which the necessary contact is established has been explained. As to the mode of penetration, we have to content ourselves with identifying it with other well-known but equally unexplained processes.

And, finally, as regards stasis: to understand its relation to the other effects of injury, and to the injury itself, we must bear in mind, first, that it does not form part of the inflammatory state, but is rather a sequel or consequence; and, secondly, that the lagging, the stagnation of the blood-stream, and the final choking of the capillaries with blood-discs, occur only here and there in the inflamed area; and that, when we are able to localise the action of the noxa, we find that stasis, if it occurs, is limited to the parts most directly acted upon—i.e., most injured. This localisation suggests what on other experimental grounds we know to be the case; viz., first, that stasis is the expression of a higher degree of injury than that which is required to produce the inflammatory state (i.e., redness, heat, and swelling); and, secondly, that the local retardation of the circulation which leads to it is the result of a change in the capillaries which renders it more difficult for the blood to pass through them than in the normal state. On the subject of this increased resistance, and the conditions which lead to it, a most important series of experiments have been recently made by Professors Gley and Hensen-Jewicz of Graz,* who have proved by the fact that in animals the vital properties of the tissues can be maintained by artificial circulation of properly arterialised blood, that the purpose of ascertaining to what extent the capillary resistance is increased by the introduction into the circulating liquid of extremely small quantities of injurious substances, particularly metallic salts. These experiments prove, not merely that the effect of such a body is to produce leakage, but that it shows itself immediately in diminishing the quantity of blood flowing through the blood-vessels of the injured part in a given time, under absolutely constant pressure. These beautiful experiments, though they fail to tell us why a spoiled capillary resists the passage of blood more than a sound one, afford us most important information as to the condition which leads to this increased resistance. They satisfy us in saying that although, in the order of time, stasis is a consequence of exudation, the two phenomena owe their relation to each other to their being both alike the direct effects of injury; the former being the sign of a less, the latter of a greater, degree of damage.

I now desire to admit to you one or two deductions which follow from the view we have taken of the nature of the inflammatory state. The first is, that the only direct after-effect of inflammation is exudation, that being dependent on the action of the exudative force; and that the mechanical obstruction of structures which have the capacity to have exudation, whether it be to a cavity, or to a cavity, or to a cavity, is not in any way different from those by which the same structures are destroyed when destroyed by other agencies. The second deduction is, that the only cause of the inflammatory state is the power of new vessels to form in the injured part, and that the power of new vessels to form in the injured part is the only cause of the inflammatory state. The third deduction is, that the only cause of the inflammatory state is the power of new vessels to form in the injured part, and that the power of new vessels to form in the injured part is the only cause of the inflammatory state.

* *Archiv für Experimentelle Medicin und Anatomie*, 1881, 1, 1.

An uncomplicated inflammation is neither reproductive nor infective, neither benignant nor malignant. If it have any tendency, it is the tendency to leave off as soon as the occasion for it ceases.

(To be continued.)

CROONIAN LECTURES ON THE CLIMATE AND FEVERS OF INDIA.

Delivered before the Royal College of Physicians of London.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE I. PART II.—ETIOLOGY OF FEVERS.

[Concluded from page 415 of last number.]

Plants and Modes of Action of Malaria.—Briefly to summarise the facts about malaria and the methods by which it acts—whatever it be, it seems to be influenced by local and climatic conditions; its activity increasing generally with proximity to the equator, though there are parts of North India, as well as of Europe, where it is most active. Though prevalent in low-lying, marshy, or water-logged ground, or on soil drying up after rains, or on land that is rendered damp by interrupted drainage, it is also found on dry, sandy, or rocky ground, where there is little or no moisture or vegetation of any kind. Of this there are many examples in Europe and in India. Still, water seems to be the prime causal agent, especially when stagnant and near the surface. Water seems to not only determine the generation of malaria, but to hold it in solution. The natives of India attach little importance to atmospheric states, but believe that the water of pools and tanks, or even of streams flowing through certain jungles or marshy places, is charged with the fever-poison, and many believe that the milk of buffaloes or cows fed in these places has the same effect. I have myself heard natives assert this. Malaria is more active near the surface of the ground, in valleys, deep dry ditches or moats, old tanks filled with refuse, silted-up beds of rivers, obstructed watercourses; decreasing in energy with height, it ceases to exist above certain altitudes, variously given at from 1,500 to 5,000 feet. How high it permeates the air above the sea-level surface is not known; but the top of a hill, even the upper room of a house, is less dangerous than the ground-floor. It occurs in some of the hill-stations of India; but, as there is constant communication with the plains and valleys, fever may be the result of importation. It moves like mist and rolls up the hill-sides, nay, overtops those of a certain height, may be dissipated by or travels with the wind, probably some miles, but no one can say how far, though to a greater distance over land than over water, especially salt water, which is supposed to have the power of absorbing and retaining it. Crews of ships lying at a considerable distance to leeward of a malarious shore have been affected by the off-shore wind; and it is said that ships have generated it from certain cargoes of green wood, coals, and other vegetable matter, from rotting timber or bilge, which have developed fever of great severity. Steeping of hemp, jute, and indigo, or other vegetable matter, has had similar effects. Villages and camps have been affected when to leeward of swamps, even at a considerable distance. It is said that burning fires, smoke, or a belt of trees, will arrest its progress; that it clings about trees—hence the danger of sleeping under them; that the growth of trees will destroy or prevent it; and that some trees—the eucalyptus, for example—have a special antagonistic power; but there is probably nothing more in this than the rapid growth of these trees, which makes them quickly available as shelter. A screen of gauze or muslin is said to be protective; a mosquito-curtain will keep out malaria as well as insects! A very high temperature does not always cause, it may even prevent it, though the other necessary elements seem to be present. Malaria is more active at night than in the day—more likely to affect those who are exposed to it at that time, during sleep, on or near the ground. It affects the weak sooner than the strong; those of a phlegmatic, lymphatic, or melancholic, rather than the sanguine or nervous temperament; the sickly and ill-fed before the robust; it spares no age; new comers are more liable to suffer than those who have been acclimatised; it affects all races, but it would appear that the negroes in some parts of the coast of Guinea acquire a toleration which has been referred, possibly

without sufficient reason, to the colour of the skin. There are certain tribes in the Terai and other forest districts of India who acquire some immunity; the non-Aryan races, inhabiting Assam, suffer, it is said, to a greater extent from malarial disease than the Aryans in the same province. The Tharoos live where it would be death to others, but even they are not altogether exempt.

Malaria is very intense in the belt of low swampy forest ground at the foot of the Himalaya mountains, where the porous soil has a substratum of clay, by which the water is brought near the surface, and where there are dense vegetation and a high temperature; in certain jungle districts, and water-logged land, and where the tides encroach; in the river-valleys, deltas, and debouchures of rivers; and near rice and other cultivation in some stages, though the danger from fresh rice cultivation is probably exaggerated; in the Sunderbunds of Bengal, where the mud is covered with dense jungle and frequently washed by the tide; in the jungles lying at the foot of hill-ranges, and along the sea-coast where salt and fresh water mingle, and where organic matters decompose amid moisture and heat. But it is scarcely less active on high and arid ground, as in the Deccan, Sind, Bikaner, Peshawar, the Punjab, Bhawalpore; but even in these localities, subsoil, damp, and organic matter seem to be at the bottom of it; though there are places, it must be admitted, which seem so dry and devoid of vegetation, and with the water at such depths below the surface, that it is difficult to believe that the explanation holds good—as it probably does; for, though there may be no great quantity of water, the subsoil is impregnated by a certain amount of stagnant moisture, which is probably the worst of all. It often appears with great intensity, after excavation and turning up of soil, in land that has recently been broken up, or has been denuded of jungle; whilst, on the other hand, cultivation, draining, and cropping seem to diminish or destroy it. The worst malarial dysentery that I have ever seen followed the clearing of some jungle during the last Burmese war. There are localities in India now comparatively healthy, that were formerly dangerous. Malaria is at its worst in the drying-up season after the rains and the beginning of the cold season; whilst, in the dry hot weather, and during heavy rains when the ground is covered with water, or when the land has been for some time cultivated and populated, or covered with trees, it is less severe. Volcanic, rocky, sandy, granitic soils or surfaces, have been thought to favour it, but it seems impossible to ascribe it to any particular soil.

Heyne, in a paper on the Hill-Fevers in India, shows that fevers prevail where granite rocks and ironstone are found in large quantities, and attributes it to magnetic or electric fluid disengaged in excess. Martin thought ferruginous hornblende might be the cause. Volcanic soils and exhalations were supposed by Sir W. Napier and Parkins to cause fever in Sind. Sulphurous vapour has also been suggested. Kuler attributed the endemic fever to limestone rocks. Gordon says: "Fever may occur on rocks, and on the detritus of rocks, as at Gibraltar, Malta, Ascension, the Ionian Islands, Hong Kong, and Cape Coast Castle, when the rock is rotten, and gives out vapours as the sun falls on it after rain." At Port of Spain in Trinidad, the residents enjoy comparative immunity from fever, though the place is surrounded by a swamp; and yet the same persons, if they take up their abode for a single night in La Vantile hill, in the immediate neighbourhood overlooking the Bay of Trinidad, suffer from fever in its severest form. So at Hong Kong, and at Cape Coast in Africa, climatic fevers are severe and deadly, though the soil is dry and hard in both places. At both, the underlying rock consists of decomposing ferruginous granite; and the alternations in meteorological conditions are great and sudden. In Sind and the Punjab, the soil is mostly sandy or alluvium on clay. At Kurrachee it is magnesium limestone, yet malarial fever, neuralgia, and cachexia are common.

Indian experience, however, supports the view expressed long ago by Pringle, that the chief determining cause is stagnant subsoil water at certain temperatures; for when such water moves, however slowly, the evidences of malarial poisoning are less marked. To the stagnant water must be added a certain combination of air and decomposing organic matter. What part may be taken respectively by vegetable and animal matter in the production of malaria is not known, but it is impossible to conceive of miasmata arising from organic decomposition in a tropical marsh, that is not a mixture of both; for low forms of animal life teem among the vegetation in such places, and the slime and ooze of a swamp drying up must contain quantities of animal matter, dying and dead. This may explain the more virulent character of some miasmata, and account for varying phenomena. Those given off from rocky soils, having less of the animal element, may account for differences that characterise the fevers of those regions.*

* Jackson attributed paroxysmal fever to vegetable emanation, typhus and its congeners to animal emanation, miasmata.

its own definite and well marked pathological processes, but in simulating others, from the stupor of typhus, the collapse of cholera, the high temperature of insolation, the sickness of an irritant poison, to the convulsions of epilepsy or of dentition, which may occur in the pernicious forms. It induces anemia and general cachexia, with structural changes in the liver, spleen, or other viscera. Neuralgia, asthma, and various other symptoms of disturbed innervation and sanguification; and, as I have before said, appears to be in close etiological relation with dysentery, cholera, diarrhoea, beri-beri, hydrocele, elephantiasis, bronchocele, and hepatic disease.

Whatever its nature may be, the action of malaria on the human economy is very striking; it affects the central nervous system, causing disturbance of vaso-motor action, paroxysms of fever, and congestion of the abdominal viscera, which become periodic in recurrence, or pass on to structural changes in the liver and spleen, or intestinal mucous membrane. No one can have resided long in a malarious climate, like Assam, without observing the cachectic, deteriorated aspect of the people, who, although they may never have had a single attack of fever, and do not feel ill, and would resent being told so, are yet victims to the insidious action of the poison, and present evidences of anemia, degenerate tissues, and chronic visceral disease. In my next lecture, I shall describe intermittent fever as it occurs in India.

THE GULSTONIAN LECTURES ON PULMONARY CAVITIES: THEIR ORIGIN, GROWTH, AND REPAIR.

BY WILLIAM EWART, M.D. Cantab., F.R.C.P.,

Assistant-Physician and Pathologist to the Brompton Hospital for Consumption;
Physician to the Belgrave Hospital for Children; Demonstrator of
Physiological Chemistry at St. George's Hospital.

LECTURE II. PART II.

THE occasional occurrence of decomposition in the secretion of cavities leads us to inquire into the influences which may be exerted by this cause upon the walls of vomicae, and particularly into the existence of any absorptive power special to the latter.

I have already pointed out that fluids may regurgitate from the cavity into the open mouths of the bronchioles, and, gaining access into the alveoli, may diffuse into the blood. This circumstance introduces into the problem a serious complication, which will be discussed hereafter. But for the present, I am specially considering the cavity-wall, independently of the bronchi opening into it.

The extent to which simple percolation may take place is determined by the condition of the internal surface of cavities. During the period of formation of the latter, the fluids act locally upon the decaying structures. Dr. Reginald E. Thompson, in his book on *Pulmonary Hemorrhage*, alludes to this mode of excavation by maceration, leading to the appearance of a "nibbling". If we exclude the more virulent cases of acute phthisis, where the lung-substance literally dissolves away in its own juices, and the oedematous forms of softening, the soakage to which I have alluded does not extend into the depths of the tissues where the work of repair is progressing, but the dead tissue acts as a temporary shield for the living. On the other hand, in the matured cavities, any extensive diffusion of the fluid contents is opposed by the fibrous layer and by the outer zone of fibroid cell-growth, the special function of which is to add thickness to the cavity-wall. The possibility of any direct absorption in these cavities mainly depends upon the tightness or the looseness of the fibrous tissue around them; all fibrous structures are by nature fitted for some degree of absorption, and even the densest are capable of opening up hidden paths under the agency of pressure. Much pressure does not usually exist in vomicae; neither do they contain many of those cells which have a tendency to force their way through lymph-passages. The current of secretion is altogether from the tissue towards the cavity; and circumstances rarely arise in ordinary phthisis which would occasion a reversal of the stream. The case, however, is different in the bronchiectatic sacculations: these are from time to time filled—nay, distended—with their own secretion, and the pressure within them is periodically increased by ineffectual efforts at expectoration. Although the existence of a limiting membrane has been microscopically demonstrated by Grancher and by Dr. D. J. Hamilton, it remains an open question whether, in its stretched and thinned condition, this membrane opposes

an effectual barrier to the more soluble products of decomposition. The clinical evidence appears to justify this doubt; symptoms of putrid infection, such as nausea and diarrhoea, frequently coincide with a period of fullness of the tubes, and disappear with the evacuation of their contents. No such continuous layer exists in the common phthisical cavities. If placed under similar pressure, the meshes of their fibrous coat would probably allow of free filtration. Some filtration actually occurs from simple stagnation in the putrid cavities to which I have referred; and it is significant that, in these cases, the peculiar fetor is present after death in the other organs, showing that the whole blood is contaminated. From this dangerous degree of filtration of secretion, the vomicae in phthisis are usually protected by the absence of pressure within them, and perhaps in a slight degree by the false membrane due to necrosis, which their inner surface exhibits.

In connection with the subject of absorption, it is interesting to compare with the cavities, relatively well drained by means of patent bronchi, the deposits which remain permanently isolated from contact with the air, and gradually undergo shrinking within the lung-tissue. Microscopical sections usually show around a caseous nodule a clear space or vallum separating the mass from a zone of fibro-nuclear growth. This space is traversed by wandering cells, which may be noticed on their return laden with pigment and granular matter, and which can be followed into the plasmatic spaces. They are sometimes detected at the periphery of the caseous mass, lodged as it were in recesses, which almost seem to be of their own formation. I have never discovered any evidence at the circumference of cavities of a cell-traffic comparable to that which I have just described. Cell-migration, if it occurs, takes place in the opposite direction from the tissue into the cavity.

But whether active or slow, continuous or intermittent, the slight absorption occurring through the walls of cavities has, for its consequence, a progressive thickening of the surrounding lung-tissue, proportionate to the irritation. I readily admit that mechanical factors have a share in promoting this fibrosis; so contractile an organ as the lung cannot, with impunity, be retarded in its movements by the presence within it of patches of consolidation, or by the uneven traction from a thickened or adherent pleura. These mechanical agencies must, however, be considered as secondary in importance to the more subtle influences of chemical irritation.

Formation of simple fibrous tissue is but one result of irritation by absorption. I propose to devote a few remarks to another more important consequence arising from the same cause: I refer to tubercle, and first to that form of tubercle which is observed with great frequency in the immediate vicinity of the cavity-wall. Tubercle in this situation is clearly local and secondary. We are familiar with its exact analogon in the trachea. When, in a case of excavation at the right apex, we find the trachea deeply ulcerated and tubercular at a point of its left wall, situated about one inch above the bifurcation, in a line with the axis of the right bronchus, as shown on the diagram (see fig. 4), we possess a proof of the formation of secondary tubercle under the direct influence of a primary excavation. A wholesale ulceration of the trachea, and even of the larynx, occurring under similar circumstances, is capable of the same explanation. These observations are of extreme importance as establishing the causation of tubercle from the direct application of the contents of a cavity to the healthy mucous surface. If the comparatively resistant structures of the trachea suffer such marked lesions from this form of irritation, how much more decisive must be the effect produced on the tender wall of the alveolus, or on the bronchiole. Thus we are prepared for the recognition of a form of secondary pulmonary tubercle purely irritative in its origin, not necessarily arising in visible contact with the primary disease, but capable of being generated at considerable distances from it, by the impact of air contaminated with the products of disintegration; and it may be incidentally stated that such is the usual origin of the bunchy or racemose tubercle. Another link in this chain of evidence is supplied by the local tuberculosis observed in the walls of bronchiectatic cavities: from cases of this nature, the suspicion of pre-existing tubercle, independent of the cavity, is absent conveniently to our purpose. These local tubercles do not widely differ in aspect from those belonging to a more generalised tuberculosis, which often affects the pulmonary tissue at a later date; and there is, I believe, no escape from the conclusion, that their presence is indicative of the direct causation which I seek to establish.

But let us return to a consideration of the ordinary phthisical cavities. Bordering upon the latter, I have very commonly found large dense masses of tubercle, resembling, by their pigmentation, by their firmness, and by their tendency to fibrosis, the usual racemose deposits. (Fig. 2.) From these, however, they differ both in their size and in their shape; they present a wider expansion, and a cuboidal rather than a spherical outline. The position in which they are found is remarkably constant in

wall. Whosoever will inspect the limiting membrane of a tuberculo-pneumonic softening, will be readily convinced of the comparative toughness of this membrane, which is capable of resisting a greater force than the slight variations in pressure induced by inspiratory efforts. If with these tough structures the delicate alveolar wall be compared, it will become apparent that the atmospheric pressure would dilate the latter rather than the cavity. Exclusively preoccupied with the elasticity of the spongy tissue, Rindfleisch appears to have lost sight of its remarkable expansibility. As long as alveolar substance remains to fill up the space created by inspiration, the atmospheric pressure cannot influence the cavity. I shall have occasion to revert to this point, and to show that the great disproportion between the resistance of the cavity-wall and that of the alveolus, favours the contraction rather than the dilatation of vomice.

Cavities in the progress of phthisis tend to increase in number as well as in size. The position of the younger cavities is not entirely the result of chance. The prevalence of cavities in the dorso-axillary region, to which I alluded in my last lecture, points to an element of regularity even in the later development of phthisis, and to the operation of definite causes which we may study with profit. A recognition of the extension of the disease from the apex downwards was among the earliest results of improved methods of investigation. In one sense, this is but a corollary of the proposition prominently asserted by Louis, as to the frequency of apex-phthisis. The position of the secondary mischief, not only beneath, but in the vicinity of, the primary lesion, could not fail to be construed in the sense of extension by continuity; and this impression, if I mistake not, is still uppermost in the minds of many. The existence of a progressive tendency in phthisis it is not in my power to deny; but I venture to oppose the view that inflammation necessarily extends by continuity of structure. Among the achievements of modern medicine, we can point with just pride to the recognition and the furtherance of the curability of phthisis. It is now very generally admitted that pulmonary consumption may sometimes be arrested. We have all witnessed the progress and the recession of pulmonary vomice. This curability, special to some cases, rests entirely upon the local character of the lesions; in these cases, the disease is obviously not propagated by a creeping process.

The mechanism of the reproduction of cavities from above downwards, especially in the axillary region, will be best understood from a glance at the physiological and anatomical conditions, which so often contain the solution of pathological problems. Just as the affections of the kidney are chiefly connected with their secreting duty, the affections of the liver with its functional activities, so with the lungs, most of their diseases are influenced by their function of aëration. The respiratory energies undoubtedly vary in different parts. This can be proved indirectly by stethometry. Dr. Ransome's tables conclusively show that different excursions are performed by the various points of the surface of the thorax. Collateral proof of the same fact is supplied by the atrophic changes which the lung undergoes in old age, when the requirements fall short of the available breathing space. The atrophy affects definite regions. Hourmann and Dechambre* have shown that the middle lobe is relatively more wasted than other parts. This observation points to a comparative loss of function in this region. In the healthy adult, differences can usually be detected in the regional activities of the lung. If the respiratory capabilities of the various parts of the chest be tested by the combined methods of auscultation and of surface-measurement, we arrive at the following results. Respiration is most active in the lower lobe, least active at the apex, and very active in the axilla; whilst it gradually diminishes towards the sternal border. The importance attaching to these relative respiratory values will become evident, when I have pointed out the anatomical peculiarities of the bronchial distribution (Fig. 3). You will observe, from an inspection of the diagram, that on each side the main bronchus divides essentially into two branches; the upper (A) being destined for the apex; the lower (B), which is, more strictly speaking, a continuation of the main bronchus, supplying its divisions to the base. In any careful dissection, horizontal branches will be seen to traverse the back of the lung from the root to the axilla. In each lung, two of these are present. I will call them, for convenience, the *upper and the lower posterior-horizontal bronchi*. The anatomical differences between the lungs occasion a corresponding difference in the origin and distribution of these tubes. The right upper lobe, possessing posteriorly a greater height than the left, includes the upper posterior-horizontal bronchus, which takes a direction parallel to the septum and immediately above it; whilst the lower posterior-horizontal branch occupies a similar position in the lower lobe. In the

left lung, these branches both belong to the lower lobe, which rises considerably higher at the back than the right lower lobe. The upper branch is by far the more important on this side; but the relative size of the two branches is liable to vary. The origin of the upper posterior-horizontal bronchus differs widely on the two sides. Whereas on the right this bronchus is a branch of the bronchial stem A, on the left it usually opens immediately beneath A into the main bronchus continued. I have witnessed its occasional derivation from A, but would consider this an abnormality. The lower posterior-horizontal bronchi present no differences; on both sides, they originate in the posterior wall of B, rather more than one inch below the primary division, being the first tube given off by B, with the exception of the bronchus (L. S.) destined for the lower sternal region, which has its orifice in the anterior wall.

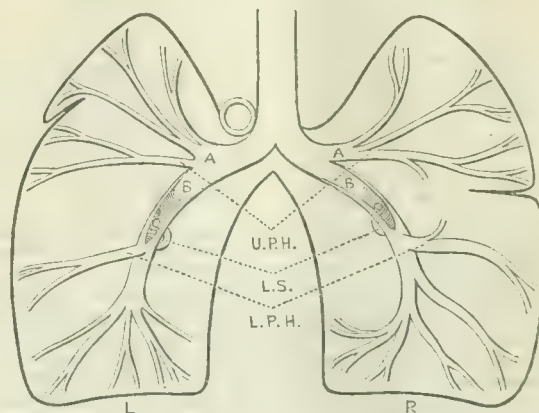


Fig. 3.—Origin and Distribution of Upper and of Lower Posterior-horizontal Bronchi (other branches not accurately given). A. Bronchus to the Apex. B. Bronchus to the Base. U.P.H. Upper Posterior-Horizontal. L.P.H. Lower Posterior-Horizontal. L.S. Lower Sternal Bronchus.

I would call your attention specially to the close relation existing between the upper branches and the bronchial supply to the upper lobe, and also to their rigidly patent circular orifice—a peculiarity which they share with the bronchial tubes of the apex. All branches originating below this point present a somewhat flattened oblique orifice, the patency of which is probably subject to variations. The posterior wall of the bronchus from which the lower branch arises is liable, owing to its position, to be clogged by viscous secretion during the hours of sleep, when sensitiveness of the membrane is lessened; and mucus would the more readily cling to its surface on account of its fine rugæ. The implication of the lower branches is, however, an event subsequent to the excavation in the distribution of the upper divisions, which should be considered first.

In cases of excavation at the apex, overaction and ultimate distension of the axillary region, result in proportion to the loss of respiratory power at the summit; thus the velocity of the air-current destined for the axilla will be rather in excess of the velocity in the apex-bronchus. Dr. Reginald E. Thompson would even assume that the ventilation of the apex is mainly dependent upon the stronger current which blows from the lower air-tubes over the aperture of the bronchus distributed to the apex. This point, however, is not material to my argument.

Owing to the close bronchial relations subsisting between the apex and the axilla, the enfeebled current through the tubes of the apex, and the exaggerated traffic through the axillary branches, inevitably lead to axillary excavation. (See Fig. 4.) The secretions, imperfectly propelled by the deficient expiratory effort of the diseased apex through the main upper bronchial division, are in danger of being sucked, by the deep inspiration which succeeds cough, into the neighbouring bronchus, which supplies the axilla. That such a result really follows is rendered highly probable by the shape of the early consolidation, by its microscopical character, and by its subsequent history. The early deposits are quite distinct from ordinary catarrhal pneumonia. They do not involve a whole lobule forming a polygonal patch of tolerably even consolidation, but distinctly occupy a bronchiole and two or three of its terminal divisions; hence the trefoil appearance of the nodules, often described. In strict harmony with this view of their origin, nodules occur in groups in the district of a bronchial division of mode-

* "Recherches cliniques pour servir à l'histoire des maladies des vieillards; Maladies des organes de la respiration"—*Archives Générales de Médecine*, ii, t. 8, p. 417.

Schneiderian folds are protected below by special valvular cartilages. The cornua trabeculae lie between and below the capsules.

Neither in Ganoids nor in Teleostei are there any special cartilaginous nasal capsules; but, in Acipenser and the Teleostei, a recess is formed in front of the antorbital (lateral ethmoid) cartilage, in which the membranous capsule is lodged. But, in Lepidosteus, the long nasal capsules travel to the end of the snout, and are lodged on each side of the rostrum terminally.

The essential nasal capsule in the Amphibia is primarily a distinct crescentic cartilage; but the walls, floor, and septum of the olfactory region are largely constituted by the skull proper.

In the snake, the nasal capsules are simple curved cartilages, so bent as to appear reniform, the "hilus" being the external nostril; they are well bent over the membranous lining, and, by their inner edges, grow down and meet the coalesced trabeculae.

In the rest of the Sauropsida and in the Mammalia the essential nasal capsule is a more or less tubular cartilage, which combines above with the large intertrabecular or ethmo-nasal septum, and behind with the lateral cranial outgrowth in the ethmoidal region. Turbinal growths of the capsule may be seen in a rudimentary form in lizards, turtles, and crocodiles, but these are in the region of the inferior or maxillary turbinals, which are supplied by the fifth nerve. In birds, very perfect turbinals are formed, which are highly complicated in the Ratite, but these are mainly outgrowths from the vestibular region, and are also supplied by the fifth nerve, so that the true olfactory region is not complex. In the Mammalia, the hinder region, which alone is supplied by the olfactory nerve, is highly complicated by ethmoidal turbinal outgrowths, as well as the nasal and maxillary regions in front of it.

In both Myxine and Petromyzon, the small and oval auditory capsules coalesce with the skull, and are composed of hard cartilage; but each only contains a double semicircular canal, comparable to the anterior and posterior canals of other types.

In Selachians and Sturgeons, the large cartilaginous auditory capsules are imbedded in and coalesced with the side walls of the very perfect chondrocranium. There is a very small opening above into each, the *aqueductus vestibuli*, representing the primitive auditory involution, and there are three perfect semicircular canals.

In Lepidosteus, the cartilaginous capsules are perfect and ovoidal, and become ossified by centres which are called præotic, epiotic, opisthotic, and sphenotic. Teleostei agree with Lepidosteus in these respects, but they have also a pterotic. These ossifications are not confined to the capsule proper, but extend also to the chondrocranium with which the capsules are completely blended.

In the Urodeles, there is a præotic, which also belongs to the alisphenoidal region, and an opisthotic, belonging also to the exoccipital region.* Each capsule, which chondrifies from below upwards, becomes perfect, and then opens infero-laterally to form the fenestra ovalis, which appears in this group for the first time, and is closed by the stapes, a separately developed cartilage belonging to the hyoid arch. This description is equally applicable to the auditory capsules of the Anura, but in several of the lower and more generalised types of these, the greater part of the occipito-otic region becomes converted rapidly into bone, without distinction of elements. In this case, however, the bone divides afterwards into regions.

In the Sauropsida, each cartilaginous auditory capsule can be distinctly traced from the contiguous parts of the chondrocranium, but coalesces more or less with it, especially below. It soon loses the ovoidal form, on account of the huge development of the semicircular canals. In all, a fenestra ovalis is formed as a secondary space which becomes closed by the stapes. There is nearly always a fenestra rotunda, and this is a primary and not a secondary opening; it is only closed by membrane. The normal ossifications of the capsules in reptiles are a præotic in front, an opisthotic behind, and an epiotic over the junction of the anterior and posterior canals. The stem of the Y-shaped suture dividing these is vertical; the opisthotic surrounds the fenestra rotunda, and divides it from the fenestra ovalis, which latter is bounded behind by the opisthotic, and in front by the præotic. These three periotic centres, which do not unite with each other, coalesce as a rule with the bone nearest to them—viz., the præotic with the alisphenoid, the epiotic with the supra-occipital, and the opisthotic with the exoccipital.

In Birds, the auditory capsules correspond very closely with those of reptiles, but the epiotic and opisthotic are very small. All the centres of this part of the head speedily unite with the surrounding bones before they unite with each other.

In Mammals, the auditory capsules are modified very largely by the size of the highly developed cochlea, and by the frequently large development of the mastoid region. The lobulated cartilaginous capsules

early become continuous with the adjoining parts of the chondrocranium. Ossification, which begins in the substance of the cartilage endosteally, is extremely irregular, and the centres very soon coalesce; but, as a rule, three can be made out in the upper part of the proper petrous region—a distinct præotic, a small epiotic, and a much larger opisthotic tract, the latter occupying nearly all the mastoid region except its upper part, as well as the lower face and greater part of the cochlea. In certain types, the ossified auditory capsule ankyloses more or less with contiguous parts, especially with the tympanic; but, in the largest and the smallest of mammals—in whales, on the one hand, and in shrews and bats on the other—the petromastoid, or whole ossified capsule, is quite distinct both from the tympanic and from the surrounding cranial bones. The relations of the fenestrae to the bony elements is the same as in the Sauropsida.

THE ANTIDOTES FOR STRYCHNINE.

By ROBERT BARNES, M.D.,

Obstetric Physician to St. George's Hospital.

HAVING had occasion to study, experimentally and clinically, the action of strychnine, I was much interested in the notice of the experiments of Messrs. Greville Williams and Waters on the antidotal action of " β lutidine", in the number of the JOURNAL for March 11th. I earnestly hope that further experiments will be carried out, to test the correctness of their theory, in some country in which scientific research is not yet paralysed by the tyranny of ignorance. My immediate object is to invite attention to the value of nitrite of amyl in strychnine-poisoning. This agent is not mentioned in the text-books; but it is probably much more efficacious than any of those which are commonly specified. Antidotes, it must be premised, are of two kinds: 1. The true antidotes; those which destroy the poison by decomposing it, or by annihilating it in essence, or by producing inert combinations. These are the chemical or mechanical antidotes. 2. Those, which, not altering the poison in its essence, counteract its action upon the organism. These are the physiological antidotes. In our endeavours to rescue a patient from the action of a poison, we have three indications: 1. To discharge the poison from the stomach, if it have been introduced by that organ, by the aid of the stomach-pump and emetics; 2. To administer antidotes that destroy or neutralise the poison in the stomach, or in the system; 3. To administer means that will sustain the patient against the action of the poison—in short, keep him alive until the poison is exhausted.

To apply these principles to strychnine, I am unable to judge how far the new organic base β lutidine belongs to the chemical or physiological class of antidotes. Strychnine is, unfortunately, a very stable substance, not easily attacked in its integrity; nor is it easily discharged in substance by vomiting or the stomach-pump. By the time that symptoms of strychnine-poisoning are developed, enough may have entered the circulation to lead to a fatal result, without absorbing more from the stomach. In practice, we shall commonly be reduced to the use of those means which counteract its toxic influence.

There is good evidence to show that strychnine kills by repeated violent shocks, exhausting the nervous centres, especially the respiratory and spinal centres; and that, if these shocks could be moderated or averted, the patient might be kept alive until the danger had passed, by the elimination of the poison. I had the good fortune, in the pre-hysterical epoch of legislation, occasionally to assist Marshall Hall in his experiments *ad hoc*. It is well known now that a frog, poisoned by strychnine, may not exhibit any tetanic action if it be kept absolutely quiescent; but that the same dose will kill it, if, by stimulating the diastaltic functions, as by touching its body, or even by shaking the table upon which the frog rests, tetanic action be evoked.

The first imperative rule to observe, then, is to avoid every possible cause of physical or emotional disturbance. Agents that have to be administered by the mouth contravene this rule; the attempt to swallow will excite a tetanic fit. Agents that act by inhalation do not contravene this rule. Of all the agents with which I am acquainted, which possess any virtue in stilling the diastaltic function, and in subduing muscular spasm, not one equals the nitrite of amyl. In obstetric practice, we are met by the formidable conditions of morbidly exalted, diastaltic, and spasmodic action: puerperal convulsions; and that irregular action of the uterus called hour-glass contraction. Both these conditions are physiologically allied to tetanus. In my *Obstetric Operations* (third edition), I recommended nitrite of amyl to subdue irregular and excessive action of the uterus. The value of chloroform in counteracting puerperal convulsions is now familiar; but I believe nitrite of amyl is even more valuable. By applying this principle, I have had the satisfaction, as I believe, of saving several lives; and

* There is a separate pterotic in the Axolotl

sive pus. The liver weighed five pounds and five ounces. From its cut surface a greyish-white infiltration could be squeezed out. This whitish fluid, as pointed out by Virchow and Böttcher in leucocythæmic cases, consisted of closely packed free nuclei and small cells. The naked eye appearance was remarkably purulent. Section of the kidney gave a somewhat similar material, which, however, more resembled thickened greenish pus. The lymphatic glands were not appreciably enlarged. I did not then examine the blood; but when I sent for some after a little time, the cadaver was removed to its final resting-place.

No reliable history of the case was obtainable. It was said that her circumstances were somewhat straightened; that she suffered hunger and privations at times; severe and prolonged trials for years. Her appearance was always cachectic. The pain in her side dated from a fall (uncertain) or some sudden exertion (?) months previously. It is probable that a fall was the starting-point in the displacement of this leukæmic spleen; and then that its own increasing weight, with that of the superincumbent enlarged liver, caused it to be jammed deeper and deeper into the pelvis, till gradual pressure on the sigmoid flexure ended in obstruction and death.

SALICYLIC ACID TREATMENT CONTRASTED WITH OTHER REMEDIES IN THE TREATMENT OF ACUTE RHEUMATISM.

By JAMES RUSSELL, M.D., F.R.C.P.,
Physician to the Birmingham General Hospital.

THE following observations are based upon 90 cases of acute rheumatism; 35 (uncomplicated) having been treated by remedies in use before salicylic acid, 55 treated by salicylate of soda or ammonia. The circumstances of the cases are alike in all.

I compare the two groups (1) with reference to the number of hours occupied by the temperature in dropping to 99°; (2) with reference to the respective stay in hospital.

1. In 35 cases treated by various remedies (uncomplicated) the average number of hours occupied in the temperature falling to 99° was 248; the extremes, 12 and 1,056 hours. The average stay in hospital (27 cases) was 39 days.

2. The cases treated by salicylate salt must be subdivided into (a) 43 cases in which the remedy acted successfully; and (b) 12 in which it failed; but, as in 4 the failure probably resulted from imperfect administration, the number of failures must be reduced to 8.

(a) In 43 successful cases, the average number of hours in temperature reaching 99° (39 cases) was 38; the extremes were 6 hours and 72. In 16 cases, it was 30 hours or fewer. The average stay in hospital (37 cases) was 38 days; the extremes, 10 days and 138. The reduction of the local symptoms, particularly of pain and heat, generally kept pace with the decline of temperature, or even anticipated it. In 20 cases, it is expressly stated that the relief of pain was effected within 24 hours; the same thing probably occurred in others. In 4, it began with the first dose. Hence, whilst the average residence in hospital was hardly lessened by the salicylic acid, the period was passed in comparative immunity from the symptoms of the disease. The duration of residence was determined by relapses, and also by the need of caution in guarding against their occurrence. Of the 43 cases of successful treatment, a relapse occurred in 11; a second in 4. In all, the relapse was brief and speedily controlled. The duration of the salicylate treatment strikingly attests the varied character of the disease. Taking 22 cases in which no relapse had occurred, the number of days during which the remedy had been given varied between 2 and 17. In two cases of relapse, the salt had been taken for 19 days.

(b) In 8 cases, the remedy failed. They were severe. The average residence in hospital (6 cases) was 75 days. One death occurred. Four patients were abnormally neurotic.

Accidents.—Of the 55 cases in which the salicylate salt was given, vomiting occurred in 9, chiefly after doses exceeding 10 grains. Delirium occurred in 6; in 2 it was protracted, but was free from alarming element; in 1 it was followed by death.

Two deaths have occurred whilst the patient was taking the medicine. One was in a boy, aged 15, of weak intellect, who had been taking ten grains every four hours with great relief, and without any sign of disagreement except slight vomiting for six days. After screaming through the night, without apparent cause, he died suddenly in the morning; temperature 99.6°. The lungs were highly cedematous, and much congested. The right auricle was gorged with blood. In the second case, a man of nervous temperament had taken ten grains every two hours for two days without relief. The dose was then doubled, and two days after was raised to 25 grains. The rheumatism was re-

lieved, and the dose was lowered to 12 grains on the same evening, and to 8 on the following morning. He had been depressed and delirious through the night. The delirium continued severely through the day, and he died suddenly in the night; the temperature, which had sunk to 100°, rising to 111.5° immediately before death. The right side of the heart was moderately full of dark tarry blood; considerable ecchymoses under the serous membranes.

Among the 43 successful cases are 5 of pericarditis, in all but 1 slight and of brief duration. In 3, it preceded the remedy; in 1, it was discovered on the day after commencement; in the fifth case, severe and ultimately fatal pericarditis set in three days after the rheumatic symptoms had been removed by the salicylate.

OBSTETRIC MEMORANDA.

PUERPERAL ZYMOSES.

A VERY painful case has, within the last few days, come under my notice, which illustrates many of the points ably laid down by Dr. Braxton Hicks in the JOURNAL of March 25th. Mrs. B., a lady, aged 26, was attended in her second confinement by her regular medical man, who was a friend of mine. For several days all went on well; then, all of a sudden, without any apparent cause, her temperature began to rise, and was soon between 104° and 105°. This condition caused my friend considerable anxiety, and an examination of the sanitary condition of the house—one in a row of new ones—was immediately made, with the result of finding sewer-gas pouring up from the sink in the scullery almost sufficient to blow out a candle held over it.

On the next evening, I believe it was, I was sent for in great haste to see the patient. I found her screaming at the top of her voice, and so violent that it was as much as several attendants could do to control her movements by force; in short, she was suffering from an attack of acute mania. By means of chloroform and hypodermic injections, we managed to quiet her, and I then had no difficulty in agreeing with my medical friend—who had diagnosed typhoid fever—as to the cause of these terrible symptoms, the typhoid spots on the abdomen being but too characteristic. The delirium lasted about eighteen hours, after which the patient became conscious and took nutriment well; but such was the fearful exhaustion caused by her condition as described above, that she sank slowly but surely, and eventually died in spite of every care and attention bestowed upon her. Now, surely, it is time the law took cognisance of cases like this. The poor young couple only removed into the abominable house at Christmas, and had they remained where they were, there is every reason to suppose that the wife would at this present moment have been alive and well. Surely something may be done in the way of compelling builders and landlords to produce a certificate from a surveyor or other competent person to the effect that their property is properly drained, previously to a new tenant going in. The public are more careful of their stables in as much as they relate to the health of their horses, than they are of the sanitary conditions of their houses.

W. BARRETT ROUÉ, M.B., M.S., Physician to the Bristol
Hospital for Children and Women.

THERAPEUTIC MEMORANDA.

RECTAL ALIMENTATION.

IN the course of an able article on the above subject in the JOURNAL of March 25th, Dr. Tyson observes that the coating of cacao butter with which Mr. Slinger endeavoured to improve the appearance of my "nutrient suppositories" was calculated to interfere with their absorption. Whether this be correct or not, I may be allowed to mention, perhaps, that in consequence of a suggestion made to me by Dr. Tyson privately, the suppositories made by Mr. Slinger have now for some months been sent without any coating. The earlier attempts made under my directions were to a great extent failures, owing to the too great dryness of the suppository. The suppositories now made under improved methods are such that, without opium, 90 per cent. of them are retained and absorbed. Messrs. Slinger also make them with the addition of half a grain of extract of opium.

H. E. SPENCER, York.

SNAKE BITES IN THE PUNJAB.—During 1880 no fewer than 968 deaths were registered from snake-bite in the provinces of the Punjab, against 818 in 1879, and 752 in 1878. The deaths from hydrophobia show, unhappily, an enormous increase, the number of victims from this cause amounting to 107, against 69 in 1879; 286 deaths were caused by suicide, and 67 by wild beasts.

Punctures made (previous to the application of copper and steel) invariably bled after the metals were applied for some minutes; ischæmia having prevailed before their application. 7. Recovery of sensation was simultaneous on both sides of the face after inhalation through the solenoid, and a marked rise of temperature took place, but no appreciable change in the condition of the contracted muscles. 8. As regards the achromatopsia, it was removed by the application of metals and the solenoid; the colour "red" being invariably the first restored.

In conclusion, Dr. Moore wishes to return his best thanks to his clinical clerks, Messrs. Godfrey Reid, Frank Jenken, and J. E. Pigot, for the care and attention they bestowed on this case.

LEFT HEMICHOREA: HEMIANÆSTHESIA (LEFT): ISCHÆMIA: HYSTERO-EPILEPSY.

(Under the care of Dr. MOORE.)

Mary H., a milliner, aged 22, a well formed girl, without any signs of anæmia, disturbance of menstruation, or history of nervous disease, applied, suffering from pain under the left breast, and pain on pressure over the left ovary. Three months earlier, whilst engaged at her ordinary occupation, she was suddenly seized with a "jerking" sensation in the left shoulder and left arm generally. These "jerkings" occurred, without any previous warning, eight or ten times in the twenty-four hours, leaving the arm with a sense of weariness and numbness, and, for a time, partially contracted. After repeated attacks, the girl became generally hysterical, and afterwards semisomnolent. On a careful examination, the arm generally felt cold, and pale, but not wasted. Over the extensor aspect of the forearm, there was generally well marked anæsthesia and ischæmia. Pin-punctures (which did not bleed) were made over the extensors of the forearm; then gold, silver, and copper were applied. The latter restored sensation to the part, and the punctures bled; there was no transference of the anæsthesia. Both arms responded to faradisation, the left more feebly than the right. Under the use of bromide of camphor, the choreic attacks disappeared, normal sensation was restored to the arm, and the patient was, when last seen, in perfect health.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 28TH, 1882.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

Case of Excision of a Stricture of the Descending Colon through an Incision made for a Left Lumbar Colotomy: with Remarks. By THOMAS BRYANT, F.R.C.S.—Mr. Bryant read the record of a case of stricture of the descending colon, in which he excised the diseased segment of bowel through the wound made for a left lumbar colotomy, the patient recovering. The operation was performed on a lady aged 50, who had suffered from complete obstruction for eight weeks, and was very feeble. The stricture could not be felt from below. The bowel was removed through the oblique incision made for left lumbar colotomy, by simply pulling the segment strictured through the wound, and stitching each portion of the bowel, with its two orifices as divided, to the lips of the wound. The stricture was of the annular kind, and involved about one inch of the bowel; it was so narrow as to admit the passage of a No. 8 catheter. The preparation was exhibited, with microscopical appearances of the growth in section, as made by Dr. Goodhart. Mr. Bryant said he believed the operation he had performed was a new one, and that it was applicable to not a few of the cases of stricture of the descending colon. It had suggested itself to his mind from seeing cases of localised or annular stricture of the bowel which were free and movable, both in operations of colotomy as well as in the *post mortem* room; but the case read was the first in which he had put the suggestion into practice. He pointed out how these annular strictures were generally local diseases, and consequently how desirable it was that they should be removed where possible. He suggested that the question of excision of the diseased growth should be entertained as soon as the diagnosis of the case was made, and that, in every case of colotomy for chronic obstruction of the descending colon, the possibility of being able to remove the diseased bowel by operation should be considered before the bowel was opened for a colotomy operation. He then showed how desirable it was that the question of excision or of colotomy should not be postponed till the patient's powers were too feeble to bear either, as was too often the case. He stated that he did not regard the operation he had performed in a more serious light than he did a colotomy in which the peritoneum was wounded.—Mr. G. D. POLLOCK thought the operation creditable to Mr. Bryant; he was not aware of a similar case in British surgery.

The history of some cases of colotomy for stricture was in favour of Mr. Bryant's proposal. He hoped that the case recorded would encourage other surgeons in dealing with similar cases, and in operating early.—Mr. HARRISON CRIPPS referred to the pathology of stricture of the large intestine, and recommended that, instead of lumbar colotomy, which afforded insufficient room, an incision should be made in the front of the abdomen, along the outer side of the rectus muscle.—Mr. HOWARD MARSH agreed with Mr. Cripps in recommending the anterior incision, and said that cases in which Mr. Bryant's operation would be admissible were very rare. He agreed with Mr. Pollock that the operation ought to be performed early.—Mr. HENRY MORRIS said that in such cases as that of Mr. Bryant the lumbar incision was preferable; one incision into the peritoneum was better than two.—Mr. BRYANT briefly replied.

On the Presence of Bile in the Saliva, and on the Variation in the Amount of Sulphocyanide of Potassium in the Saliva of Persons affected with different Diseases. By SAMUEL FENWICK, M.D., F.R.C.P.—Dr. Fenwick said that it was generally believed that, in cases of jaundice, the saliva did not contain any of the colouring matter of the bile. The author had, however, found a yellow colouring matter in the saliva of every case he had examined, after evaporating it by means of a gentle heat. A bitter taste was often complained of by patients affected with jaundice, and it had been suggested that it might result from the presence of the biliary acids in the saliva. The author had not been able to prove whether this opinion was correct or not, but he detailed a case in which an intense bitterness was complained of by a person unaffected with jaundice, in whose saliva he found traces of the biliary salts by the ordinary tests. It having been proved that both the colouring matter and the salts of the bile occasionally presented themselves in the saliva, an attempt was made to ascertain whether the amount of the sulphocyanide of potassium, usually present in the saliva, varied in different diseases, and whether such variations coexisted with any particular diseases. For this purpose, the saliva was examined in a large number of patients treated in private and in hospital practice, and the results were afterwards analysed. As it had been stated by one physiologist that the sulphocyanide was only the result of decomposition set up in the saliva by decayed teeth, and by others that it was produced by tobacco-smoking, these two conjectures were first examined. The state of the teeth was carefully remarked in 87 hospital patients, and it was found that there was no relation between the amount of decay in them and the quantity of the sulphocyanide in their saliva. The habits of 213 persons were inquired into respecting their use of tobacco, and it was found that the amount of the sulphocyanide was not affected by the habit of smoking. The quantity of sulphocyanide was almost always deficient in cases of jaundice arising from obstruction; thus, of 23 cases, it was very deficient in 18, and in some scarcely a trace could be found. From this, the author conjectured that the amount of this salt in the saliva depended on the quantity of the bile that reached the intestines; a conclusion that seemed to be supported by two cases of hepatic fistula, in both of which it was also very deficient. Where jaundice was absent, one of the chief circumstances that appeared to regulate the amount of the sulphocyanide was the quantity of food taken by the patient; thus, it was always deficient in œsophageal stricture, and in cancer of the stomach. Persistent vomiting, diarrhoea, and dysentery produced a similar result, probably by removing the food before it could be fully digested. It was also deficient in cases of severe atonic dyspepsia, and in all cases of chronic disease where the appetite was very bad. The sulphocyanide was found to be in excess in fat persons, and in those who were gaining flesh; deficient in those who were thin, or rapidly losing weight. It was greatly in excess in all cases of acute rheumatism (36 cases examined), and reached the maximum in the second week of the disease. It was also in excess in all the cases of acute gout, and in most of the persons liable to "bilious headaches". In the early stages of all inflammatory disorders, there was an excess; for instance, in gastric catarrh, in acute pleurisy, erysipelas, diseased kidneys, and in phthisis; but it sank below the average in the later stages of these diseases. The author pointed out that the fibrine of the blood had been found to be in excess in most of the above diseases, such as acute rheumatism, gout, erysipelas, and acute inflammation; and he suggested that an unusual amount of the sulphocyanide in the saliva was, perhaps, the consequence of an excessive excretion of unoxidised sulphur, resulting from the large amount of albuminous material of the blood that had been altered by the inflammatory process, and thereby rendered unfit for organisation into healthy tissue.—Dr. MARCET said that Dr. Fenwick had proposed a new method of diagnosis. Very little was known about the sulphocyanide of potassium in the saliva. Its presence was inferred in consequence of the chemical reaction; but it had never been isolated. For clinical purposes, it would be useless

very imperfect: and, seeing that leucocythæmia was very common among some of the lower animals, it was highly desirable that observations and experiments on them should be made, with the view of ascertaining if removal of the diseased spleen was followed by permanent benefit. He had thought of tying the splenic artery, but shrank from it, because he feared that the spleen might necrose and necessitate its removal, thus adding a second severe operation to one which would, no doubt, be difficult, and, under the circumstances, very hazardous. It was most desirable, by selecting proper cases, to ascertain if surgery could be of use, where medicine had, unfortunately, been hitherto invariably unsuccessful. Malaria was said to be a frequent cause of the disease, and without denying this he would ask, was it a common cause, or a cause at all, in the lower animals? He had recently been consulted by a medical man with reference to a case of a strong well-built gentleman, aged 29, who had never been exposed to malarial influences, whose circumstances had always been unusually good, and who had never had syphilis. At one time this patient was extremely weak, and looked very like dying; but lately he had much improved in the condition of his blood, and in general strength. His spleen was only about three and a half times its normal size. This case was quoted as showing that something other than malaria, insufficient food, bad hygienic surroundings, and syphilis, was at work in this instance.—Dr. GOODHART said that Mr. Warrington Haward had asked the question, a very important one, whether a mere excess of colourless corpuscles in the blood was of itself sufficient so to interfere with the coagulability of the blood as to condemn an operation. Dr. Goodhart thought that that question was capable of answer by the experience of the *post mortem* room. This, now, in his experience, amounted to five or six cases, and in all he had observed that the coagula in the heart and great vessels were peculiarly flimsy, and in general appearance more like pus than blood. Of course it might be said that this was hardly an argument, seeing that by the time a case arrived at a fatal issue it had probably overstepped the distinction drawn by Mr. Haward between early and late leucocythæmia. But that was not the case. So far as the blood was concerned, cases were fatal with a far less proportion of white and red corpuscle than one in six. The proportion exists in Mr. Haward's case, and therefore, so far as the blood was concerned, he thought it might always be said of it that it was in a similar condition to that found in fatal cases. Looking, also, as he did, upon the existence of leucocythæmia as a late symptom, he doubted whether any case of leucocythæmia could, with propriety, be called early. But there was also another point to be considered, and that was the effect of an operation and the resulting pyrexia upon the condition of such blood as existed in these cases. He thought he had observed that they bore fever badly, and that the blood had a tendency to be more pus-like under such circumstances. Now that antiseptic treatment had reduced in great measure the risk of fever, such an argument had less weight.—Dr. MARCET related particulars of the case of a dog from which the spleen had been removed about thirty years ago; the animal had subsequently lived many months, without apparently being in the least degree altered by the operation. It had then died from another cause altogether.—The PRESIDENT thought it most unfortunate that Mr. Haward's case had been fatal. Death had apparently resulted from shock, although ether, not chloroform, had been given. The case was discouraging, as it was one favourable for the operation, and no hæmorrhage had followed. Ligature of the splenic artery would be a dangerous proceeding. Experiments should perhaps be performed on the lower animals, to see if the spleen could live after ligature of its main artery, and if animals afflicted with leucocythæmia were cured by the removal of the spleen.—Mr. HAWARD said it was not at first suspected that the patient had leucocythæmia, although she had a large spleen. It was true that, in Mr. Collier's tables, the mortality after splenectomy in leucocythæmia was very great; but in this case there was no evidence of change of blood in the direction of leucocythæmia than that given by the microscope. The cause of death was not due to hæmorrhage. The spleen was easily torn; and, at the rent which occurred in its substance during the operation, the hæmorrhage was quite momentary, and no great amount of blood was lost. There was no oozing from the abdominal wall, and no difficulty in arresting the hæmorrhage. Ligature of the splenic artery would be a very difficult operation, if the spleen were much enlarged. Perhaps in future operations a clamp might be placed around the vessels; the spleen removed, and the vessels subsequently tied. The spleen had been removed in many cases, and the patients had recovered; so that the spleen did not appear to be a very essential part of the human economy. But, if there were an early stage of leucocythæmia, it came to be a question whether the operation should be attempted. Dr. Goodhart's remark as to the feeble clotting power of the blood after death from leucocythæmia should be remembered.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, MARCH 1ST, 1882.

GEORGE BUCHANAN, M.D., President, in the Chair.

On the Probability that the Infection of Diphtheria is sometimes Transported by the Wind.—Dr. HUBERT AIRY read a paper on this subject. If, as the result of the Royal Commission on Small-pox Hospitals, conclusive evidence should be forthcoming of the dissemination of small-pox by the outer air, it would become necessary to note if other infectious diseases might not spread in the same way. As regards diphtheria, the possibility of the disease being conveyed by wind was first suggested to the author, in 1880, by an account, given by Mr. Wynter Blyth, of an outbreak at an isolated farmhouse, on a hill near Woolfardisworthy, in North Devon, where, after careful investigation (first by Mr. Blyth and afterwards independently by the author) no clue could be found to the origin of the disease, except in the fact that, for five or six days before the outbreak, the wind had been blowing strongly from the south-west, in which direction it was afterwards learnt that a death from diphtheria had recently occurred. Later in the same year, the author met with another even more suggestive case, near East Grinstead, in Sussex. Diphtheria broke out at an isolated farmhouse on a northern spur of Ashdown Forest, after the wind had been blowing from the Tunbridge district, where there had been much fatal diphtheria. The disease afterwards appeared successively on two hills to leeward of the farmhouse first attacked, without any traceable personal communication; whereas the shape of the ground favoured the idea of conveyance of the infection by the wind. For other instances, the author referred to Mr. Wynter Blyth's paper on "The Prevention and Propagation of Diphtheria" (*Sanitary Record*, May 1880), and Dr. Stadel King's "Notes on the Spread of Diphtheria" (Meeting of Sanitary Institute at Exeter, September 1880). An instance of diphtheria being caused apparently by the entrance into a house of air, which had blown over an adjacent offensive midden, was reported in the *New York Medical Record* for January 22nd, 1881. In Southern Russia, the spread of diphtheria was said to have followed the direction of the prevailing winds. The theory of aerial infection, suggested by these picked cases, required to be tested by being applied to a large number of cases, not picked, but taken as they came, none being rejected but such as involved doubt as to the date of the first attack, or as to precedent cases of sore-throat in the same locality, or clear evidence of dependence on some other known mode of diffusion. The question would remain for later examination, whether the evidence did not point to the existence of a class of original cases, occurring in certain favourite regions, at a certain season of the year, showing no dependence on conditions of wind, but possibly due to some local malaria comparable to that of ague. Possibly, also, it might be found necessary to classify separately urban and rural outbreaks. Referring to the list of thirty outbreaks named in a previous paper (*Transactions of the International Medical Congress*, 1881), the author described the mode of analysis adopted—comparing the direction and force of the wind during the fortnight preceding each outbreak with the direction of recent previous diphtheria, and noting the topographical features of each locality. For example: the outbreak at Coggeshall was preceded by fatal diphtheria at Braintree and Black Notley, six miles to the west and west-south-west; and, on the fifth day before the outbreak, the direction of the wind was west and west-south-west; and the wind was blowing at the rate of twenty-four miles an hour. In a quarter of an hour, it might have wafted infectious matter from Braintree or Black Notley to Coggeshall, which latter place, though not on a hill, was decidedly exposed to the force of a west wind. The analysis of these thirty outbreaks gave results favourable to the wind-theory. The curve obtained, by taking the mean for the whole thirty cases, of the number of miles travelled by the wind in each day of the fortnight preceding the date of outbreak, showed a velocity above the average in the five days immediately preceding that date, and below the average in the eight days previous; and this appeared to indicate a relation of some kind between the velocity of the wind and the occurrence of outbreaks of diphtheria. This indication might admit of various interpretations, but for the fact, that, in a large majority of the thirty cases, there was an actual focus of recent previous diphtheria, from which the infection might have been brought by a wind which was actually blowing in the right direction at the right time. This made it probable that the relation in question was a relation of conveyance by the wind of infective germs from previously infected places. This inference was confirmed by the test of applying arbitrary dates, with new conditions of wind, to the thirty actual local conditions of outbreak, and finding that they fulfilled the requirements of the wind-theory only half as often as the real diphtheria dates. But, if the theory were groundless, the results

it up to half a pint. It may be boiled for a few minutes, if preferred. For adults, from two to three tablespoonfuls should be used to the half-pint. We find that the food so prepared is palatable, is destitute of bitter or disagreeable taste, and is readily digested by children.

GARDNER'S SYRUP OF HYDRIODIC ACID.

ALTHOUGH very little is said about hydriodic acid in our text-books of materia medica, it is undoubtedly a valuable drug, and affords an admirable mode of administering iodine when it is desired to obtain its constitutional effects. It has of late been employed, with considerable success, in the treatment of asthma, bronchitis, and hay fever. It is frequently prepared, on a small scale, by the action of sulphuretted hydrogen on iodine mixed with water. When pure, it is a colourless, inextinguishable, and unflammable gas, having an odour not unlike hydrochloric acid. When dissolved in water, the solution is colourless, has a strong acid reaction, and a pungent styptic taste. When exposed to the air, it quickly decomposes the hydrogen, taking up oxygen to form water, and setting free the iodine, which imparts its characteristic colour to the fluid. It has been but little used in medicine, from the difficulty experienced in obtaining it in a stable form. This difficulty has at length been overcome; and we have received from Messrs. Allen and Hanburys a specimen of Gardner's syrup of hydriodic acid, which is all that could be desired. It is of a light straw colour, is free from smell, and has a sweet styptic taste, which is by no means disagreeable. Each fluid ounce contains forty minims of dilute hydriodic acid, equivalent to about six and a half grains of iodine, or eight and a half grains of iodide of potassium. The dose is from two to three teaspoonfuls in water, three times a day.

BENGER'S PREPARATIONS OF THE DIGESTIVE FERMENTS.

MESSRS. MOTTERSHEAD AND CO., of Manchester, have now for some time issued a series of preparations of the natural digestive ferments prepared by ingenious methods to fulfil the indications described by Dr. Roberts in his Lumeian lectures on the artificial digestion of food. Time and use have justified the claims put forward for these preparations. Dr. Roberts describes the liquor pancreaticus of Mr. Benger as being an almost faultless pharmaceutical preparation, in preparing which mechanical difficulties of manufacture have been overcome, so that it possesses the diastasic and protein properties of the pancreas in a highly concentrated degree. Dr. Saundby, of Birmingham, has recently borne practical testimony to the great therapeutical value of the peptonised milk gruel and beef tea prepared by means of this liquor pancreaticus, and sold, with full directions for use, by Messrs. Mottershead. With the aid of this liquor pancreaticus, peptonised milk, gruel, beef tea, soup, jellies, and blanc-manges may be prepared without difficulty, and according to the precise directions which are given. Food thus prepared is in a condition for rapid absorption, and by the use of these preparations nutrition is maintained, while the digestive powers are gradually restored. The latest of these preparations is a peptonised beef jelly, which contains much of the fibrine of the beef in an absorbable and partially digested state, and therefore has a superiority over the ordinary beef extracts. The self-digestive food for infants and invalids consists of wheaten flour carefully cooked, and impregnated with the digestive principles of the pancreas. When mixed with warm milk, the starch of the flour and the albuminoids of the flour and milk are acted upon by these tryptic and diastasic properties of the pancreatic extract, and undergo solution, and are readily absorbed in the partially digested state. Such a preparation warmly recommends itself in conditions of defective digestive activity. In nothing is a high degree of pharmaceutical skill and special accuracy more needed than in the preparation of these peptonised foods, and it is satisfactory to have the assurance of Dr. Roberts that these qualifications have been adequately brought to bear in the preparation of Benger's products.

THE Corporation of Wells has approved of plans for new sewage works. Application is to be made to the Local Government Board for a loan of £5,000 to carry them out.

SMALL-POX IN THE UNITED STATES.—It is estimated that 15,000 cases of small-pox came to the notice of the authorities in the United States during 1881, and that of these over 4,000 persons succumbed to the disease. Bearing in mind that the epidemic tendency of the disease has not subsided, more stringent measures seem called for than the establishment of quarantine stations. The present moment seems opportune for the introduction of a compulsory system of vaccination in the States, though it may be doubted whether united action is possible in view of the legislative peculiarities of the country.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 1ST, 1882.

THE PROMOTION AND PROTECTION OF MEDICAL RESEARCH.

THE important meeting of leaders of the medical profession which was held at the College of Physicians on Tuesday last, and of which a report appears in another column, is an event of signal importance, and one which will, we hope, be memorable in the history of medicine in this country. It cannot be said that it is premature. For several years now, medical men, and especially those who have engaged in scientific medical research, on which the progress of medicine largely depends, have been subject to public obloquy and unmeasured abuse by persons, many of whom have a social position and a degree of general culture and literary influence which have given importance to their attitude and to their language. It has of late been persistently, loudly, and violently asserted that the practical progress of the healing art is little advanced by experiment upon animals; the noisy declamations of a few persons who possess medical degrees have been accepted as, in some way, representing the general voice of the profession, or, at any rate, of a large section of it. Publicists of high repute, lawyers, military men, peers, poets, and politicians have been drawn in to swell the army enlisted for the crusade against that which all reasonable and educated men well know, and are profoundly convinced by their knowledge, their experience, and their daily observation, to have been the basis of the greatest advances of medicine in the past, and to be the surest foundation for its future progress. The existing law imposes restraints upon investigation which have been felt to be irksome, and even destructive of the necessary freedom of research, mainly because the working of the law has been rendered unnecessarily cumbrous and obstructive. This is partly due to misconceptions in the minds of some of the officials with whom its administration rests, and partly, it is presumable, to the impression that public sentiment would approve a very restrictive interpretation of the action of the law. However this may be, there can be no doubt that the need for the formation of an association specially destined to protect those engaged in physiological and medical research from public obloquy and undue obstruction, was made plainly evident by the circumstances of the prosecution of Dr. Ferrier. The British Medical Association stepped in to throw its shield over that eminent physician, and to protect him from the unjust attack made upon him. Its action was fully endorsed by the whole profession, and accepted as just and useful by the public. But from that moment it was felt that some public, universal, and powerful protest from the combined universities, corporations, and scientific societies was needed against such a course of action and such an organisation of public opinion as lay at the bottom of that most painful proceeding. Many voluntary offers were addressed to this JOURNAL on that occasion from individuals, and it was proposed to raise a fund and organise an association for the purpose. Out of these proposals, from the letter of Dr. Wilks, and from the action then taken in connection with these letters by Dr. Pye-Smith and Dr. Lauder Brunton and others, this association has arisen, with the aid and under the guidance of the recognised leaders of the profession. With excellent judgment, great prudence, and much deliberation, it has been so organised as to

include representatives of all the great societies and associations throughout the United Kingdom, and of the friends and leaders of science generally. A full representation has been given to our own British Medical Association; and it is intended and desired by those who have organised this association, that it shall always carry with it not only the whole force of the united medical profession in the three kingdoms, but also that of the associated societies connected with biological science outside the pale of the profession. The presence of the President of the Royal Society, of the Master of the Rolls, of Sir John Lubbock, of Professor Tyndall, the adhesion of other names eminent in science and in politics, and especially of that most kindly, venerable, and illustrious biologist, Charles Darwin, afford an ample guarantee that this association will be conducted with that full recognition of all the social and humanitarian sides of the question, as well as of the claims of society that the progress of knowledge in directions calculated to increase the power of relieving human suffering shall be aided, and not scorned and flouted as they have been in the last few years. The speeches speak for themselves, as do the names of those who took part in the meeting. It is unnecessary for us to do more than call the earnest attention of all our associates to this most interesting and important meeting, and to express the firm conviction that the association as a whole, and the members of it individually, will be ready to act under the banner of the distinguished body of leaders who are here banded together in advancing the joint interests of science and humanity, by protecting and promoting research on subjects connected with our knowledge of life and our powers of diagnosing and treating disease.

THE LATE COMPETITIVE EXAMINATION FOR COMMISSIONS IN THE ARMY MEDICAL DEPARTMENT.

THE fact that more than sixty surgeons competed for fifteen vacancies at the recent competition for commissions in the Army Medical Department continues to attract attention. The Secretary for War, Mr. Childers, was, a few evenings since, asked a question in the House of Commons, on the small number of appointments offered for competition; and various letters and comments on the subject have appeared in the columns of our military contemporaries. It does not appear to us that there is any real ground for astonishment either in the circumstance of the large number of competitors who appeared on the occasion, or in that of the relative fewness of the appointments placed at their disposal. Ever since the publication of the last Army Medical Warrant, the number of candidates for commissions who have presented themselves at the competitive examinations has been very large; but, as the commissions conferred by the War Department have also been numerous in proportion, general notice has not been called to the occurrence. The large gaps which existed a few years ago in the ranks of the medical service of the army have thus been filled up, and only the vacancies from the current numbers have now to be provided for. This, perhaps, has not been sufficiently considered. The more satisfied tone which prevails among the army medical officers, the improved rates of pay and allowances in case of sickness or injury conferred by the last warrant, the prospects of constant remunerative employment, and the opportunities of taking early retirement if wished for, have produced, and are still producing, their natural results. The Army Medical Department has become popular as a service; and it manifestly now wholly depends upon the manner in which it is ruled, and dealt with, by the authorities in whose hands its management is placed, how long this popularity shall continue.

One of the subjects of complaint with regard to the recent competition is, that no public arrangement was made of so limited a number of appointments being available for distribution. It is also stated that the physical examination of the candidates was held several days prior to the professional competitive examination; and that, as a consequence, all who were not habitually residing in London—and many had come from long distances, even from remote parts of Scotland and Ireland—were subjected to needless detention and expense. There

seems to be a good deal of reason for dissatisfaction under these heads. It is mortifying enough to a candidate to fail in obtaining a place for which he has competed after a long preparation, without the additional discomfiture of discovering only at the end of the struggle that the number of vacancies to be filled up has been far less in number than he had been led to believe them to be; and of feeling, at the same time, that some of the outlay he had expended in making the effort might easily have been avoided by better management on the part of those who had conducted the competition. The professional part of the competition might surely be immediately preceded by the inquiry into the physical fitness of the candidates for public service. A single day before the commencement of the competitive examination would suffice for the physical tests, and all ground of complaint on this head would then disappear. Neither does there seem to be any real difficulty in removing the grievance as to the secrecy maintained, concerning the number of appointments intended to be conferred at each competition. The numbers of vacancies to be competed for in the medical services of the Royal Navy and Indian Army are always advertised a long time prior to the date of the examination. It was announced, long before the late competition, that there were only six appointments to be made in the Naval Medical Service; and although, at the examination, twenty-one candidates proved themselves to be qualified for receiving commissions, the original number of six appointments was strictly adhered to. No dissatisfaction has been expressed on this subject; for no sense of unfairness has been felt by those who presented themselves for this branch of the service, knowing, as they did, the number of appointments open to them at starting. It cannot be expected that the heads of the Army Medical Department can be aware of the precise number of vacancies until close upon the time when the competition is to commence. Casualties in the ranks of the department may take place at any moment; and many that occur in remote stations cannot be officially known at headquarters until long after their occurrence. Neither can it be expected that those who are charged with the management of the funds allotted to the War Department will run a risk of issuing more commissions than are actually required to meet the wants of the public service. But, whatever uncertainties may spring from these considerations, similar sources of doubt must exist in the other branches of the public service, in the Indian Army and in the Royal Navy; and in these branches the numbers of commissions available for competition are always, as before mentioned, previously announced. An approximate number of vacancies to be filled up, it is presumed, is agreed upon and published; and should circumstances arise to cause a deviation from it to be necessary at the last moment—a most improbable event—a simple explanation would put the matter right with those interested. It was evidently known beforehand, as regards the recent competition for vacancies in the Army Medical Department, that there would be very few indeed to be filled up; for the Secretary for War stated, in the House of Commons, in reply to Mr. Gibson, that there were actually no vacancies in the department at the end of December last, owing to a considerable reduction of the British medical establishment in India; so that thirty medical officers who had been struck off the roster at home for service in that country were no longer required there. The number of surgeons available for general duties thus became suddenly increased in proportion. There is every reason for believing that, if the young surgeons who contested in the late competition for commissions had not been misled by vague and unreliable reports as to an expectation of a greater number of appointments being forthcoming, had the true number been published previously to the examination, some who came from Ireland and Scotland would not have been present to undergo the ordeal. The loss of time, and the expenses entailed by the journey, sometimes falling on parents who could ill afford them, would have deterred those especially who were not very confident of success in obtaining a prize where there were likely to be so many blanks. We believe we are right in saying that Colonel Stanley, when Secretary of State for War, gave a distinct promise in the House of Commons that the number of vacancies to

be competed for in the Army Medical Department should always be published beforehand. It may have been regarded as a matter of policy not to announce the number of surgeons wanted when the service was unattractive, and few cared to come forward as candidates for appointments in it; but this condition of things is altered now. The present advantages of medical employment in the army are generally known; and no good reason, that we are aware of, can be alleged for withholding the required information on the subject. We know that the fact of the number of vacancies in the Army Medical Department not having been published beforehand on the occasion of the late competition, as was done in the Naval and Indian branches of the service, has given rise to a vast amount of irritation and disappointment; and, in the interests of the department itself, as well as out of consideration for candidates and their relatives, we are led to express a hope that this cause of complaint may be avoided in future.

THE SALE OF POISONS.

THE unusual prominence given to the sale of poisons by the facts revealed by the recent trial of Lamson demands more than a passing notice. The jury at the Old Bailey made a presentment to the presiding judge, which was forwarded to the Home Secretary, that received the attention of Sir William Harcourt; for a circular letter has been addressed to various public bodies, inviting them to express their views as to the sufficiency or insufficiency of existing statutes regulating the sale of poisons. The public expects that something will be done in the matter by the Home Secretary; and no doubt something ought to be done, either by way of enforcing existing legislative enactments, or by way of amending the law.

Nevertheless, it is anticipated that an attempt will be made to snub the Home Secretary, by informing him that the Sale of Poisons Act, usually known as the Pharmacy Act, 1868, vests all powers relating to the sale of poisons, not, as before, in a Secretary of State, but in the Privy Council. We anticipate, however, that the Home Secretary will not be deterred by receiving this information from those interested in the sale of poisons. He has an important function to perform when he finds that the public safety is endangered by careless sale; and, although he may now have no direct power to interfere in the matter, yet, if such power be needed to protect the public, there is no doubt that the law will be altered to meet the difficulty. It would be monstrous to assume that any technical difficulty of that sort—any jealousy of departments—will be allowed to frustrate an effort to secure the safety of the public.

Before entering upon the discussion of the questions as to the sufficiency or insufficiency of the existing law to protect the public, it will be well to inquire as to what is the present state of the law, and how it is carried out, and whether its provisions are neglected. Much ignorance is often displayed by medical men—even those holding official positions—as to the law regulating the sale of poisons; and even pharmaceutical chemists, and chemists and druggists, who are supposed to be familiar with the matter, are sometimes at fault.

The statute 31 and 32 Vic., cap. 121, cited as "The Pharmacy Act, 1868", and headed "An Act to regulate the Sale of Poisons, and alter and amend the Pharmacy Act, 1852", is the statute which regulates the sale of poisons. Its preamble, beginning thus: "Whereas it is expedient for the safety of the public", lays down the principle of the Act; the safety of the public is the sole thing contemplated by the Act, and to this all else is subsidiary. We wish we could add that those who have been concerned in the administration of the statute in question had always had clearly before their eyes the safety of the public, and made all other interests subsidiary to this. In carrying out the object thus specified, provision is made to secure the qualification and registration of persons selling or compounding poisons; and the several articles which shall be deemed to be poisons are named or described in the Schedule (A) of the Act. The Council of the Pharmaceutical Society may also, from time to time, add to the list of poisons in this schedule, with the approval of the Privy Council. It must be clearly

understood that for anyone but a registered chemist and druggist to retail or compound any poison in the schedule is a misdemeanour, and punishable as such. At the present time, the Council of the Pharmaceutical Society has declared that certain articles, including the ordinary mineral acids, ought to be deemed poisons within the meaning of the Act; but the Privy Council has, perhaps wisely, or it may be unwisely, as yet not acceded to the demands of the Council.

The rights of certain persons are, however, reserved; and the statute enacts that "nothing hereinbefore contained shall extend to or interfere with the business of any legally qualified apothecary or of any Member of the Royal College of Veterinary Surgeons of Great Britain, nor with the making or dealing in patent medicines, nor with the business of wholesale dealers in supplying poisons in the ordinary course of wholesale dealing." A wide door is here opened. *Bona fide* wholesale dealing—*e.g.*, the supply of strychnine by the pound—is not touched by the Act. The admissibility of the use of scheduled poisons—*e.g.*, chloral-hydrate—in patent medicines, without conformity to the supposed provisions of the Act, is still a matter of dispute; and a case of the vending of Hunter's syrup of chloral-hydrate is still before the law courts. What constitutes interference with the business of an apothecary is a still greater unsolved mystery. Apparently, the provision applies solely to the licentiates of the Apothecaries' Company; and they, and they only, are to be allowed unlimited access to poisons sold by retail.

The Schedule (A) of the Act referred to places poisons in two classes. Those of the first class (Part I of the Schedule) may be spoken of as deadly or potent poisons; and it is unlawful to sell any poison named in this first part of the schedule to any person unknown to the seller, unless introduced by some person known to the seller; and on such sale an official entry of the transaction must be entered in a book, and the entry is to be signed by the purchaser. Any poison, in whichever part of the schedule it may be contained, and whether sold by wholesale or retail, is to be labelled with the name of the article and the word "poison", and the name and address of the seller. This is a provision which is very frequently neglected in wholesale dealing, when the articles are supplied to those who are acquainted with their nature and uses. A special Act deals with the sale of arsenic.

We believe the Act to be a good one; and, with a few alterations, it might, with efficient carrying out, fulfil every useful function. Cases of infringement of its provisions should be visited most rigorously by prosecution at the hands of some person, or body of persons, not interested in the sale of poisons; and it would be well for the Government to consider whether the police, under the direction of the Public Prosecutor, cannot do something for the more effectual carrying out of the Act. In this respect, the Home Secretary may do useful service.

Manifestly the Statute is deficient in this respect, that it gives no definition of what constitutes a wholesale transaction. Even pharmaceutical chemists differ as to what is, and what constitutes, this transaction. But, whatever may be the particular view held as to what constitutes a wholesale transaction, there can be, we conceive, none as to the meaning of the 17th Section of the Act, which states, that it shall be unlawful to sell any poison, *either by wholesale or by retail*, unless marked "poison". To illustrate how the Act is carried out, we may remark that we ourselves are in the habit of purchasing chloroform wholesale from two firms. One of these conscientiously labels our supply "poison"; the other always serves it unlabelled. Again: the same section prohibits the sale of deadly poisons—those in the first part of the schedule—to any person unknown to the seller, unless introduced by some person known to the seller, and without a record being entered in the sale of poisons book. The reservation in the previous (16th) section of the Act, that nothing *hereinbefore* contained in the Act shall extend to, or interfere with, the business of wholesale dealers in supplying poisons, has clearly no bearing upon the 17th Section. It is, therefore, astounding to read, in the case of the Lamson trial, that two of Messrs. Allen and Hanburys' assistants stated that the fact that Lamson was, or was assumed to be, a medical man, and

purchased two grains of aconitine—termed a wholesale transaction—though the buyer was personally unknown to the seller, rendered compliance with this section unnecessary. This 17th Section applies, as we believe, to every sale of poison, wholesale or retail, and by whomsoever the sale is made, be he medical man or not. This is a point which ought not to be left untested; and the question should certainly be raised, and determined by our law courts, before fresh legislation is demanded.

To our minds, the present statutory powers are ample, if only properly enforced; and at present they cannot be said to be enforced with any degree of rigour. It is hopeless to prevent access to poisons by the public; the use of these articles for legitimate purposes is too universal to permit of this; and anything which would prevent medical men from obtaining them, when needed for curative purposes, would be deplorable. Nothing whatever can prevent, now and then, some reprobate of our profession—or, indeed, of any other profession—from misusing his special knowledge for the purposes of crime. All that can be done is to prevent accident by the careless use of poisons, and to provide for a ready and effective way of tracing the purchase of poisons by those who are entitled to use them in a legitimate way: and thus to put a check upon their improper use for criminal purposes. In the present agitated state of the public mind as to the sale of poisons, the medical profession must be careful to see that their interests, and those of the community at large, are not unduly interfered with: and, on the other hand, it behoves us to use our best endeavours to secure the more efficient administration of the existing law. If this be done, Percy Malcolm John will not have died in vain.

POST MORTEM EXAMINATIONS.

THE importance of making inspection after death of persons dying in hospitals from disease is so palpable, to the unlearned as well as to the learned, that it is always greatly to be regretted when any circumstance occurs which can arouse prejudice in respect to it. Our hospital authorities are always rather overanxious than otherwise to consult the feelings of relatives in respect to such *post mortem* examinations, and in this they show a wise deference to sentiment.

The law on this subject is to be found in "An Act for Regulating Schools of Anatomy", passed in 1832, which, among other enactments, provides that the executor or other person having lawful possession of a corpse, and who is not merely entrusted with it for interment only, may permit the same to undergo anatomical examination, unless, to the knowledge of such executor or other party, the deceased shall have expressed his desire to the contrary, in writing or verbally, in the presence of two or more witnesses, during the illness of which he died; or unless the surviving husband, or wife, or other known relative of the deceased person shall require the body to be buried without such examination. The secretary or resident house-surgeon, therefore, or other officer in a hospital having the legal custody of a dead body, may, subject to the objections before mentioned, allow a *post mortem* or anatomical examination of it to be made by a medical man.

An important case on this subject was brought before the notice of Mr. Flowers, the magistrate at Bow Street, on the 18th instant, by a Mrs. Maddock, who complained that such an examination had been held on the body of her child without her consent, at the Hospital for Sick Children, in Great Ormond Street. It appears from her statement to be as follows:—Her infant, in this institution, died of lock in the morning of the 9th instant, and stayed with it until noon, when she had to leave to attend to her work. On account of some misunderstanding between her and the porter, she was unable to see her child between noon and seven the same evening, but was told by a "Punter" that the infant had died at twenty minutes to one o'clock. Three evenings the next day between twelve and one o'clock, she was informed that, as the doctor was engaged, she could not see the body. When looking at it next morning, she found that it had been cut open, and that all the hair of its head had been cut off, and said that the child had been subjected to this treatment without her consent.

According to the evidence of a gentleman from the hospital, the committee of the board had instructed him to hand a written statement to the magistrate, to show that the infant was dying when admitted to the hospital; and the non-permission for the mother to see it was owing to a misunderstanding of the name by the porter. The witness further said that, upon her being informed of the death of the child, the "sister" offered to take its body to the mortuary, but the mother objected to this under the advice of a friend. The refusal to allow her to see the body, the second time she called, was because the doctor was engaged in its examination, which was twenty-six hours after death, thinking that the mother had been informed of it, and that it was the general practice to make such examination unless the parents of a child objected to the same. It was also said that it was necessary to make this examination, as the medical officer could not otherwise have any certain opinion of the cause of the infant's death, and therefore would have been unable to give the necessary certificate.

In his remarks upon this case, Mr. Flowers said that, if it were generally necessary to examine a corpse before giving a certificate of death, he scarcely thought that such a course should be adopted without consulting the parents, and added that, as it was not suggested in this case that the body had been dissected, but only subjected to a *post mortem* examination without the mother's consent, the only question was whether this proceeding was legal; and that, while he thought he could not interfere criminally, he would not say that it was not a case for a civil action, and concluded by suggesting to the applicant, who wished to make a reply to the explanation, that she should communicate the entire facts in a formal information, and he would reconsider the case.

Now, with all due respect to the observations of the magistrate, we are of opinion, after a careful reading of the before-mentioned statute, and the case of "*Regina v. Feist*", which came before the Court for the consideration of Crown Cases Reserved in 1858, respecting the anatomical examination of the body of an inmate of a workhouse by the implied permission of the master of the establishment without the assent of any of the relatives of the deceased, that the *post mortem* examination of Mrs. Maddock's infant was quite lawful under the circumstances under which it was made, provided the consent of the officer having legal possession of it was obtained for making it: and we need scarcely say that, if an examination of this kind were decided to be otherwise by an appellate court, such a judgment would be very injurious to the progress of the healing art and the interests of the people generally, as, we repeat, it is most essential that every due facility should be given for the necropsy of corpses when deemed necessary.

WE are informed that the sum to be received by the National Consumption Hospital, Ventnor, under the will of Mr. Jones, is less than that reported to us, and will probably not exceed £50,000.

HIS ROYAL HIGHNESS the Duke of Connaught has signified his intention to patronise an Exhibition of Means and Appliances for the Protection and Preservation of Human Life, to be held at the Alexandra Palace in June.

ON Tuesday last, Mr. Bartleet ligatured the external iliac artery in a case of aneurysm of the femoral artery, either above or just at the point of division. The ligature used was catgut, prepared in the way recently described by Professor Lister, and kindly supplied by him for this operation. The operation was performed antiseptically.

M. SCHLAESENHAUFEN of Nancy has studied the seed of an African plant known by the name of *la pole*. Its cotyledons contain caffeine and tannin. The Arabs use it to replace impure water. M. Schlæsenhaufen, in a note from him read at a meeting of the Académie des Sciences, stated that he considers *la pole* may rank in utility with tea and coffee.

THE Queen has been pleased to approve of the appointment of Mr. E. Ray Lankester, M.A., F.R.S., to the Chair of Natural History in the University of Edinburgh, in the room of the late Sir Wyville Thomson, LL.D. This Chair has been described as the "blue riband" of zoology. It is the most highly remunerated, and the class is the largest in Great Britain. Professor Lankester owes his appointment entirely to the irresistible claims of his scientific achievements and reputation at home and abroad. There are many old friends of the late Coroner for Central Middlesex who will rejoice at the high position which his son has attained in a department of zoological science which the father cultivated with much success, while retaining his direct connection with the medical profession.

NOTIFICATION OF INFECTIOUS DISEASES.

IN an excellent letter to the *Times*, Dr. Alfred Carpenter deals with the subject of the notification of infectious disease, and the injustice of requiring the medical man to give, under compulsion, such notification to the sanitary authorities. We shall again refer to this subject; meantime, we may say that the Parliamentary Bills Committee is about to arrange for a conference of the provincial and metropolitan members of the Association and others, at which the increasing objection which is evidently felt by a large number to any form of compulsion whatever, in connection with the notification of disease, may be fully discussed. Dr. Carpenter writes: "It is absolutely necessary to have the assistance of the medical profession in procuring the repression of infectious disease, but it is not to be obtained by preventing a certain class of people from consulting the doctor at all; it will defeat its own object unless the doctor is made the ally of the law. This alliance will be best brought about by giving the patient, or rather the person in charge, a right to request the assistance of the doctor in making the disclosure, and thus relieving the former of the responsibility and the expense. The doctor then becomes the agent of his patient in making the disclosure; while, if the latter does not do this, and the doctor becomes aware that the householder is disobeying the law, he will be very earnest in urging upon him the duty of preventing the spread of the disease to other people. The penal enactment against the doctor may be beneficial in certain cases; but it will lead to injustice to a noble profession, and will fail to effect its object. The result cannot be obtained unless the goodwill of the profession goes with it; and I respectfully ask that the one barrel may be tried before the other be pointed in the same direction."

OFFICIAL ANALYSTS.

THE reply of the Home Secretary to Mr. St. Aubyn in the House of Commons on Monday last, is not altogether reassuring. Hitherto, it has been customary for the Home Office to depute analysis in suspected cases of poisoning to one analyst; and, since the retirement of the late Dr. A. S. Taylor in 1870, Dr. Stevenson has usually been the analyst selected. In the Lamson case, this gentleman applied for, and obtained, the assistance of a second expert; and the profession has to thank Dr. Stevenson for having thus endeavoured to create a precedent for the appointment of two analysts in all difficult cases. In the future, this is to be changed. There are to be two official analysts, it is true, but their appointment is to be a yearly one, and they are to be nominated by the Presidents of the Royal Colleges of Physicians and Surgeons for the time being. There are, however, but few men competent to conduct all the pathological examinations, chemical analyses, and physiological investigations, necessary to a successful toxicological investigation. No doubt the two Presidents of the Royal Colleges will nominate persons of high reputation to the posts of analyst; and it may be expected that, having once made the appointment, the public safety may not be endangered by capricious changes, and the possible introduction of such untried men as may happen to have influence in high places, and a hankering to cultivate practice in the courts of justice. In making his announcement, the Home Secretary, we are glad to observe, expressed his entire satisfaction with the ability and impar-

tiality of the persons hitherto employed by the Home Office. The late Dr. Alfred Swaine Taylor enjoyed a justly high, and indeed an European reputation; and Dr. Stevenson's appearances as his successor, and notably in the Lamson trial, have been such as to earn confidence and admiration from counsel on both sides, and from the bench, for his moderation and sense of justice, no less than his scientific skill.

THE INTERNATIONAL MEDICAL CONGRESS.

MR. BARRAUD of Gloucester Place has just completed his great portrait picture commemorative of the International Congress of 1881. This remarkable effort of photographic portraiture includes in one picture 684 portraits of members of the Congress. The portraits are all taken from life, and were taken specially for this purpose. The popular size of the picture is 29 by 20 inches, and an extra size 47 by 30 inches; thus some idea may be formed of the importance and interest; and this is the most remarkable collection of portraits which has, we believe, ever been brought together in one plate. The work has been executed with very great skill and success. There is not one portrait among the many hundreds of persons whom we can recognise that may not be pronounced a good likeness, and some of the portraits are certainly strikingly good; especially may be noticed for their life-like character the portraits of Owen, Spence, Struthers, Charcot, Savory, Bucknill, Lister, Donders, Hebra, Andrew Clark, Billings, Virchow, Sir W. Mac Cormac, Bigelow, Esmarch, Langenbeck, Sir James Paget, Sir George Burrows, Sayre, Spencer Wells, Grainger Stewart, Sir William Muir, John Simon, Sir Henry Thompson, and Austin Flint. We have no doubt that a very large proportion of the members of the profession will be tempted to possess themselves of this interesting commemorative picture.

THE CONSTITUTION OF THE NEW ASSOCIATION FOR THE PROMOTION OF RESEARCH.

WE have referred elsewhere to the great importance of the new Association for the Protection and Promotion of Medical Research. We cannot, however, omit to say a word as to the peculiarity of its constitution. No doubt there are special circumstances connected with the very delicate nature of the subjects which will have to be handled, and the necessity for extreme prudence, which called for great care in the constitution of this new Association. In one respect, it is eminently and highly representative; it includes the heads of the great medical universities and associations throughout the country. There is, however, a failure to recognise the real value of representative and elective principles, and the right of the great body of general practitioners to have a share in the government as well as in the membership of the professional bodies of which they are, or are expected to form, a part; and we should be false to the principles which we hold to be of the highest value in the construction of all such Associations, if we failed to notice it. In our opinion, this constitution is defective in assigning to the presidents of two special bodies—the College of Surgeons and the College of Physicians—the duty of nominating the twenty-four other members of Council besides its *ex officio* members. Strangely enough, the propriety of making such members of Council representative is recognised in the fact that they are described as twenty-four "representative members". This is, however, a curious misnomer, as they are in fact twenty-four nominated members, and members not even nominated by the whole of the Council, but nominated by the two alternating presidents. That this discretion will be exercised wisely, we do not for a moment doubt; but we cannot but think that it would be wise, at an early stage of the existence of the Association, to modify this power of nomination, and to give to the Council the right of at least nominating one-half of these twenty-four members, and to give the members of the Association at large the power of electing or not electing them when so nominated. We do not recall any instance in which a nominated list has not been accepted by its members, and we see no reason to doubt that this Association will be any exception to it. But in the present constitu-

tion of this Association there is not that recognition of the profound interest in this question of the great body of general practitioners which we think it would be at once wise, graceful, and just to afford. Nor can we think that it will be difficult to devise a plan by which such recognition of representative principle, and of the right of members of an association to elect some part of its executive body, should be recognised in an entirely unexceptionable manner. It must be expected that means will be taken to add to the Council a just proportion of general practitioners and of professional practitioners; but the constitution of the Council as presented does not afford such a representation of the general body of the profession, or such recognition of the elective and representative element, as we think every association, and especially every medical association, ought to possess. The defect is one which is by no means incapable of remedy, and no doubt means will be taken for perfecting the constitution of an Association which we cannot but regard as one of the most important and one of the most useful and well-devised that has for a long time been suggested or brought into operation in connection with our profession.

A TEST OF CIVILISATION.

LORD DERBY, on Saturday, in opening the new hospital at Bury, which has been erected at a cost of £13,000, pointed out that, although a man ought to lay by something for unforeseen difficulties, yet to say "if they could not pay to be looked after, let them die," was certainly not the feeling of Englishmen, still less of the medical profession. Hospitals were thus not only safeguards against bodily disease, but against the decay of patriotic feeling, and the antagonism of classes. Various tests have been proposed for indicating the progress of civilisation. That which Lord Derby initiated on the occasion of the opening of the Bury Hospital is an essentially nineteenth century test. "We recognise," he says, "the fact that there is no better test of a true civilisation of a country than its death-rate: and there is no such evidence, and at the same time no such cause, of true national well-being, as the health of the population." It has taken half a century for medical men to impress this view upon the minds of our statesmen; and it is to be feared that there are even yet only a few who recognise it as frankly and fully as it is stated here by Lord Derby.

SANITARY LEGISLATION THROUGH PRIVATE BILLS.

MR. SCLATER-BOOTH has been appointed Chairman of the Committee of Selection, whose duty it will be to report on any provisions in private Bills, promoted by municipal and other local authorities, by which it is proposed to create powers relating to police or sanitary regulations which deviate from, or are in extension of, or repugnant to, the general law. It was while Mr. Sclater-Booth held the reins of the Local Government Board that the Public Health Act of 1875 passed into law, and the new system of local tinkering of general enactments began; so that he may be expected to bring much valuable experience to the help of the committee, and to guide its investigations into proper channels.

THE LIVERPOOL LYING-IN HOSPITAL.

A SPECIAL and adjourned meeting of the Liverpool Lying-in Hospital was held at the Town Hall, Liverpool, on March 27th, to consider a proposal which had been brought forward by the committee at the annual meeting in February last. The committee had recommended that the hospital should be converted from a lying-in to a special hospital for diseases of women. The subscribers appointed a subcommittee of delegates to confer with the committee and the ladies committee, and to seek such further information as might be useful with reference to such a serious change. This they did, and presented their report to the subscribers on March 27th. They stated that they were of opinion that the hospital should continue to be carried on as a lying-in hospital, the purpose for which it had been founded. In support of this, they referred to the fact that the maternal mortality in the Liverpool Workhouse during the past six years had only been 3.2 per 1,000, including one case from fever. The subscribers, after some dis-

cussion, rejected the proposal of the committee to change the constitution of the hospital, and adopted the report of the delegates. The hospital has, therefore, been saved to the town of Liverpool as a lying-in institution. We congratulate the subscribers upon the decision at which they have arrived. Lying-in hospitals have proved an incalculable boon to large numbers of poor women who cannot be delivered at their own homes, and who yet shrink from the social stigma of entering the workhouse. No doubt the new committee of the Liverpool Lying-in Hospital will energetically set to work to bring the hospital up to the level of the obstetric knowledge of the day. When this is done, there can be no doubt that the institution will again take its place among the well managed and successful hospitals of its kind.

THE UNIVERSITY OF LONDON.

At a meeting of the Senate on Wednesday, the 29th instant, Dr. George Buchanan took his seat as a member, in the room of the late Dr. Billings, who was one of the members named in the original charter. At the same meeting, Mr. F. V. Dickins was appointed to the office of Assistant-Registrar, in the room of Mr. Arthur Moseley. Mr. Dickins is a Bachelor of Medicine and also a Bachelor of Science of the University. He is a barrister-at-law, and an accomplished linguist. The appointment can scarcely fail to be gratifying to the graduates, inasmuch as that this is the first occasion upon which an office of importance and emolument in the University has been conferred on one of their own body.

THE GERMAN MEDICAL CONGRESS.

THE programme of this Congress, which will meet at Weisbaden on April 20th, 21st, and 22nd, has been issued. A reception of members will take place on the 19th, at 8 P.M. On the 20th, at 10 A.M., the Congress will be opened by Professor Frerichs of Berlin; after which a report on the Pathology of Bright's Disease will be read by Dr. Leyden of Berlin, and Dr. Rosenstein of Leiden; and a discussion will follow. The time after this until 1 P.M. will be occupied with the reading of papers; and the afternoon from 3 to 5 will be devoted to papers and demonstrations. On the 21st, the morning meeting will be held from 9 to 12. The subject for discussion will be the Antipyretic Method of Treatment, reported on by Dr. Liebermeister of Tübingen, and Dr. Riess of Berlin; after which, and also from 2 to 4 P.M., papers will be read and specimens exhibited. The meeting on the 22nd will be for business purposes—the organisation of the Congress, adoption of rules, etc. The charge for membership is fifteen marks. The Committee of Arrangement consists of Drs. Gerhardt of Würzburg, Kussmaul of Strasburg, Leyden of Berlin, and Seitz of Wiesbaden; to the last-named of whom communications are to be sent.

MANSLAUGHTER BY NEGLECT.

THE conviction in the case of "The Queen v. Morby", where Morby, one of the "Peculiar People", was charged with manslaughter, in feloniously causing the death of his child by neglecting to provide proper medical assistance, has been quashed by the Court for the Consideration of Crown Cases Reserved. Five judges concurred in the course now taken. It was not enough, they said, in order to sustain a conviction for manslaughter, to show a neglect of the legal duty; there must also be evidence to show that the neglect to take reasonable means to prolong life had the effect of shortening it. In this case (small-pox), two medical men saw the child during life; but Dr. Sharpe, who made a *post mortem* examination of the body, stated that the chances of the boy's life would have been increased by having medical advice; and that, in his judgment, if medical advice and assistance had been procured, death might have been averted altogether. He was unable to say that life would probably have been prolonged, because he did not see the child during life. It would be dangerous, the Court laid down, upon such evidence, to allow the conviction to be sustained. They must, before doing so, be satisfied by affirmative proof that the death was caused by the neglect; and, when all that a skilled and

competent witness, giving his evidence under a strong sense of responsibility, could say was, that "probably" it "might" have been so, the Court could not be so satisfied; and, therefore, the conviction could not be sustained. Notwithstanding that the conviction is quashed, and apparently because the death of the child destroyed all evidence of the particular offence having been committed, the prosecution will have had a salutary effect; and none the less because Mr. Justice Stephen remarked that it was probable that there was an offence, under the statute, in not providing medical aid.

SEATS FOR SALESWOMEN.

THE question of seats for saleswomen in linendrapers' and other shops has been agitated more than once in this country, but up to the present time without any practical effect. We note that the Americans, with their rapid method of obtaining results, have proceeded further in this matter than ourselves, and that, in New York State, there is a law requiring employers to provide seats for their saleswomen to use, when not engaged with customers. Further, we learn from the *Philadelphia Medical Times* that proceedings have been taken against seven prominent firms to enforce the law. It might be worth the while of the association which is taking this question in hand in England to procure a copy of this law, and see how far its provisions are applicable to the alleviation of an acknowledged evil, for which no remedy has yet been found in this country.

SUPERNUMERARY FINGERS AND TOES.

In the recently published volume of the *Guy's Hospital Reports*, Mr. Clement Lucas gives the history of a family in which there exists a remarkable tendency to the development of supernumerary digits. He traces the abnormality through five generations, to the maternal great-grandmother of the man whose children were brought for treatment. The tendency was transmitted, without rule, through both males and females. Altogether, the great-great-grandmother was responsible for abnormalities occurring in twenty-four persons out of a total of eighty descendants, or 30 per cent of those carrying her blood. The persistency with which this deformity has asserted itself is very remarkable, when it is considered how many times the blood must have been diluted by marriage. The paper is illustrated by a genealogical tree; and the author, thinking that other observers may meet with different members of the same family, gives the names of those whose descendants have incurred a liability to this excess in development.

DEFENCE ANALYSTS.

THE refusal of the Home Secretary to permit a third analyst to be present on behalf of the defence during the analysis of the viscera of Percy Malcolm John, has elicited adverse comments in the public press. The reply of the Home Secretary to Lamson's solicitor, stating that the application must be refused, as it was contrary to precedent, is of course indefensible. The refusal might, however, have been made on other and better grounds. The right course was pursued of having a second analyst present in a case of such a serious nature. In his evidence, Dr. Stevenson stated that it was at his request that Dr. Dupré was appointed to assist. Both of these gentlemen were in the position of independent experts appointed by the Home Office, at the request of the coroner, to assist in the determination of the cause of death; and they were not responsible to the actual prosecuting authority, viz., the Treasury. It was not until nearly a week after the analyses were entrusted to Dr. Stevenson, that application was made for the presence of a third analyst on Lamson's behalf. By this time, the analyses must have been well in hand; and we fail to see what good result could have ensued from the presence of a gentleman responsible only to his employer, the prisoner. Were the rule introduced of having an analyst present on behalf of the defence, grave results might ensue, and the public interests would not be subserved by the change. The third party would usually be introduced at a late stage in the analysis; he could have no voice in, or control of, the analyses; his objections might or might not have weight with the official analysts. Moreover, it would

be practically impossible to secure the collective attendance of three analysts eminent in their profession day by day for perhaps two or three weeks. The semblance of injustice done to Lamson by the refusal of the Home Secretary was, we believe, a semblance only; though we must admit that the refusal was made on quite insufficient and erroneous grounds.

TESTING A DOCTOR'S CERTIFICATE.

AN inquest was recently held at Church Coppenhall, Cheshire, touching the death of a girl named Mary Owen, aged 15, the daughter of a labouring man. Mr. Vaughan of Haslington had been attending the deceased for twelve months previously to her death, and had given a certificate ascribing death to epilepsy, hysteria, and cerebral congestion; but the circumstances came to the knowledge of the police, the case was represented to the coroner as "suspicious", and that gentleman ordered a *post mortem* examination by another medical man. Mr. Vaughan was not present at the inquest, it being said that he was not cognisant of the matter. The mother of the deceased girl said her daughter had been attended by Mr. Vaughan for the past twelve or eighteen months. She had been subject to violent fits, which occurred every Wednesday morning at 10.30. Lately the doctor had been trying to avert them, and had given her medicine to take every Tuesday evening on going to bed. During the past six weeks, she had had only one fit, and she thought the deceased was beginning to get better of them. She took her to the doctor's surgery on the previous Tuesday, and he refilled the old bottle, saying it was the same kind of medicine, and must be taken as before. The medicine was taken at bedtime as usual, but about half-an-hour afterwards, deceased became very violent, knocking her head against the wall, and talking childishly. She stayed up with her till half-past three o'clock in the morning, when the deceased lapsed into sleep. She never awoke, but died the same evening about five. She was positive she did not give her an overdose of the medicine. The seizure did not seem like one of her ordinary fits, and she did not send for the doctor until late in the afternoon. He was not then at home. The doctor did not see the deceased again; but gave her (witness's) husband the certificate of death. The husband corroborated the evidence of his wife. After taking the medicine, the deceased sometimes slept for twelve or fifteen hours. The time for the fit would then be passed. Dr. Hodgson of Crewe said he had made a *post mortem* examination of the body. He could not find any external marks of violence. Rigor mortis was well marked. The pupils were fairly dilated. The brain was very much congested. The sinuses were well filled. There was no fluid in the ventricles, and no apparent disease of the substance of the brain. The heart was larger than usual for a girl fifteen years of age, and, he thought, rather hypertrophied. The right auricle was distended with dark blood, and also the right ventricle. There was hardly any fluid in the left ventricle and auricle. There were the remains of two small clots of blood, formed some time previously, in both the right and left ventricle. These were quite fatty. The right lung was much congested, and floated in water; the left was very much more congested, and sank in water. Some portion of the congestion was not of recent formation. He tied the stomach at both ends, and removed it. On opening it, a quantity of gas escaped. There were only about two teaspoonfuls of fluid in the stomach, and this he placed in a bottle, and handed it to the police, sealed. The liver was congested, but not enlarged. The left kidney was slightly congested; the right kidney was very much so. He took a portion of the liver and spleen and the right kidney, placed them in a sealed jar, together with the stomach, and handed them to the police. In the bladder he found about a pint of urine, a portion of which (about six ounces) he also assigned to the care of the police. He found a long red worm in the bowels, and one or two segments of tapeworm. The intestines were not diseased. Death might have been due to an epileptic fit, or to some other cause. He had no doubt that there had been epilepsy and hysteria, and that the immediate cause of death was the congestion of the various organs; but what produced that congestion he was unable to determine. A fit of epilepsy might have caused

death. He had not examined the medicine which the deceased had taken. The coroner, in summing up, told the jury that, if they were not satisfied with the evidence, he would direct that the contents of the stomach should be analysed, and also the doctor's medicine. The jury deliberated in private for over an hour, and then returned a verdict that the deceased had died from epilepsy, hysteria, etc., as set forth in Mr. Vaughan's certificate. If we are correctly informed, that the inquest in the above case was held without the cognisance of Mr. Vaughan, we must express our astonishment. In justice to that gentleman, he ought to have been informed of the inquiry, and to have been allowed to state what medicine he had administered to the deceased child. As the case stands, the result is most unsatisfactory.—Since writing the above, we have received a copy of the prescription for the medicine given by Mr. Vaughan—a mixture of acetate of morphia and chloral-hydrate. Surely this prescription ought to have been before the jury; and care should have been taken that Dr. Hodgson, who made the necropsy, should have been in a position to account for the appearances noted, by having before him a history of the case. Epilepsy and hysteria, the causes of death stated in Mr. Vaughan's certificate, might afford sufficient explanation of the appearances met with. The readers of our impression of February 25th last may remember that, under the heading "A Perverse Jury," we made a previous comment respecting a case in which the same coroner and the same doctor were concerned.

NAVAL MEDICAL DEPARTMENT.

WITHIN the current month we have had occasion to criticise the severity with which a medical officer of H.M.S. *Cambridge*, at Devonport, was treated, by sentence of court-martial, for allowing a seaman, convalescent from rheumatism, to be conducted from one part of a town to the naval hospital at another part of it, by a sick-berth steward, in lieu of a medical officer. We then asserted that the error was due to the system in vogue at our sea-ports rather than to any direct dereliction on the part of the young officer, who seemed to us to have been the selected scapegoat for irregularities, for which the executives of the ship appeared to have been primarily responsible. The series of changes consequent on this event, as we may believe, is now completed by the sacrifice of another medical scapegoat, as we find in "Admiralty Appointments," on the 28th inst., that the fleet-surgeon of the ship has been dismissed from this harbour-ship and sent afloat once more, after serving twenty-five years in the Royal Navy. A case has also happened at Portsmouth, proving that the practice thus condemned with summary punishment is but the recognised custom of the service. This week, an inquest has been held at Haslar, on the body of a workman who fell from a ship's side into the dock, receiving a fracture of the skull, with bleeding from the ears, nose, and mouth. He was unconscious from the moment of his fall. He was carried across the harbour to Haslar Hospital, without any medical officer conducting him. Thus we find that, in a national establishment, with over 4,000 workmen, among whom very severe accidents occur, the strength of the surgical staff is insufficient to admit, at all times, of a surgeon being detached to conduct a man mortally hurt to the port hospital; while, at another port, two medical officers are dismissed their ship, because a convalescent seaman was removed in a vehicle, not under charge of a surgeon. We do not imagine that inconsistency could take a longer leap than this.

THE LEGAL RIGHT TO HEALTHY HOUSING.

A case has now lately brought against the owner of a house at New Cross, for housing, through his agent, a house which was a veritable pest-hole. The ground defect in the drainage was not noticed, but the plaintiff alleged that the agent had assured him, before he took the house, that it had lately been thoroughly examined, and all defects remedied, and that it was in a perfect sanitary condition. There was no any written statement to that effect; and, although the owner asserted that he had not authorized his agent to warrant the efficiency of the drainage, a verdict was given for loss and damage sustained through

illness was given against the owner, subject to proof that the house was in a bad sanitary condition. This is not the first case in which such a decision has been given; but it is important as showing that, if an agent represent a house to be well drained, when it is not, the owner is responsible. All who take houses should therefore obtain a warranty before a third person, or in writing. Medical men should be aware of the law in the matter, and, when consulted, should advise their patients to take this course, even although the drainage might appear to be good on such a cursory examination as can ordinarily be made without disturbing any structural part of the premises. If this were usually done, much illness, suffering, and danger to health would be prevented.

SANITATION JUSTIFIED.

A NOTEWORTHY instance of the effect of improved sanitation upon the rate of mortality at Carlisle is mentioned by Dr. Elliot in his last report on the health of that town. In 1841, the census gave the population as 23,959, and during the seven years (1842-1848) the average yearly mortality was 728; whereas in 1881, thirty years later, the mortality was only 717 amongst an increased population of 35,866.

M. PASTEUR'S RESEARCHES.

AN application to man of M. Pasteur's researches on the preservation of animals from malignant pustule has been reported by M. Casson, in a note read at a meeting of the Académie des Sciences. He described the case of a farmer who had been twice attacked by charbon. The first attack was slight; the second was very serious, and expected to be fatal. However, the dangerous symptoms speedily disappeared, leaving two deep ulcers on the back of the hand. M. Casson considers that the rapid improvement indicates an actual vaccination resulting from the first attack of charbon, and suggests that the case confirms the facts established by M. Pasteur's researches on the preservation of animals by the inoculation of attenuated virus.

IODOFORM AS AN ANTISEPTIC.

DR. MIKULICZ has recently published in the *Berliner Klinische Wochenschrift* a paper in which he discusses the uses of iodoform in surgery, and sums up as follows. 1. Iodoform is an excellent remedy in all conditions in which the direct application of an antiseptic to a wound is required, and in this matter deserves to be preferred to all other means at present in use. 2. Lister's carbolic gauze dressing may be completely replaced by iodoform dressing, which has the additional advantage of being simple and certain. 3. Iodoform dressing ensures an aseptic course to wounds, even in conditions where it has not hitherto been possible to carry out antiseptics strictly. 4. In cases of wounds and ulcers which have already become septic, iodoform acts, as a rule, more rapidly and certainly than other antiseptics, and does not irritate the tissues. 5. Iodoform acts as a specific on syphilitic, tuberculous, and other, and lupus infiltrations.—Dr. Zeissl relates in the *Wiener Med. Wochenschrift* two cases in which toxic symptoms—erythema, fever, and albumen and iodine in the urine in one case, urticaria and iodine in the urine in the other—followed the application of iodoform after operation. The quantity used, however, is not stated.

NOTICE AS TO SMALL-POX MORTALITY.

IN an article communicated to the *New York Medical Record*, entitled "A Plea for Improved Vaccination," Dr. S. Branch calls attention to what appears, in some countries, to be the increasing mortality among vaccinated persons attacked with small-pox. He states that in the various epidemics from 1818 to 1870, the mortality among the vaccinated was 4.32 per cent., while from 1870 to 1880, the mortality was 12.32 per cent. The mortality varied, he states, in different countries; for instance in France from 1848-50 it was 6 per cent., and during 1871-72, he alleges it to have been 14.55 per cent. In London, he states that, from 1848 to 1850, the mortality was, among the vaccinated, 5 per cent., while from 1871 to 1878, it was 10.02 per cent. As regards London, at any rate, we think Dr. Branch has considerably overstated

the mortality from 1871 to 1878, and understated it from 1836 to 1856. In the Asylums Board Small-pox Hospitals from 1871 to 1878, the mortality among those with vaccination marks has been, we believe, 8 per cent.; and Mr. Marson states that, at the London Small-pox Hospital from 1836 to 1856 it was 4.0 per cent., excluding those that died of superadded disease, amounting, he states, to 2 per cent. Now in the London statistics, from 1871 to 1878 all who died of superadded disease are included in the mortality, and if we add the 2 per cent. of deaths from superadded disease to Mr. Marson's 1836 to 1856 mortality, we find that it becomes 6.6 per cent.—that is an increase of 1.6 per cent. in 1871-78 over the years from 1836 to 1856. It should be borne in mind that the statistics for 1871-78 include the exceptionally fatal epidemic of 1871.

SCOTLAND.

UNIVERSITY OF EDINBURGH.

THE winter session in the University of Edinburgh and in the Medical School terminated yesterday; the only way in which the closing day differs from others being in the distribution of medals, prizes, and certificates of honour and of attendance. The Senatus Academicus has resolved to confer the honorary degree of Doctor of Laws upon Dr. Angus Smith, and Mr. John Simon, F.R.S., late medical adviser to the Privy Council. The degrees will be conferred with the ordinary examination degrees in arts, sciences, and divinity, at the graduation ceremonial to be held on the 21st of April.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

AT the next meeting, on Tuesday, April 11th, it is proposed to have a demonstration of cases of pseudo-hypertrophic muscular paralysis. It is expected that patients from the Western and Royal Infirmarys will be shown, and likewise from Lenzie Asylum and the Towns Hospital. Two patients are also promised from private practice. If there be any other cases in the neighbourhood available for this meeting, a communication to the secretary of the Society, addressed to the Faculty of Physicians and Surgeons, in order that they may be included in the circular calling the meeting, will receive attention.

THE NORTHERN DISPENSARY, EDINBURGH.

THE annual meeting of the supporters of the Northern Free Dispensary, Edinburgh (the youngest of the Edinburgh medical charities), was held last week. The secretary, Dr. Black, in his report stated that, up till the 15th March (the end of the year), patients to the number of 1,300 had sought and obtained relief at the dispensary, being an increase of 400 on the number of the previous year. Of the entire number, 400 were visited at their own homes. Midwifery cases numbered 50, and vaccinations 30, while as many as 1,500 prescriptions were dispensed. Unfortunately, the otherwise promising dispensary is crippled in its funds, as the total income for the year was only £38, and the expenditure £81. Situated as it is in a district where there is ample scope for its usefulness, it is to be hoped that vigorous efforts will be made to place it on a sound financial basis.

EDINBURGH ROYAL INFIRMARY.

ON Monday, the managers of the Royal Infirmary elected an assistant-physician to fill the place of Dr. Wyllie (advanced to the position of Ordinary Physician to the Infirmary). As noticed in last week's JOURNAL, there were four candidates for the appointment; but the contest practically was confined to two of them—Drs. Byrom Bramwell and James. The Lord Provost proposed and Professor Rutherford seconded Dr. Byrom Bramwell, while Dr. James was proposed by Dr. Haldane, President of the Royal College of Physicians, and seconded by Sir James Falshaw, Bart. It would be impossible to find a more equally balanced vote than was taken, nine managers voting for each candidate—so that

the matter had to be settled by the chairman's casting vote. He decided in favour of Dr. James, who is therefore third assistant-physician, an appointment which has been well received by the staff of the infirmary and by the profession in Edinburgh. As showing, however, how uncertain anyone can be beforehand in such a matter, it may be mentioned that, had voting by proxy been allowed, Dr. Bramwell would have received ten votes, and thus secured the coveted position, as one of the managers who was out of town had sent a vote in his favour. This, however, was not allowed to be reckoned.

EDINBURGH EYE DISPENSARY.

AN addition has been made to the staff of the Edinburgh Eye Dispensary by the appointment of Mr. G. A. Graham Berry, M.B., F.R.C.S.E., as assistant-surgeon to the institution.

THE NOTIFICATION OF INFECTIOUS DISEASES.

IN Edinburgh the Police Act, which requires notification of infectious diseases by medical practitioners, came into operation in November 1879. During the time that has elapsed since then no fewer than 11,400 such cases have been notified to the medical officer of health, and this has doubtless led to important practical results. The sum which the members of the profession in Edinburgh have received (at the rate of 2s. 6d. for each case) amounts to £1,400 fully. There are, perhaps, still some cases which, owing to their being overlooked, or through carelessness, are not notified, but there can be little doubt that the profession has backed up Dr. Littlejohn thoroughly in this matter.

THE PUBLIC HEALTH OF ST. ANDREW'S.

DR. D. ARCHIBALD, the Health-Officer for St. Andrew's, obligingly sends us a tabular view of the annual death-rate of the city of St. Andrew's, and eight other Scotch towns with about the same population, for the years 1871 to 1881 inclusive. It would appear from this statement that St. Andrew's has the lowest death-rate of any of these nine towns, the rate amounting, in 1881, only to 12.24 per 1,000. Of the other towns, Row comes second, with a death-rate of 15.80 per 1,000; Kirkintilloch having the highest death-rate (22 per 1,000). The remarkably low death-rate of St. Andrew's in 1881 was partly due to the absence of epidemics, there being no deaths from scarlatina, measles, or diphtheria, and to the deaths from bronchial and pulmonary affections being considerably below the average. The chief mortality, in fact, occurred in infants under five years of age and in old people. Dr. Archibald ascribes the low death-rate in St. Andrew's chiefly to the healthy situation of the town; to the invigorating sea-breezes laden with ozone; to a more or less equable temperature; to the facilities afforded for out-door exercises and amusements; and to the absence of manufactories, and the smoke and confinement which inevitably follow in their train. In fact, as a health and educational resort, he regards St. Andrew's as one of the first places in the kingdom.

HEALTH OF THE PRINCIPAL SCOTCH TOWNS IN FEBRUARY.

IN the eight principal Scotch towns, there were registered during the month of February the deaths of 1,101 males and 1,059 females; the total, 2,160, is 544 under the average for the same month during the preceding ten years, due allowance being made for proportionate increase of population. The mortalities of the individual towns were, per thousand of the population, Dundee and Aberdeen, 18; Edinburgh, Greenock, and Leith, 19; Glasgow and Paisley, 24; and Perth, 27. Of the entire mortality, 39.4 per cent. was of children under five years of age, the respective percentages being—Leith, 24; Edinburgh, 29; Paisley, 35; Dundee, 36; Aberdeen, 39; Perth, 43; Glasgow, 45; and Greenock, 47. Zymotic diseases caused 14.7 per cent. of the entire mortality; but in Glasgow, Leith, and Perth this rate was exceeded. Whooping-cough was, as usual, the most fatal, itself causing 3.5 per cent. of all the deaths; in Glasgow and Aberdeen, it caused respectively 5.1 and 5.7 per cent. of all the deaths. Of 50 deaths due

to fever, 16 were registered as typhus, 33 as enteric, and 1 as simple continued fever. In Perth, 11.9 per cent. of the deaths were caused by measles (it may be mentioned that in the public press the insanitary conditions of several parts of Perth have been strongly commented upon recently). Croup caused 34 deaths, diarrhoea 32, diphtheria 31, and scarlet fever 28 deaths. Apoplexy was the cause of death in 45 cases, paralysis in 62, cardiac diseases in 130, hydrocephalus in 60, and premature birth debility in 65 cases. Phthisis pulmonalis contributed 11.6 per cent. of the entire mortality, and inflammatory affections of the respiratory organs (other than those already referred to) 21.2 per cent. of all the deaths. Six individuals (the oldest of them aged ninety-four) died over ninety years of age, four of them being females. The births of 1,700 males and 1,573 females were registered during the month. As to meteorological conditions, the mean barometric pressure was greater by 0.168 inch, the barometric range greater by 0.307 inch, the mean temperature greater by 1.2°, its mean daily range greater by 1.2°, the mean humidity less by 2, the mean dew-point less by 0.48 inch, and the wind-pressure greater by 0.65 than the averages of the same month during the preceding twenty years. The chief characteristics of the month have thus been the unusually high mean temperature, which is the highest since 1861, the high barometric pressure, the large barometric range, and the prominent increase in the strength of wind. The diminished rainfall, rainy days, and humidity are also noticeable. Greenock had the highest rainfall (2.31 inches), and Aberdeen the least (0.8 inch).

IRELAND.

Mr. J. L. Hester was last week unanimously re-elected Medical Officer of the North Dublin Union Workhouse Hospital.

THERE are at present six patients suffering from small-pox in Lisburn Workhouse; but no fresh cases have been admitted for the past week.

In consequence of the want of accommodation recently felt in Armagh, during the late outbreak of small-pox, a committee have been appointed by the board of guardians to confer as to the propriety of erecting a separate ward for infectious diseases. The governors, also, of the county have under consideration the propriety of erecting a separate ward for the purpose of receiving patients suffering from other contagious diseases, willing to pay for their maintenance.

The following resolution of the Dublin Sanitary Association have been forwarded to the Chief Secretary for Ireland, urging him to take up the matter raised by Mr. McEllin, on behalf of the Dublin Sanitary Association, in the House of Commons, for the sanitary ratification of the Sanitary Act of 1880.

H. J. HARRIS AND F. A. MATHIAS, JR.

It is important to understand that, since the opening of the school mentioned, I have been engaged in London to give the highest attention to that our institution had opened. The facilities of the school is excellent, the school of teachers is very good and one of the best in the world. The teachers of the school are of a high level. It is the intention of the school to give the students a high level of education in the field of education. It is the intention of the school to give the students a high level of education in the field of education. It is the intention of the school to give the students a high level of education in the field of education.

1971, 1972). I find no evidence that the average, young, high-ability student has the advantage of the experienced and older students in the context of a typical first-year calculus course and absence of super-

vision prevails, which is much to be regretted. Dr. Brodie calls attention to the indiscriminate admission of visitors to the workhouse, and states that many of them have been, up to the last few weeks, allowed access to the wards of the fever hospital; and that he has seen as many as six surrounding the bed of one fever-patient, which is not only directly opposed to the isolation of contagious diseases for which the fever hospital is intended, but must interfere with the patients' treatment, and seriously impede the staff in the discharge of their duties. These are very serious charges; and the Local Government Board suggests that the guardians should appoint a special committee, and refer the whole question to them of the discipline and management of the Cork Workhouse.

PATHOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.

The final meeting of this Society for the current session was held last Saturday. A large number of interesting specimens were exhibited. The President, Mr. Stokes, in declaring the session closed, expressed his thanks for the honour which had been done him by electing him to the chair of that society, which was the parent Pathological Society of Great Britain. He believed that the return to the old practice of admitting medical students to the meetings of the society had been attended with the greatest advantage. He could not avoid alluding to a topic which had been a matter for serious consideration to himself and others, namely, that instead of having, as at present in Dublin, separate societies for the discussion of medical, surgical, pathological, and obstetric subjects, all these societies should be united into one. He believed that, if they were amalgamated into one Institute or Academy of Medicine, the amount of work done would be larger than at present, and it would also be better done, and a greater amount of interest would be excited in it. Should this academy ever come into existence, it would be a matter of pride for the Pathological Society that they had taken the first steps to bring about that result. He was happy to be able to say that, during the past session, not only had many old members of the society rejoined it, but a number of new members had been enrolled.

A REPLICATION IN THE NEW YORK AREA

From July to December last, Dr. Cameron, analyst for the county, examined twenty-five specimens for the local sanitary authorities, one hundred and two for the inspectors of weights and measures, and two for private parties. A specimen of so-called brandy was found to be composed wholly of grain spirit, and not of the so-called brandy from wine. Some of the mustard was adulterated with forty per cent. of wheat-flour, cayenne pepper and turmeric being added. As compared with previous years, there was an improvement in the quality of the articles submitted for analysis. Dr. Cameron applied to the grand jury last week for an increase of salary, and stated that he was appointed six years ago at the rate of £100 per annum, while since 1870 the work had largely increased. Twenty-five analyses were made for local authorities, the fee for which varies from two to five guineas, but Dr. Cameron did not receive any fee for them. He is also known to be called upon to give evidence in support of his certificate, and is asked to make analyses, free of charge, for the boards of guardians, towns commissioners, lunatic asphyxiated persons, and many local, county, and general sanitary bodies.

THE SEVEN OF THE AND THE SEVEN OF THE SEVEN.

The voluntary committee of management in the United Kingdom, having been formed in 1912, has since recently moved to new premises in Millwall Street, where it occupies a full working order. For the present time it occupies a house in Northampton Street, the house being divided into twelve beds, seven for the men and five for the women, and made up on the temporary and limited basis of the large number of persons attending the external services, and the inconvenience and delay. Owing to the energy of the committee of management

and especially of the honorary secretary, sufficient funds were raised to purchase the large town house recently occupied by the registrar-general; and, by judicious alterations and additions, it has been made a most complete ophthalmic hospital. It contains twelve male and twelve female beds, a private ward for a pay-patient, with separate day-rooms for men and women, operating-room, board-room, matron's apartments, accommodation for a resident surgeon and for nurses, a food-lift, bath-room, arrangements for fire-hose, etc. The lavatories and water-closets are detached from the wards, and well ventilated. The extern department or dispensary has been newly built, and is quite distinct from the hospital proper, occupying the site of the former stables and coach-house, and has a separate entrance. In this department, which has been most carefully planned to meet all possible requirements, separate waiting-rooms for men and women are provided; also a large consulting-room for diseases of the eye, and distinct waiting and consulting rooms for diseases of the ear. The entire hospital and dispensary is heated with hot-water pipes, which, besides being more economical than open fireplaces, are much safer when people of imperfect sight are to be considered. Ample provision is made, in suitable apartments adjoining the consulting-room for diseases of the eye, for ophthalmoscopic examinations, and for clinical instruction—all the arrangements for gas, water, and regulation of daylight, etc., being most complete. We were much pleased with the method adopted for recording extern cases. It ensures, not alone regularity and order on the part of each patient, the subject of either eye or ear affection, attending the dispensary, but also forms a valuable record of disease, which is preserved in the hospital, and which can be instantly referred to, and, if necessary, added to at any future time.

HEALTH OF PROVINCIAL URBAN SANITARY DISTRICTS.

DURING last year, of 832 deaths from all causes registered in Belfast, 25 were caused by small-pox (being 20 over the number for the previous year), 123 by whooping-cough, and 110 by fever. Small-pox also caused 9 deaths in Waterford, and 2 in Lurgan. Measles caused 79 deaths, and scarlatina 248, of which 30 took place in Cork, being a considerable decrease in that town, as compared with 1880, when 204 deaths were registered from the disease. Whooping-cough caused 231 deaths, against 453 in 1880; diarrhoea 421; and fever 380, the mortality from the last-named being, in proportion to population, most numerous at Waterford, the rate being 1.9 per 1,000.

STATISTICS OF THE DUBLIN HOSPITAL.

THE twenty-third annual report of the Board of Superintendence of the Dublin Hospitals receiving Parliamentary grants has been just issued. During the past year 10,708 patients were admitted into the wards of these hospitals, exclusive of 785 who had been remaining at the beginning of the year. Of the total number, 10,428 left the wards cured, relieved, or were dismissed for other causes. The number remaining under treatment amounted to 798, and the average mortality was 6.39 per cent. There were no fewer than 61 patients under treatment suffering from alcoholic poisoning, or affected with delirium tremens. The report points out the necessity, for various reasons, of having separate and special apartments in hospitals for patients labouring under that disease.

HEALTH OF DUBLIN.

THE state of the public health in this city during the five weeks ending March 4th shows, according to Dr. Cameron's official report, a death-rate within the metropolitan registration area in the ratio of 34.32 per 1,000, and within the municipal or city area in the annual ratio of 39.14 per 1,000. A recent statement of a Dublin correspondent, that Dr. Cameron had published unrealised "rosate anticipations" as to the improvement of the health of Dublin (JOURNAL, February 18th, 1882, page 247, and March 4th, page 326), was contradicted by that gentleman. Dr. Cameron, however, has now published an "anticipation" which we sincerely trust may be realised; and as we know, on his own authority, that he has been "most guarded in venturing upon

any speculation as to the future state of public health in this city" (Dublin), we presume the following statement must be regarded as being based upon higher scientific and more logical grounds than would appear from the context. "The mortality in February, though high, and to a large extent raised by an epidemic of measles, now declining, was much lower than in February of last year; as the latter (month?) *sic* had a much lower mortality than the two previous years (*sic*), *there is no reason why we should anticipate a high death-rate in 1882.*"

HEALTH OF IRELAND: QUARTERLY REPORT.

DURING the quarter ending the 31st of December last, there were registered in Ireland 28,690 births, being equal to an annual birth-rate of 22.4 in every 1,000; and 19,777 deaths, representing an annual rate of 15.4 per 1,000. The births were in excess of those for the December quarter of 1880 by 1,108; while the deaths were below those registered in the corresponding quarter of the previous year to the extent of 2,449, and the death-rate 1.3 per 1,000 lower. The death-rate has not been so low during the fourth quarter of the year since 1876. Small-pox caused 35 deaths, against 11 in the preceding quarter, due chiefly to an epidemic of the disease in Belfast, which caused 18 deaths in that place. To measles 108 deaths were due, of which no fewer than 134 occurred in the county and city of Dublin; to scarlatina, 327 deaths; diphtheria, 101; whooping-cough, 184; typhus, 206; enteric fever, 136; and simple fever, 89. Diarrhoea and simple cholera together caused 317 deaths, the smallest number recorded in any of the past eight quarters.

THE QUEEN AT MENTONE.

WE are informed that the health of Her Majesty and of the Royal household is and has been very good since their arrival at Mentone. The Queen has settled down to the routine of a calm retired domestic life, drives and walks daily, and has expressed herself as much pleased with the climate, with her residence, the scenery, and her surroundings. The inhabitants of Mentone and the visitors seem to understand Her Majesty's wishes, and show no obtrusive curiosity. She is allowed to move about all but as one of her own subjects. The weather continues unusually fine; it has ceased to be warm, and is now cool, fresh, and agreeable. So far, the usual equinoctial gales have not made their appearance, the barometer remaining about 29°. Occasional clouds obscure the sky in the morning, under the influence of a south-west wind, but are invariably brushed away by midday by a north-west upper current. Thus outdoor life continues as usual.

THE GOVERNMENT ARRANGEMENTS FOR ANIMAL VACCINATION.

THE Local Government Board have been deliberate in perfecting the arrangements which Mr. Dodson promised the Parliamentary Bills Committee of the British Medical Association (now nearly two years ago) should be made for the supply of animal lymph by the National Vaccine Establishment, in addition to that of long humanisation. But, having finally got their animal vaccine station into working order, they have now taken a step which cuts at the root of the objection of the antivaccinator, that some untoward disease may be implanted in his child's system with the lymph used for vaccinating. People with apprehensions or prejudices such as these may now go to the public vaccinator and have their children vaccinated, at their option, with animal lymph instead of the ordinary human lymph, arrangements having presumably been made for the supply to public vaccinators of such lymph from the Government station. Public notice to this effect has been given by the Registrar-General in a fresh issue of his Notices of Requirement of Vaccination, and it will be interesting to see what use is made of the new facilities offered. In any event, it must be gratifying to the Association that the conclusions and reports laid by Mr. Ernest Hart before our Parliamentary Bills Committee, and the active and powerful parliamentary assistance of Dr. Cameron in inducing the Local Government Board to reconsider its position with regard to the supply of animal lymph by the National Vaccine Establishment, have been successful. The suggested organisation sketched by Mr. Hart in his report to the Conference, to which the Local Government Board deputed a representative, has been in fact fully carried into effect. The annual charge on the State for the new station will, we believe, be as follows: Director, at £400 (Dr. Cory); Assistant to Director, at £150 (Mr. Shirley Murphy); supply of calves, £300; keep of calves and incidental expenses, £250; attendants, £100; or £1,200 in all.

sarily be very ignorant both of the art of healing and of the various sciences which went to make up the accomplished practitioner in that art. They required, first of all, information as to the necessity of the experiments on living animals, which had given rise to so much discussion of late years. They required to be fully informed of the advantages of that method of pursuing scientific investigation, and they required to be told of the advantages which had already been obtained by it. They also required to be told what was the amount of pain inflicted upon the lower animals, and how often it needed to be inflicted, and whether it did or did not harden the heart of the practitioner so to deprive him of that sympathy which, he thought, was one of the most marked characteristics of the medical profession. He could only say, he wished success to the society, and God speed to those who endeavoured to further the great aim of all medical art and science—the alleviation of human suffering.

The resolution was passed unanimously.

Mr. SPOTTISWOODE, President of the Royal Society, moved the next resolution: "That the Association consist of representative members of the medical profession, and of other persons desirous of promoting the above objects." He said that the resolution was one which must recommend itself to all present. The main work of the association, although of very diversified aspect, and of very wide application, was still special in its essential character. It must, in his opinion, be both designed and carried out by persons who understood it. An opinion appeared to prevail in some quarters that any one, however little conversant with the subject of medicine, was competent to define what should, and still more, what should not be done towards its advancement. The promotion of the association concerned the public at large, as well as the medical profession. But between the special experts and the public, there was a class whose admission to their councils he would thoroughly advocate. The aspect of their subjects was so varied; the methods which they employed were so diversified in their nature, and involved principles gathered from so many sciences, that he would advise them to associate with themselves the leading men in biological and, to some extent, in other sciences. On the specific topics of the present movement, he did not, as a non-biologist, propose to offer any remarks; but, representing as he did the Society which was the centre and head of all British science, and whose function was the promotion of all natural knowledge, he had ventured to say they had undertaken to help towards the decision of the great, nay, the all-important, question—whether medicine should wait upon time and circumstance, upon the accidents of life, upon the habits, or even whims of society and fashion; or whether, with earnest thought and firm hand, it should form circumstance to its needs, turn accident to good purpose, and wrest from Nature that which she freely gave to him who asked, but which she resolutely withheld from the listless bystander; whether, in short, medicine should remain and be for ever relegated to the limbo of observation, or whether it should become an experimental science.

Sir JAMES PAGET said it would be difficult to find a resolution which would more completely fulfil the design included in the two previous resolutions which the meeting had adopted, the point being that this association about to be formed would consist of representative members of the medical profession and other persons desirous of promoting that object. He would not read the whole resolution, but it would be seen at once that the council to be formed should consist of the Royal College of Physicians, the Royal College of Surgeons, and many others there named, and it would be seen at once that they were named not personally, but as representatives of the large bodies of the medical profession or of scientific bodies. There was the name of the President and two other officers of the British Medical Association, as representing the largest body of the medical profession which had ever been formed, and the whole of those there named represented bodies of men who desired to favour the promotion of medical science. This was the object desired by them all, and he ventured to say there was not one of them which had not promoted this object within its own particular sphere in which it moved. They could not too much admire the energy of those who, unaided, had pursued researches which had brought so much good to humanity, but still they could not but feel that there were occasions when these persons required some weight of authority should be brought to bear, for the purpose of carrying out the objects of science. Its voice and the weight of its authority should, at all times, be brought to bear on the pursuit of science. The public needed instruction upon a large number of scientific pursuits, and, doubtless, there were many who, notwithstanding whatever knowledge might be imparted to them, would cling to their ignorance, and hold tenaciously to their own self-conceit. The society to be formed would address itself to the really intelligent portion of the public, and enlighten them on the subject of medical science. They could not but look with some amount of alarm

at the removal of these societies of medicine from other scientific bodies, and one could not but observe that as year succeeded year each of these associations of science became more and more in danger of becoming detached from the other. It would be well that this association should be able to suggest to them the things which need to be learnt, and, more important still, that they should have the means of gathering from these societies the knowledge which they required to guide them. A society such as the one proposed could represent to the Government facts and opinions held by a large mass of the profession, by a body of men counting not its hundreds, but its thousands and tens of thousands, which could not fail to carry greater weight than could probably be carried by an individual action. It would be a central authority to which any one, when in doubt, could refer. It would offer the practitioner the best advice, and show him whether he should proceed or wait. It must be of immense use to the profession, because it would point out the direction in which knowledge was needed. In whatever aspect he looked at it, he could not but feel that an Association of the kind would be of the greatest possible value to all concerned. He proposed:

"That the Presidents for the time being of the Royal College of Physicians of London, and of the Royal College of Surgeons of England, be the permanent *ex officio* Presidents of the Association; and that each of them be requested to nominate annually twelve persons, of whom six at least must be Fellows of their respective Colleges, to be representative members of the Council of the Association for the year, in addition to the following, who shall be *ex officio* members—viz.: the Presidents for the time being of the Royal Society, of the General Council of Medical Education and Registration, of the Royal Colleges of Physicians and Surgeons in Edinburgh and Dublin, of the Faculty of Physicians and Surgeons in Glasgow, and of the Royal Veterinary College of Surgeons, the Director of the Royal Gardens, Kew, and the Medical Officer of the Local Government Board; the Regius Professor of Medicine and the Linacre Professor of Anatomy and Physiology in the University of Oxford; the Regius Professor of Physic and the Professor of Anatomy and Physiology in the University of Cambridge; the Professor of Institutes of Medicine in the University of Dublin; the Deans of the Medical Faculties of the Universities of Edinburgh, Glasgow, and Aberdeen; the Brown Professor of Pathology in the University of London; the Presidents of the British Medical Association, of the Council, and of the Parliamentary Bills Committee of the British Medical Association, and of the following societies: the Royal Medical and Chirurgical, Pathological, Clinical, Epidemiological, Obstetrical, Medical, Hunterian, Harveian, Zoological Societies, and the Society of Medical Officers of Health. That the Council be authorised to invite the co-operation of additional representative men, within the United Kingdom, as corresponding members of their body. That registered medical men desirous of promoting the above objects shall, with the consent of the Council, be admitted as members of the Association on the nomination of an ordinary or corresponding member of Council. That members of the Council, on their retirement, become ordinary members of the Association. That the President for the time being of the Royal College of Physicians of London, and the President for the time being of the Royal College of Surgeons of England, shall be alternately, for the term of one year, *ex officio*, chairman of the Council, and shall nominate a member of Council as vice-chairman for the year, such nominated vice-chairman to be re-eligible. The ordinary quorum of the Council shall be six. That the Council have the entire control of the business of the Association, and the entire management of any funds contributed for its general objects, or for any special purpose, and shall annually appoint a treasurer and secretary, who shall be re-eligible."

Dr. QUAIN seconded the resolution. As a member of the late commission in the time of the cattle-disease, he was aware that experiments on animals were on several occasions the means of saving the lives of cattle. It had been said, and he believed it to be true, that if it had not been for the steps taken to stamp out the cattle-disease, there would scarcely have been one left in England. These experiments had been the means of saving hundreds and thousands of cattle, and probably a large number of human beings. The importance of isolation could not be denied. It was widely different when animals were pursued by dogs for wagers. That was illegal, but still men did not raise their voices in Parliament against it. When animals were scientifically experimented upon, it was only for the purpose of alleviating the sufferings of human beings, and to protect those who were sacrificing their feelings to duty was one of the objects of the association.

Sir WILLIAM GULL, in supporting the motion, said that he saw men prosecuting their researches in the face of obloquy; but henceforth he trusted the Society would stand between them and the public, and that

as indicated by many or few joints being affected. Space is left for other complications and sequelæ, as paralysis, insanity, etc., being recorded. Attention is directed to the occurrence of "subcutaneous nodules", which are sometimes met with in connection with rheumatism and chorea, and concerning which information is needed. These nodules are usually about the size of a split-pea, though they vary from the size of a pin's head to that of an almond. They are strictly subcutaneous; the skin over them is not reddened; they are painless. The back of the elbow, the malleoli, and the margins of the patella, are the most common situations of such nodules, but they have been met with over the vertebral spines, the spine of the scapula, the extensor tendons of the foot and hand, the scalp, etc.

Observers are asked to note the common ailments to which the patient is liable, in order to ascertain the clinical associations of chorea. It is desired, also, to obtain information as to the occurrence of nervous diseases and rheumatism in members of the patient's family. This can be succinctly given. Thus, under the first head, in an ideal case it might have to be recorded: Father, insane; paternal aunt suffered from chorea in childhood. Under the head of "Family History of Rheumatism": Mother had rheumatic fever; one brother, crippled from rheumatism.

A few notes on "Treatment" are desired, when a simple or consistent plan has been employed. Principles, and not details, of treatment should be noted; as, for instance, "arsenic", or "iron", or "sulphate of zinc", or "expectant"; or, "at first arsenic, later quinine."

Lastly, space is left for "Remarks on any special feature of the case". The nature of eruptions, such as various forms of erythema, etc., when occurring, should be recorded, and any other points of interest. The main object of the inquiry will, however, be served by simply answering the questions. When fatal, the mode of death should be noted, and, when a *post mortem* examination has been made, the appearances observed should be recorded.

It may seem that the questions are both numerous and intricate; but it will, it is hoped, be found that the questions run on in a connected manner, and very many require only a stroke of the pen to constitute an answer. When practicable, a positive and negative answer are printed, and all that is required is to strike out the words which do not correctly describe the condition.

Form of Card about to be issued.

Observer's name.	How many previous attacks.
Address.	Present attack—severe, moderate, mild.
Initials of patient. M. or F. Age.	Date of onset. Duration.
Upper, middle, or lower class.	Temperature—normal, subnormal, febrile.
Place of residence.	Result.
Stout, moderate, thin; strong, moderate, weak; dark, fair.	Condition of Heart.
Previous mental condition.	Before attack.
Growth—rapid, moderate, slow.	During attack.
Menstruation—regular, irregular. Pregnant.	After attack.
Food—sufficient, insufficient.	Rheumatism.
Arterial diseases.	During attack. Many joints. Few joints.
Rheumatism. With distinct joint-affection. Date.	After attack. Many joints. Few joints.
With fever. Date.	Subcutaneous nodules—present, absent.
With vague pains. Date.	Other Complications.
Scarlet fever. Date.	Sequelæ.
Anæmia. Duration.	Common ailments to which patient is specially liable.
Other diseases. Date.	Family history of nervous diseases.—In what members.
Supposed Exciting Cause of Present Attack.	Rheumatism.—In what members.
Overwork—mental, bodily.	Remarks on any special feature of case.
Shock; Fright.	Treatment.
Other causes.	
Interval between exciting cause and attack.	

N.B.—Information and assistance given to the Committee in this and all other investigations will be duly acknowledged.

THE METEOROLOGICAL SOCIETY.—The usual monthly meeting of this society was held on Wednesday, March 14th, at the Institution of Civil Engineers, 25, Great George Street; Mr. J. R. Laughton, F.R.A.S., president, in the chair. The President gave a historical sketch of the different classes of anemometers. In conclusion, he said that what was wanted was not so much new and improved apparatus for registering or recording; for, though those now in use were not perfect, they were far superior to the anemometers to which they were applied. What they wanted was rather some radical improvement in the instrument itself, or in the theory which translated its action.—In connection with this meeting there was an exhibition of instruments, consisting of anemometers and new meteorological apparatus, etc. The anemometers exhibited were forty-five in number. There were also photographs and drawings of old forms of anemometers, damage caused by whirlwinds, etc.

THE ROYAL UNIVERSITY OF IRELAND AND QUEEN'S UNIVERSITY.

MUCH interest attaches to the questions which have recently sprung up in connection with the establishment of the new Royal University of Ireland. This university is intended, under the provisions of the Acts which created it, to take the place of the Queen's University in Ireland, and the latter institution has now ceased to exist. There are a large number of medical graduates of the Queen's University whose position is affected by this legislation. The 11th section of the University Education (Ireland) Act constitutes the graduates of the Queen's University graduates of the new Royal University. Under these circumstances, there arises a question which must agitate the minds of the graduates who have obtained their degree in the Queen's University. Many of these gentlemen are proud of this distinction, and will hesitate to accept the position offered them. Fortunately for them, there is no clause of the University Act which deprives them of their original degree, nor would it be consistent with precedent that an Act of Parliament should interfere with an established and vested interest. A question more pressing at the moment arises as to the position of the Royal University under the Medical Act of 1858. By clause 4 of that Act, the institutions entitled to send a representative to the Medical Council, including the several corporations and the universities then existing, are enumerated. This list does not, of course, include the name of the Royal University, and, consequently, no representative from that university can appear at the next meeting of the Medical Council. So far, graduates of this university are deprived of representation. But still another question arises with regard to the medical graduates of the New University. Are they, or are they not, entitled to be registered as legally qualified medical practitioners? Under schedule A of the Medical Act, the several corporations and the diplomas they confer are enumerated, and then follows a paragraph, which says the graduates of any university in Great Britain or Ireland shall be entitled to registration. It is, however, a matter for legal interpretation whether this wording entitles to registration only graduates of the universities then existing and enumerated in clause 4 of the Medical Act (1858), or whether it can be interpreted to apply to any and all universities subsequently chartered in the United Kingdom. If the latter interpretation prevail, then the graduates of the new Royal University will be entitled to register, as it is, of course, intended that they should be; and the graduates of the Queen's University, who are already registered as such, may have the option, if they choose, of changing the form of registration. Of this option, however, they will not be very likely to avail themselves, inasmuch as their existing registration is already a legal one, and no privileges or advantages will be gained by changing their existing registration to meet the new legislation. Universities under this *regime* in Ireland appear to be of such a transitory and changeable nature that it may possibly be considered to be a more unique distinction to remain a graduate, and to retain the prestige of the extinct Queen's University, than to assume the title of that which has just been called into existence, and of whose permanency, judging from recent proceedings in Parliament, there is no very complete guarantee.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall on Wednesday, the 12th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary*.

161A, Strand, London, March 15th, 1882.

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 12th, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, June 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881.

FRANCIS FOWKE, *General Secretary*.

SPECIAL CORRESPONDENCE.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

Transfer of Medical Teaching from Queen's College to Mason's College. — Vivisection. — The Ingleby Lectures. — The Medical Institute. — The Queen's Hospital. — The Musical Festival. — Wolverhampton Hospital.

I AM informed that arrangements are now practically completed by which the teaching of physiology, chemistry, and biology, will be transferred from Queen's College to Mason's College. This will effect a great improvement in the means of education at the disposal of our students, as the laboratory accommodation at Queen's College has been very defective. In addition to these courses, it is hoped that many students will avail themselves of the opportunity afforded them of attending Professor J. H. Poynting's admirable course of physics. Great credit is due to those lecturers in Queen's College who have shown such admirable readiness to sacrifice their own pecuniary interests in order to facilitate this change.

The question of vivisection has been brought forward here lately, with reference to rumours of the intention to seek a licence for Mason's College physiological laboratory. One of the chiefs of the antivivisection party is Mr. Lawson Tait. The dispute has passed through the phase of a newspaper controversy, in which the press took the scientific side of the question, and the antivivisection party made little by that move. Mr. Gamgee read his paper on Vivisection in Surgery at the February meeting of the Branch, when he was replied to by Mr. Lawson Tait, and the debate was adjourned to the March meeting. The secretary of the Antivivisection Society attended the adjourned meeting, and in lieu of a speech read from a manuscript excerpts from the evidence of Sir William Fergusson; but the other side of the question was handled very ably by Mr. Furneaux Jordan and Dr. Haycraft. Mr. Gamgee's paper is a valuable contribution to the controversy as it now stands, and has done and will do much good. We are threatened with a renewal of the discussion at the Graduates' Club and the Philosophical Society, at both of which papers on the subject are announced, but I do not doubt that the result will be satisfactory to the cause of scientific progress in both places.

The Ingleby lectures are to be delivered in June next by Dr. R. C. R. Jordan, Senior Physician to the Hospital for Children, but the particular subject has not yet been announced, though in all probability it will be selected from that branch of practice in which his hospital experience has been especially large, and of which he is well known to be so accomplished and successful a student.

The Medical Institute has lately received a handsome donation of £200 from W. Cregoe Colmore, Esq. The annual meeting takes place this month, when it is hoped that the report will show a very decided improvement in all respects upon that of last year.

Since my last letter, the Queen's Hospital has completed the arrangements for its out-patient staff by electing Dr. C. W. Suckling Casualty-Physician to the Hospital. Dr. Suckling is a distinguished student of the Birmingham School, an Honours graduate of the University of London, and has occupied the post of medical tutor at the Queen's College for the past two winters, conducting himself with marked ability, and obtaining in the highest degree the confidence of the students and the professorial staff.

The triennial musical festival for the benefit of the General Hospital takes place this August, and is expected to outshine all that have preceded it for many years in the character of its programme, which includes a new oratorio by Gounod. The income of the General Hospital depends in such an important degree upon the success of the festival, that no pains can be spared to ensure that result; and there seems every probability that the Birmingham Festival of 1882 will be an occasion to be remembered for a long while by all lovers of music. It will take place very near the time of the annual meeting, so that there is a probability that, without much extension of time, it will be possible for members of the Association who are so disposed to return from Worcester by way of Birmingham, and enjoy this rare musical treat.

The governors of the Wolverhampton Hospital have lately rejected by a large majority a proposal to appoint general practitioners as out-patient physicians. It is a curious anomaly that, while so much was said of the ignominy that would result from the employment of general practitioners to see medical out-patients, no one remembered that the surgical staff, like that of most provincial hospitals, is composed exclusively of general practitioners. There seems no propriety in the rule that admits general practitioners to sur-

gical appointments, but excludes them from all share in medical work. It cannot be asserted with truth that there is greater need for specialism of study in one than the other, and there is no ground for maintaining this distinction. At the present time, a very large number of provincial hospitals find a great and increasing difficulty in securing the services of an adequate number of practising physicians to perform the duties of the medical staff—a difficulty which would find a satisfactory solution in the appointment of well qualified general practitioners to these posts.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS, Monday, March 27th.

Cases of Suspected Poisoning.—The Home Secretary was asked whether, in cases of suspected poisoning, when an analysis was directed to be made, he would consider whether it would not be more satisfactory that the suspected person should have an opportunity of being represented at such analysis.—He replied: I am of opinion that it would never do to allow a delicate process of this kind to be conducted by a combination of persons, who may be acting in adverse interests, and thus defeat the object of the experiments, which are necessarily delicate. I quite understand the sentiment, and I do not believe that it operates on a fear that the persons who carry out the experiments should not be appointed by the Crown, so as to be considered parties to the prosecution. Therefore, I propose to ask the presidents of the College of Surgeons and of the College of Physicians yearly to appoint two independent experienced men of science to refer to in cases of this kind for the purposes of performing these experiments. In making this statement, I wish it to be distinctly understood that there is no hesitation whatever as to the entire ability and impartiality of the persons who have hitherto been employed by the Crown.

Notices.—The following notices stand on the books of the House of Commons:—Wednesday, 21st June: Vaccination Acts (Compulsory Clauses Repeal) Bill (second reading).—Wednesday, 28th June: Vivisection Abolition Bill (second reading). Mr. Arthur Balfour: On the second reading of the Vivisection Abolition Bill, to move.—That while due provision should be made for preventing the infliction of unnecessary pain on animals, it is inexpedient so to limit scientific investigation as to hinder discoveries which must result in a great diminution of human suffering.—Wednesday, 5th July: Contagious Diseases Acts Repeal Bill (second reading). Mr. Warton: On the second reading of the Contagious Diseases Acts Repeal Bill, to move.—That it be read a second time upon this day six months.—Notices have also been given by Mr. Thomasson and Mr. Gray: On the second reading of the Infectious Diseases Notification (Ireland) Bill, to move.—That it be read a second time upon this day six months.

MILITARY AND NAVAL MEDICAL SERVICES.

SURGEON H. R. O. CROSS has been appointed Surgeon Assistant Instructor to the Depot Army Hospital Corps, Aldershot, on his return from South Africa.

SURGEON-MAJOR A. F. PRESTON, M.B., A.M.D., has been considered by the Secretary of State for War, to have merited special advancement in consideration of his services during the late Afghan campaign, and has been rewarded by promotion to the next higher rate of pay in his rank, with seniority next to the junior officer on such higher rate of pay. Surgeon-Major Preston was in medical charge of the 66th Regiment at the battle of Maiwand, and was very severely wounded (shot through both loins and left forearm) while attending to a wounded man of his regiment in the front line of fire, and was mentioned in despatches.

THE following appointments were made at the Admiralty on Saturday: Joseph Wood, M.D., staff-surgeon, to the *Encounter*; Samuel C. Browne, surgeon, to the *Impregnable*, additional, for service in the *Nautilus*, brig, during the cruising season; Charles H. Wheeler, surgeon, to the *Impregnable*, additional, for service in the *Pilot*, brig, during the cruising season; Edgar G. Swan, surgeon, to the *Lion*, additional, for service in the *Liberty*, brig, during the cruising season; Arthur W. E. B. Barrett, surgeon, to the *St. Vincent*, additional, for service in the *Martin* during the cruising season; Charles W. Sharples, surgeon, to the *Boscawen*, additional, for service in the *Seaflower* during the cruising season; Robert W. Anderson, surgeon, to the *Ganges*, additional, for service in the *Sealark* during the cruising season.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE HEALTH OF BOMBAY.—A standing medical board has been constituted at Bombay to report weekly as to cholera in the city. This step has been taken to procure the removal of the harassing quarantine restrictions now imposed in Egypt on arrivals from Western India.

INFANTILE MORTALITY AT KEIGHLEY.

AN extremely high rate of infantile mortality is reported for the past year in the Keighley Urban District. In his last annual report the Health Officer of the town gives the entire death-rate as 24.0 per 1,000 of the population; the deaths under five years of age representing 43.5 per cent. of the total mortality, and those under one year of age 23.8 per cent. The infantile mortality for the whole of England in 1881 was 135 to every 1,000 births, the lowest rate recorded for some years, whereas in Keighley it increased from 169 per 1,000 births in 1880 to 183 per 1,000 in 1881. Mr. Roberts rightly urges that some great effort should be made to stop the enormous sacrifice of infantile life which, unhappily, he has now to record. In other towns the formation of day nurseries has been suggested, where mothers, who are compelled to work at mills, etc., during the day, can take their children to be nursed, instead of leaving them with elder children and old women, who dose them with slops of every conceivable kind, instead of with wholesome milk. Mr. Roberts recommends the establishment of committees of ladies to visit mothers, and to explain to them the essentials of nursing, as well as the giving of lectures on the subject, and the distribution of plain and simple tracts. Any measures that may help to lessen the sad waste of infant life in our manufacturing districts deserve trial and sympathising help from the well-to-do.

THE SANITARY CONDITION OF ASHTON-UNDER-LYNE.

A SPECIAL meeting of the Ashton-under-Lyne Town Council was recently held, for the purpose of hearing a report from Dr. Ballard, one of the medical inspectors of the Local Government Board, who had been instructed to inquire into the sanitary condition of the borough. Dr. Ballard stated that the inquiry had been made in consequence of the enormously high death-rate recorded by the Registrar-General as occurring in the borough. During the eleven years (1871-1881) the annual rate of mortality was as high as 25.0 per 1,000, and the infantile rate was about 19 deaths per 100 births, while 31 of every 100 children died before they reached five years of age. Dr. Ballard found in one part of the town the blocks of houses very close to one another—so close at the rear and shut in at the sides that there were by the sides of the blocks what might be regarded as wells or deep cuttings, so that whatever air was contained in the centre was stagnant. On examination of the houses he found that the ashpits which were situated in these blocks were loaded up with excrement and ashes; indeed, in most parts of the town he found these conditions prevailing. Dr. Ballard also referred to the sloppy, wet, and dirty condition of the roads, there being nearly everywhere big puddles caused by the irregularities of the pavement. In the outskirts of the town there were really worse, because there were found a number of roads that had not been touched at all. Dr. Ballard described the condition of a road in one part of the district as "one of the most disgusting and obnoxious that he had ever seen in the town." In two others, moreover, that he had visited he observed the absence of any water supply except that obtained from the well, where he was told that worms came up in the water. He also complained of the absence of sewer ventilation, and of the want of any ventilation of some of the houses, which he went through the town. In some cases they were arched and covered, but left with a sort of trap, so that there must be a stink and a nuisance, while some of the watercourses, which were used as sewers, were left open, and some were covered. After pointing out upon what there were the responsibility of such a deplorable state of things rested, Dr. Ballard mentioned the measures which he would be at once taken to improve the sanitary condition of the town. He recommended that the houses should be examined upon those issued by the Local Government Board, and that systematic ventilation of sewers should be at once carried out, while all the populated parts of the borough should be paved and covered. An inspection hospital, mortuary, and day-nursery should be provided, and care should be taken that the measures for better health be carried out. He also recommended that the ash-pit system should be abolished, and the pit system applied throughout the town.

PARISH GUILDS OF HEALTH

A PROPOSAL to establish parish guilds of health to prevent fevers and disease in houses, by aiding, supplementing, and preserving, the work done by local surveyors, medical officers of health, and others, was brought before the National Health Society, by Sir Henry Cole, K.C.B., at a recent meeting held at 44, Berners Street (Mr. Ernest Hart in the chair), with the view of obtaining the National Health Society's co-operation in the work.

Sir HENRY COLE explained that it was proposed the guild for health should be voluntary, self-supporting and self-managing, and that it should be established in every parish district at least, in connection with a school mission house, or other suitable place. The objects were stated to include the distribution of rules on all subjects connected with house-drainage, water-supply, and general house sanitation, issued by local boards of health and kindred societies; to supply sanitary publications at the cheapest rate; and to issue a cheap periodical on sanitary matters, with the special view of informing householders in this respect; to promote the proper removal of infectious cases from private dwellings; to provide skilled labour for the performance of sanitary work required by the householder; and for the examination of drains, cisterns, pipes, kitchen boilers, etc.; to exhibit and sell specimens of various sanitary apparatus, disinfectants, etc.; the proper management of the dust, garbage, and other minor matters connected with house sanitation. The proposed scheme included the appointment of a person, whose work it would be to distribute sanitary information; and the election of officers in each district, with power to appoint contractors to carry out sanitary work, at charges fixed by the committee. A small nominal fee would be paid by each member of the guild, and subscribers would be invited to promote sanitary arrangements for the poorest class. General Cotton, when lately discussing this subject with him, had made the graphic statement that the action of a dwelling was not automatic. Constant care and attention were necessary to keep in proper working order all various sanitary apparatus for drainage, water and air supply, cleanliness, etc. The householder had to look to the state of the earth, air, fire, and water connected with the house. Unless some means were used to spur on the individual to look to his own interest in his house, the action of Parliament and of municipal authorities would be ineffectual in bringing about the desired results. If attention were not given to the condition of the household boiler for a year or two, the householder must not be surprised if the boiler, acting badly, ultimately burst, as it was an inevitable result. The present system of removing dust and filth from buildings he characterised as barbarous and dangerous to the health of all, but he did not despair of eventually getting parish authorities to adopt a more efficient system, as it would save a great deal of trouble. The same held good of the water-system; if proper attention were not given to see the arrangements for water-supply through the house, and they were not in perfect order, and proper precautions were not taken to secure protection against frost and dirt, the householder must continually experience trouble. In his opinion, sanitation of health was a necessity—a place where all the information relating to the health of the house could be freely obtained. In his own parish of St. Mary Abbots, Kensington, any householder might obtain a written report from the surveyor of the sanitary state of his house, at the necessary requirements in it, by making a payment of five shillings for a house under £100 a year. This provision, he believed, did not exist in other parishes. The individual must be enabled to feel that it was his interest and his duty to keep his house properly in order and himself healthy. There was no one who had wished to keep his house in order, but he had found it very difficult to get at them, and when he had done so, found it very difficult to understand them and put them in action; he had been compelled to do the best he could, and to go from one place to the other to get information and assistance. The point of this was that the individual must be given help, if he was to be as healthy and comfortable as he might be. Sir Henry Cole thought the collection of the various laws relating to the taking of a house and keeping it in order was a work which might very properly be undertaken by the National Health Society, and he thought it would be well to hear that the scheme was one which the society would take a warm and interested part in.

The suggestion was that it would be quite within the ordinary proceedings of the society to collect and collate the laws and rules in the different London parishes, relating to house-dirt; to print a statement of the laws of medical officers and inspectors, to the extent to which they could be applied; to enable them to have recourse to these records for keeping their houses in order; and it was quite within their scope to publish any useful information as to drainage, ventilation, water-supply, and heating of houses; and to prepare a suitable and popular handbook on the subject, which might be issued at a very cheap rate. But they

should see clearly what was to be the scope of such a work, as there were already a number of popular treatises, under separate heads, such as the little publication of Dr. Parkes on "Personal Hygiene"; various authorities on "Healthy Houses"; a useful little work by Professor de Chaumont, and another by Dr. Corfield: and a good deal of available literature. But what there was not available was a little book which he had long thought it might be advisable for the Society to publish, a little work, which might, perhaps, be called "The Citizen, his Sanitary Duties, Powers, and Relations": what these duties were in respect to their houses, their neighbours, and their relations; what it was incumbent on them according to law, and what steps they could take. But when they came to Sir H. Cole's proposal to exhibit and sell specimens of various sanitary apparatus, etc.; and that they should provide skilled labour for carrying out sanitary work, they came to a different part of the question and a different principle. This was a commercial proposition, which meant the opening of a shop, and a shop of a very extensive kind. One of the suggestions was that people were to know what were the best things for cleaning their drains, and the best kind of disinfectants, etc. But to endorse anything of the kind with the guild's name would be at once to give it an artificial value.—Sir HENRY COLE stated that he had not proposed establishing shops, but rather to induce existing shops to sell and exhibit suitable sanitary apparatus, such as cleaning-machines for house drains, different washing machines, disinfectants, etc.—Mrs. LAWRENCE suggested the formation of local committees in connection with the scheme.—The CHAIRMAN said he was glad to hear that they proposed keeping clear of establishing shops for themselves; and he thought there was nothing in the scheme in which they could not effectually assist. The work would consist in the establishing of local committees, of a somewhat similar kind to that which they had as a sanitary committee, and, as far as possible, give a practical character to the establishment in each parish of a station or room, which might be opened by private enterprise, at which specimens could be seen.—Sir HENRY COLE said it would be necessary to get at least three persons in each district to interest themselves in the question.—Rev.—LOWY suggested the appointment of a special subcommittee to consider the proposed scheme, with the view of giving it practical shape.—The CHAIRMAN was of opinion, that a large public meeting would be more effectual for this purpose.—After further discussion, the following resolution was moved by Major-General Cotton, seconded by Mr. Ernest Turner, and passed unanimously:—"That the National Health Society, having heard the statement of Sir Henry Cole, in respect to the proposed parish guilds, approves the objects stated, and will assist within its sphere in carrying them out."

THE SUBORDINATE MEDICAL SERVICE OF BENGAL.

It appears from an official report recently issued that some progress was made in 1880 towards the improvement in the composition of the subordinate medical service of Bengal. At the same time, the service has been relieved of a considerable number of its most useless members. Some have been dismissed for misconduct, others have resigned; the most frequent cause being the rejection of immoderate demands for leave. It had become a common practice with the young assistant-surgeons to apply for leave for long periods shortly after entering the service, the object being to try their fortunes in private practice, and after failure in this, to serve the Government. The men were not wanted, and leave was granted; but unreasonable extensions were asked, and refusal was followed by resignation. In no single instance has a subordinate of either class left the service whose removal has been otherwise than a gain to it. The unavoidable entries of assistant-surgeons continue to exceed the means of employing them; while from every school in the province come applications for admission of its best pupils into the class of hospital assistants, in number larger than the vacancies, notwithstanding the smallness of the pay which men of this class receive at the outset. The organisation of a provincial service of hospital assistants of the several grades, whose career will begin and end in civil employment, will involve increase of expenditure; and as the service exists chiefly for the dispensaries whose emoluments and opportunities furnish the rewards of good work and satisfy the claims of seniority, it is reasonable to look at dispensaries for the means of meeting growing charges incurred on their account. The situation is this. Formerly the province was provided with native doctors from those who had been enrolled for the army, but were not wanted for that service. These were supplemented by a class of men recruited from various sources, and containing many persons without regular training of any kind. Examination and promotions were confined to the military class; and under its rules, grades and grade pay were determined. A man of this class in charge of a dispensary, becoming on promotion en-

titled to a higher pay than he received from the dispensary, might be removed to the army, and the civil Government was saved from increased liability by putting a junior in his place. This is now altered. The civil administration must provide for all, senior and junior alike, and must meet claims for increased pay on promotion without any increased field of employment. Thus, a hospital assistant holding a dispensary of the lowest status, receives thirty rupees *per mensem*, whereof fifteen rupees are paid by the Government. The hospital assistant passes by examination into the first class, and becomes entitled to fifty-five rupees *per mensem*. The local committee will not increase his pay if they can avoid it, and the difference would fall on Government, while the dispensary would retain the services of a better man than the rules allow, because there is no other employment for him. Several instances of this kind occurred during the past year, and the following steps have been taken. 1. As opportunities have arisen, promoted men have been transferred to dispensaries to which higher salaries have been attached. Such opportunities are limited, and they will not suffice for all future cases. 2. A dispensary has been compelled to meet the increased charge by dismissing superfluous servants. 3. There are dispensaries now in charge of assistant-surgeons which do not afford adequate work for them. The supporters have been required either to raise funds for the entire payment of the assistant-surgeon if they desire to keep him, or to accept the substitution of a hospital assistant. 4. It has been ruled that whenever a dispensary is required or allowed to pass into the independent class, it be notified to the supporters that in the event of their medical officer obtaining promotion, they must be prepared to meet the additional charge, and must not expect that he will be replaced by a junior man.

PHTHISIS IN THE LUNATIC ASYLUMS OF BENGAL.—In his report on the Bengal Lunatic Asylums for 1880, Dr. Payne submits a very thorough and interesting examination of the statistics of mortality in the different asylums during the year. The death-rate per cent. fell from 14.7 per 1,000 in 1879, to 12.3 in 1880, the average of the ten previous years being 11.5. It seems quite clear that diet has no connection with this mortality. In Dellunda meat rations were introduced, with no effect whatever on sickness. In Patna, where the scale was altered, mortality increased. In Decca, where one-third of the animal food was replaced by vegetables, the mortality decreased. A detailed examination of the deaths under the different heads, leaves no doubt that the mortality was largely affected by the importation of disease from outside. Of six persons who died from ague and its consequences, three were new admissions. From anæmia, anasarca, debility and dropsy, 14 died in 1880, against 16 in 1879. Of the 14, just half were new admissions. Of three persons who died from remittent fever, two were new comers who were admitted into hospital on arrival. There were 23 recorded deaths from phthisis, against 21 in 1879. Dr. Payne observes that as the *post mortem* examinations are more regularly made, the asylum authorities are enabled to determine as phthisis a larger and larger number of cases which, had examination not been held, might have been ascribed to other causes. *Post mortem* examinations are now made in every case in which no objection is raised by the relatives of the deceased lunatic. It is certain that, under this practice, the number of phthisis cases will, as a rule, appear larger in comparison with that reported in former years; while there will probably be a corresponding reduction under the heads of anæmia and debility. On the whole, it seems clear that, while lunatics generally are known to be liable to phthisis, there is no reason to believe that the condition of any of the Bengal asylums contribute specially to the promotion of this disease.

MISTAKES IN DIAGNOSIS.

SIR.—I am directed by the South-Eastern Dispensary Medical Officers' Society, at a meeting held this day, Dr. P. F. Coghlan presiding, to express their strong condemnation of the alleged conduct of Dr. O'Neill of Athy, in publicly reflecting, unnecessarily, on the dispensing medical officers of that union; and the entire concurrence of the members of this Society with the remarks and practical suggestion of Dr. J. L. Walsh of Kilmacthomas on the subject, published in the BRITISH MEDICAL JOURNAL for March 4th.—I am, etc.,

JAMES B. NORRIS CANE, Honorary Secretary.

Leper Hospital, Waterford, March 6th, 1882.

At the annual meeting of the Brighton and Sussex Natural History Society held last week, Mr. Alfred Haviland read a paper illustrating the Geographical Distribution of Heart-Disease, etc.; and remarked on the importance of knowing the healthiest parts of watering-places—the soil, the altitude, etc. He had prepared a special map, showing not only the geology of Brighton, but also the different aspects and directions of the streets, with "contour lines" showing the different heights above high-water mark, from 15 to 425 feet. This map will probably be published, and will be found very useful.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

BOTHWELL.—March 19th, at the Strand, Topham, Devonshire, the wife of Dr. G. G. Bothwell, of a daughter.

O'RORKE.—March 24th, at Parkview, Ballinrobe, Co. Mayo, the wife of Charles T. J. O'Rorke, Esq., L.K.Q.C.P., L.R.C.S.I., of a son.

MARRIAGES.

BROWN-CARTER.—On March 29th, at St. Matthew's Church, Chapel Allerton, by the Rev. R. R. Kirby, Vicar, assisted by the Rev. R. K. Snowdon, Vicar of Clifford, Walter Henry Brown, M.R.C.S., of Queen Street Leeds, to Gertrude Elizabeth, youngest daughter of J. B. Carter, M.R.C.S., of Elm House, Chapel Allerton, Leeds.

RING-SMITH.—On March 21st, at St. James's Church, Belfast, by the Rev. John Bristow, M.A., assisted by the Rev. T. B. Brookes, M.A., James Ring, M.D., surgeon, Army Medical Department, to Margaret Fitzgerald, daughter of Deputy Surgeon-General James Sinclair, M.D., Principal Medical Officer, Aldershot Division.

WEBSTER-FAULKNER.—On March 23rd, at the Parish Church, Edgbaston, by the Rev. Henry Hardy, Joseph Henry Webster, M.R.C.S.E., L.R.C.P.E., Wareham, Dorset, son of Joseph Webster, Esq., of Sherwood Rise, Nottingham, to Clara, daughter of Charles Faulkner, Esq., of Edgbaston, Birmingham.

PROPOSED PARK FOR BRIGHTON.—A public meeting, which was largely attended, has been held at the Brighton Town-hall to determine as to the purchase of Preston Park from Mr. Benett Stanford for £50,000, the object being to convert it into a public park. The proceedings were of the most uproarious character, and eventually the matter was adjourned for a fortnight.

At the meeting of the Committee of the British Medical Benevolent Fund, held on March 28th, there were twenty-three applications for relief. Grants were voted to nineteen of them, amounting in the aggregate to £213. A sewing-machine is also to be purchased by the chairman for one of the applicants, a widow, who earns her livelihood by needlework. Among the cases were a medical man, aged 92, and two widows, aged 79 and 73 respectively, and there were seven other applicants over the age of 60. The total amount distributed in the first quarter of the current year is £690.

A PARIS temperance society, which dates as far back as 1772, we hear, has been holding its one hundred and tenth annual meeting, under the presidency of M. Hippolyte Passy, Deputy for the Seine, supported by M. Lunier, Inspector General of Lunatic Asylums; M. Beaumetz, of the Paris Hospitals, and several other medical men of influence and position. A report was read showing that the society is in a flourishing and satisfactory condition. There are upwards of a thousand members, and the revenue for the past year was about thirteen thousand francs. A prize of two thousand francs for the best essay on the changes undergone by alcohol in the human organism was awarded to M. Schmidt, of Stockholm.

CONVALESCENT HOME AT FOLKESTONE.—A correspondent, writing to a contemporary, states that no fewer than 2,439 patients have been already admitted into this home—a large proportion from thirty-six hospitals, metropolitan and provincial. Patients are received recovering from severe illness (not contagious), or from surgical operations, and who still require most careful nursing with medical treatment. Invalids of either sex, irrespective of religious opinions, and coming from whatever distance, are admitted. So numerous have applications for admission become, that the present accommodation (independently of being extremely inconvenient and far removed from the sea) is quite unequal to the demand made upon its resources. The council of the home has, therefore, decided to erect a suitable building, on a site obtained with the concurrence and by the kind consideration of Lord Radnor. A sum of £7,000 has already been subscribed, but £9,000 more is still required to complete the building. Her Royal Highness the Duchess of Edinburgh has graciously consented to lay the foundation-stone after Easter. Subscriptions can be paid to the Rev. C. J. Parsons, Priory Lees, Folkestone; or to the Folkestone Branch of the National and Provincial Bank.

IRISH GRADUATES' ASSOCIATION.—A correspondent writes:—The annual metropolitan dinner took place at the Holborn Restaurant on St. Patrick's Day. Fifty-four members and guests were present. The President for the year, Dr. J. T. Banks, Physician to the Queen in Ireland, was unavoidably prevented being present. In his absence the chair was taken by Sir W. Mac Cormac, Vice-President. Amongst the invited guests were the Presidents of the Colleges of Physicians and Surgeons, the President of the Metropolitan Branch of the British Medical Association, Mr. Lister, Drs. Sieveking, Blandford, Ord, Fothergill, Baines, Mitchell Bruce, Lauder Brunton, Mrs.

Garrett Anderson, Miss Pechey, Mrs. Atkins, Mrs. Claud Marshall, and several other ladies. An American physician was also present—Dr. McCormack, of Kentucky. After an excellent dinner, the usual toasts were proposed. From the chair—"Our Rulers" (the Queen and Royal Family) and "Our Guests;" to the latter Drs. Blandford and Sieveking replied, and Mrs. Garrett Anderson returned thanks for the lady guests. The President-elect, Dr. Waters of Chester, proposed "Our Elders," to which Mr. E. Saunders, Mr. Lister, and Dr. Ord replied. Dr. Foster, of Birmingham, proposed "Our Cousins in America," to which Dr. McCormack made a happy reply. Mr. Lister next proposed "Yourselves," coupled with the health of the Chairman, Sir W. Mac Cormac. This toast was drunk in the usual form with musical honours. In his reply he expressed the great regret the absence of the President, Dr. Banks, caused to all present, especially as the cause was illness in his family. Mr. G. Wallace proposed "The Ladies" in a humorous and happy speech, which provoked an equally happy reply. Dr. Donovan proposed "Our Next meeting," coupled with the health of the Honorary Secretaries, who replied, and stated that, at the usual Council meeting held that day, five new members were elected, and that the annual meeting would be held at Worcester on Wednesday, August 9th, under the Presidency of Dr. E. Waters, of Chester, the President-Elect. A special supply of shamrock had been procured from Ireland, and a spray was presented to each guest and member. The dinner was served in the Duke's Saloon and was in all that could be desired in materials, wines, and service.

SANITARY ASSURANCE FROM AN HOUSEHOLDER'S POINT OF VIEW.—Dr. Robert Farquharson, M.P., presided at a public meeting of the Sanitary Assurance Association, at the rooms of the Association, 5, Argyll Place, on Friday, March 10th, where Mr. H. Rutherford, Barrister-at-Law, delivered an address on the above subject. Mr. Rutherford's opening remarks were devoted to the consideration of the subject as it would be viewed by the occupant of a dwelling-house anxious to protect himself and his family from baneful diseases, which were too prevalent on account of the unscientific methods employed in providing for drainage and ventilation. Mr. Rutherford quotes from Dr. De Chaumont's lecture on the same subject some statistics showing the death-rate from diseases liable to be favoured or propagated by neglected house-sanitation, the total result, based upon the Registrar-General's report showing that about one-third of the annual mortality arose from such disease. Although it might not be possible entirely to prevent the propagation of such complaints by even the most perfect system of house-sanitation, yet there was abundant evidence to prove that in very numerous instances disease might be altogether prevented from originating, and in other cases be modified and mitigated. Mr. Rutherford also pointed out what an enormous pecuniary loss was sustained by the prevalence of these diseases, and forcibly illustrated the very poor economy which influenced a large majority of householders in abstaining from setting their houses in sanitary order; and he earnestly pressed upon his audience and the public at large the desirability of having their houses inspected properly, and reported on by a competent authority such as the Sanitary Assurance Association. The services of the specially qualified officers were to be had through the medium of the Association at fees to the Subscribers in accordance with a graduated scale in which for houses rated at £40, the fee was half a guinea. If in other associations or companies less fees might be charged for large houses, it would be well to inquire whether identical services were rendered, and whether a certificate assuring the sanitary condition of the property was given. Mr. Rutherford closed his address with a warm appeal to all to consider the subject closely, and especially those who were large employers of labour. A discussion followed. Dr. Farquharson said that it gave him much pleasure to do what he could to make the work of the Association known. In these days, when it was the fashion to look to Parliament to do everything, it was a good thing to see the people, with the aid of the Sanitary Assurance Association, taking into their own hands the sanitation of their houses, and not waiting for public officials to be appointed for this work. Sir Joseph Fayrer referred to his experience in India, where, simply from improved sanitary conditions, the death-rate in the army had been reduced enormously. The object of the Association was, as far as possible, to do away with the causes that gave rise to disease, and then the effects would cease. As far as science, architecture, and medicine combined would prevent disease, he thought they would certainly tend to do so, and the Association merited well the co-operation both of his own profession and of the architectural profession; in fact, of all science. Dr. Danford Thomas spoke of the necessity which existed for better sanitary regulations, particularly among the poorer districts, where the houses were of a class which would be inspected for subscribers to the Association for the trifling

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL ATTENDANCE UPON THE ARTISAN CLASSES.

SIR,—“A Young Practitioner” put forth a problem in your last issue, which appears to me will have to be solved sooner or later, regarding the payment for medical attendance upon the artisan class, the majority of whom, in our city at least, are anything but good, or even reasonable, payers. I do not think that, on an average, we recover more than one-half of our accounts, and then only by the regular employment of collectors, who take from sixpence per fortnight to one shilling per week—the latter payment constituting a very good patient. The only feasible suggestion that I can offer is for medical men to admit to benefit all families whose aggregate earnings are under thirty shillings per week in a medical club of their own at the present provident dispensary rates (*i.e.*, one penny per week each member, and the usual extras), and for the public to understand that this is the regular rule. If we can afford to take clubs, as we do at present rates, three shillings per head, why would not four shillings and twopenny per head pay us? We could then insist upon all the poorer class being members, or not attending them at all, and would at least prevent them at times being deeply in our debt, and then ringing the changes on our fellow practitioners.

“Young Practitioner” suggests the establishment of provident dispensaries; but perhaps he is not aware how some of those already established work. In Manchester, we have the real provident dispensary system in full work, and abused as all other good things are. There are either too many medical men on the staff to make it worth their while to interest themselves in the scheme apart from their practice, or it goes to the other extreme, and becomes a monopoly and advertisement for one individual, who can shelter all his doings under the dispensary wings. Take, for instance, the two nearest dispensaries in the district where I reside. Each has about 2,400 paying members, or more, representing an income of over £600 a year each. On the one, the medical staff number six; on the other, one. In the case of the latter, the committee absolutely refuse to entertain any applications for appointments on the staff—I know three whose applications have been refused. The present solitary—and yet, I suppose, fortunate—officer was the nominee of the previous solitary officer, and taken into partnership by him, so that for all intents and purposes, the dispensary might have been a private affair, instead of one supported partially by public subscription, and yet this very dispensary was formed upon the principle that all practitioners could join who were so inclined. All round my district there is constantly patrolling a collector and canvasser, who take in, as a matter of course, the provident class—the class, above all others, who used to pay the doctor—whilst those unfortunate individuals who rank below that are still left to hamper and harass the private practitioner, who is often obliged to attend upon them for reputation and quietness’ sake. All this, as might easily be imagined, affects very considerably private practice; and, as things are now, we have no means of altering this state of affairs.

Now, if the system of taking payments weekly for all under the thirty shillings limit could be adopted, we should have a fair share of those who have been driven from us into the dispensary ranks. I have taken the trouble to average the payments of the artisan class, and find that the dispensary rates would be much more to our interests. Then, again, the result of this dispensary monopoly has been the establishment of several of the advertising class. I could name half-a-dozen about here, the majority of which are carried on by unqualified assistants. One qualified man alone had seven or eight under his care, and has already been noticed in the JOURNAL; whereas not one was ever known here before provident dispensaries were established; so that evidently with the dispensary came the downward tendency of the profession, and cheap physic for ever. It is all very well to stand on one’s dignity, and take no notice of all this; but, at the same time, the owners of these dispensaries pocket the cash, and are certainly all the better for that at least. I know that some of them frequently take £10 per week in ready cash, and for what is not cash charge ordinary rates of attendance; whilst many practitioners who have to consider themselves above this sort of thing would do well to take £5 in ready cash. That medical men are feeling acutely the results of all this, may be inferred from this one fact, that I know of an university graduate and honorary surgeon to one of our old-established free dispensaries who not only offers, but has actually taken, clubs at two shillings per head *per annum*, finds medicine for them as well, and attends them within a radius of three miles; and this is quietly trying to be respectable and upholding the dignity of the profession!—Yours, etc., F. H. WORSWICK.

Manchester, March 13th, 1882.

CRAMP.

SIR,—May I solicit assistance by counsel through your columns on the following case? A gentleman, aged 47, in good health, but by no means robust, is frequently troubled with cramp, mostly in the night; it occurs then chiefly in the muscles of the calf, both extensors and flexors, and in the foot, once in the right thigh, apparently in the sartorius. In the daytime it occurs in the intercostal muscles, if anything provokes laughter, in the abdominal recti if he stoops to lace his boots or strains at stool; and, in short, in almost any muscle on the least unusual use of it. I have inquired into every function, and save that he says he seems to have utterly lost all sexual power, and that his bowels are very confined, I can find nothing wrong. He has had no illness for ten years, than a short attack of diphtheria.—Yours obediently,

SPASM.

DAMPNESS AND DRYNESS OF ROOMS.

SIR,—Would you, or any of your readers, kindly inform me of a ready test for the relative dampness and dryness of rooms? I believe absorbent papers from a cobaltic solution answer the purpose, by their colour sensitiveness to moisture; but I know not the strength of solution or the salt needed. This or any other simple and delicate test I should be glad of; as, in the cases to which my attention is directed, mildew forms on clothing kept in the bedrooms on one side of the house, without trace of damp on the walls or flooring, whilst a continued and mild scarlatina appears to go hand in hand with it.—Yours, etc., A. St. J.

* * Tests such as are referred to are sold in the form of flowers, as weather-indicators. They act solely under the influence of moisture or dryness, and would probably answer the purpose. Paper dipped in a strong solution of cobalt nitrate would also do. But by far the best way to test the relative humidity is by the wet and dry bulb thermometer. A room ought to have a relative humidity of about 75 per cent., and a difference of 5° between the two thermometers would secure this. A room begins to be decidedly damp if the difference is less than 4°, and rather too dry if the difference exceeds 6° (see table in Parkes’ *Hygiene*, p. 455).

VILLAGE DOCTORS.

SIR,—In the obituary notice of the late Dr. G. Bodington, in the last issue of your paper, the writer says: “It is remarkable that a village doctor should have arrived in 1840 at these conclusions, which anticipate some of our most recent teachings.” Will he inform us why it is remarkable that a village doctor should have advanced and independent views on medicine? Have not the village doctors frequently and strikingly shown that medical intelligence and knowledge is not to be measured by the population with which it is surrounded? Village doctors want to throw aside the superstitions respect shown to town doctors, and hold to and record the results of their own observation and thought, however divergent from the teachings of town doctors; and much useful knowledge would be recorded, and its value, years afterwards, accepted by the town doctors who assume the position of teachers.—Yours faithfully,

Framlingham, March 12th, 1882.

THE ATTRACTION TO EDINBURGH.

SIR,—Herewith I send you a cutting from the *Edinburgh Evening News* of February 10th, relating to the Double Qualification Examinations here. It reads as follows:

“It would be interesting to have an explanation of one or two facts in connection with Edinburgh medical examinations. Out of twenty gentlemen who have this month passed the first professional examination of the Edinburgh Royal College of Physicians, only two appear to be Scotchmen. Out of twenty-nine who have been admitted to the degrees of L.R.C.P. Edinburgh, only one appears to belong to Scotland. Seven gentlemen, again, have been admitted licentiates of the Royal College of Surgeons, and of these not one is Scotch. The figures are somewhat puzzling.”

The article expresses a desire for an explanation of the facts mentioned—a desire common to many here, and doubtless elsewhere. It appears to me that, if you would give ventilation to the subject in your valuable paper, such an explanation might be forthcoming.

In opening this question, I do not wish to infer either that the examining board is inefficient, or that the examination is inferior to others in its standard of passing. I am aware that the examiners are all eminent and competent men; but as regards the other alternative, I am not so satisfied; certain it is, at any rate, that throughout other medical schools outside Scotland, there is a widespread idea among the unsuccessful that the Edinburgh Colleges are a haven to which they can stretch their poor plucked wings, and find a certain rest. For the sake of these, as well as for others, then, there ought to be an avowal made of the standard of examination. If it be not inferior, it is cruel not to undeceive these plucked ones, and also injurious to the reputation of the Edinburgh Medical School. The belief that the standard of examination is inferior is at least so widespread among those ignorant of the difference between the University degree and the licence of the Colleges, that the merits of the former are often obscured by the supposed demerits of the latter; and not only is the pre-eminence of this University, which was so gracefully recognised by Dr. Kidd, in your issue of February 4th, denied, but for an Englishman to take this University degree, is considered by these ignorant persons to be entering the profession by a “back-door.” Being jealous, therefore, of my University’s reputation, I send you this.—I am, sir, yours faithfully,

CIVIS ACAD. EDINENSIS.

C. S. (Jedburgh).—The payment must obviously depend upon the accommodation and attention afforded, and the value set by the medical man upon his services, and upon the sacrifice of the privacy of his home.

SUBPÆNAS TO MEDICAL MEN.

SIR,—It is almost time that some public protest should be entered against the ruthless system common among solicitors of issuing sudden subpœnas to medical men, without any sort of regard to their evidence, without any kind of inquiry as to what that evidence may be, without any rehearsal of such evidence, or even the most perfunctory endeavour to ascertain its value or worthlessness. A few years ago, I was asked by an officer of a regiment stationed at Parkhurst, as a favour to him, to see the child of a sergeant of his company, the poor child having lately sustained serious injuries in a railway accident on the Caledonian Railway. Finding the little patient hopelessly crippled, I advised my friend to waste no money in the endeavour to ameliorate its condition. I did not even ask the name of the father or child; I saw it that once for five minutes, and never again. One day, many months afterwards, I received a subpoena to attend at the Court of Queen’s Bench, on the next day but one, at ten in the morning, to give evidence. Had I ever reached the witness-box, my testimony would have been an amusing satire on the ardent legal firm that had solicited and enforced it, for I could not remember any definite point in the whole case. I telegraphed to this effect, and wrote most strongly, and the case ending in a compromise out of court, I heard no more about it; but it illustrates in a faint degree the inconvenience to which I have on two subsequent occasions been put, in one of which I did actually manage to reach the court, but—I was not wanted!

Surely we should be allowed to state on paper, as a courteous preliminary proceeding, how much or how little we know; and then, if our evidence be useful, a fair notice might at least be given to us. To neglect a subpoena is, I suppose, to neglect an order of the court, and deference to the law has always been a ruling principle of action in our profession. Might not the law imitate our deference, with a little more consideration for our time, our convenience, and our special utility than they now evince?—Your obedient servant,

GEORGE H. R. DABBS, M.D.

Shanklin, Isle of Wight, March 16th, 1882.

REMARKS ON ANTHRACIC VACCINATION AS A PROPHYLACTIC OF SPLENIC FEVER.*

By L. PASTEUR,
Membre de l'Institut.

THE Editor of the BRITISH MEDICAL JOURNAL has asked me for an expression of opinion on the experiments of vaccination as a prophylactic of splenic fever, performed in Hungary at the request of Baron Kemeny, Minister of Agriculture for that country. These experiments were made by a gentleman belonging to my laboratory, M. Thuillier, whose reports, made to me on his return from Pesth and Kapuvár, are appended. I must here observe that, unfortunately, M. Thuillier only had at his disposal animals of which a certain number were affected with various diseases, and likely to die during the course of the vaccination from the effects of these diseases, without reference to splenic fever. However that may be, I am the first to recognise that these experiments have not been so completely successful as those which were performed in France, and which are now reckoned by dozens. I speak, let it be understood, of the experimental verification of the efficacy of the vaccination by means of final inoculation with highly virulent material. After the return of M. Thuillier to France, I feared that the small difference in the results to which I refer must be attributed to the difference between the race of animals in France and Hungary. Fortunately, my fellow-worker and myself soon discovered that it was not so. Numerous trials made in January and November last clearly showed that the first vaccine employed by M. Thuillier, and which I had myself given to him at the moment of his departure, was, unknown to me, rather weak in reference to a second vaccine, intended to complete the vaccination commenced by the first. This explains how it is that the second vaccine caused the death of some sheep after the second vaccination. It cannot, however, in any way compromise the success of the new method of vaccination.

At the International Medical Congress held last August in London, I stated that 20,000 sheep had already been vaccinated. The figures at the present moment are, 130,500 sheep, 19,000 oxen, cows, and horses; in all, 150,000 head. In proportion as we approach the months in which deaths from splenic fever are most considerable, vaccinations increase to an extraordinary extent. I am convinced that, from the month of April to the month of September next, the new method of inoculation will have been brought to bear on more than a million of animals, without reckoning what is done out of France.

I have noted the article of one of the *privat-docents* of the Faculty of Pesth, who made part of the commission on M. Thuillier's experiments. This gentleman has, it appears, many preconceived notions on the subject of microphytic diseases. He has thrown himself into all kinds of speculative considerations on imaginary dangers on the subject of the new method of vaccination. I deplore—without, however, feeling any surprise—the foregone conclusions of the *privat-docent*. All scientific novelties are subject to inconsiderate criticism. In the present case, this only troubles me with regard to the injury it may inflict on agriculture and on stock-raising in Hungary. It would be disastrous if it were to have the result of retarding the application of vaccination for the prophylaxis of splenic fever in a country where such a remedy is so much required.

REPORT ON ANTHRACIC VACCINATION AT BUDA-PESTH. BY M. L. THUILLIER.

Experiments have been made in the establishment of the Veterinary Institute at Buda-Pesth, under the auspices of Baron de Kemeny, the Hungarian Minister of Agriculture and Industry, and under the superintendence of a commission nominated by his Excellency, and composed of nine members: Dr. Tormay, President, Director of the Veterinary Institute; Dr. Azary, Secretary, Professor of the Institute; Dr. Thanhoffier, Dr. Czako, Dr. Liebermann, Professors of the Institute; Dr. Fodor, Professor of Hygiene to the Faculty of Medicine; Dr. Korányi, Professor of Therapeutics; Dr. Plosz, Professor of Chemistry; and Dr. Rózsahegyi, Privat-Docent of the Faculty.

* M. Pasteur, for reasons explained in his address at the International Medical Congress, employs the term "vaccination" for anthracic inoculation.

Sixty sheep, and ten animals belonging to the bovine genus, were set apart for these experiments. They were divided in the following manner:—thirty Hungarian sheep, thirty Merino sheep, three Hungarian oxen, three Hungarian cows, three Hungarian calves, one young buffalo. These animals were bought at the city market two and three days before the first inoculation. Some of the sheep were more or less weakly animals. They were divided in the following manner:—fifteen Hungarian sheep and fifteen Merino sheep intended to be inoculated; thirteen of each species by recent cultivated material, containing only filaments and no spores; two of each species by less recent cultures brought from Paris, and only containing spores; two cows, one ox, and two calves intended to be vaccinated by recent cultures; fifteen Hungarian and fifteen Merino sheep, two oxen, one cow, one Hungarian calf, and the young buffalo were reserved as test-animals (*temoins*). The whole of the sheep were placed together in a building destined for glandered horses; the cattle were lodged in stables at the Institute.

The first vaccinal inoculation was performed at midday on September 23rd, 1881. The four sheep were inoculated by spores of a culture dating from August 10th, 1881. All the inoculated animals tolerated the vaccinal fever which followed this inoculation very well. On the morning of October 2nd—that is to say, nine days after the inoculation—one of the thirteen sheep inoculated by recent cultures was found dead. The superintending commission made a necropsy, and declared the sheep to have died of catarrhal pneumonia. The second inoculation was performed on October 15th, at midday. The four sheep inoculated on September 23rd by spores were again inoculated on that day by a culture of the second vaccine, dating from June 25th, 1881, likewise containing spores only. The inoculated animals bore very well the vaccinal fever which resulted from this second dose of virus. On this occasion, also, one of the Merino sheep inoculated by recent culture died. It was found dead on the morning of the 8th. In this case, likewise, necropsy showed that death was not a consequence of the inoculation. The superintending committee declared that the sheep had died of catarrh of the stomach. The inoculation of the non-diluted virus took place on October 17th. The superintending committee having expressed a desire to reserve some sheep for ulterior researches, only twenty-five sheep of each lot were inoculated. Each lot comprised thirteen Hungarian and twelve Merino sheep. All the larger animals were inoculated with the virulent material. The two inoculated Hungarian and the Merino sheep which were reserved had been vaccinated by recent cultures.

On the morning of the 19th, fourteen of the test (*temoins*) sheep were found dead; on the 20th, four more succumbed, and five others died on the succeeding days. Thus, out of the twenty-five test sheep (*temoins*), twenty-three died. The clinical symptoms, the cadaveric lesions, the presence of bacteria in the blood, showed the cause of death in all the victims to be anthrax. However, one cachectic sheep which died with symptoms of splenic fever, did not show, at the necropsy made by the commission, any of the naked-eye or microscopic characteristics of that disease. On the morning of the 26th, one of the Hungarian sheep vaccinated by recent culture was found dead. The commission made a necropsy, and declared the cause of death to be cachexia induced by *distoma hepaticum*. Amongst the cattle, no fever nor any morbid appearance whatever supervened amongst those which were vaccinated. In the test series, the temperature rose two or three degrees. There was a little depression, but no want of appetite.

These experiments have fully verified the harmlessness and the efficacy of vaccination. The experiment made on the series of sheep vaccinated by culture of old date brought from Paris in closed tubes showed that the virus may be transported under these conditions for any distance without losing its valuable qualities.

REPORT ON INOCULATION AT KAPUVAR.

The Buda-Pesth experiment was repeated at Kapuvár on one hundred sheep and twenty oxen. Fifty sheep and fourteen oxen were vaccinated; fifty sheep and six oxen were reserved as test animals (*temoins*) of the virulent inoculation. After the second vaccination, six sheep died; after the virulent inoculation, fifty-nine sheep and one test cow (*temoins*) died. The surviving sheep and three out of the five surviving cows were very seriously ill. One vaccinated sheep died, the other sheep and oxen inoculated were not affected. Twenty-six sheep out of a flock ravaged by anthrax were also inoculated. Between the first and second vaccinal inoculation, two of these sheep died, one of the remainder of the flock died. After the second inoculation, ten of the inoculated sheep died; nine have since died. It is not known whether there have been any subsequent deaths from anthrax in the remainder of the non-vaccinated flock.

CLIMATE AND FEVERS OF INDIA.

Delivered before the Royal College of Physicians of London.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE II.

In my last lecture, I gave a brief description of the physical characters of the country, people, climate, and of the prevalence of fever in India, and of the nature and origin of malaria. I now proceed to consider the types of fever that are referred to malaria, which are of endemic prevalence throughout the continent; and, under certain seasonal influences, assume an epidemic character. In this country, there may be little difficulty in diagnosing the character of a fever, or in tracing it to its proper origin; but in India, there is often great difficulty in distinguishing one fever from another—no one symptom or pathological change being absolutely pathognomonic of either. It would seem that, the initial process of fever being set up, its course and result is determined by individual peculiarity, and by its general rather than by specific causes. Enteric fever occurs in India as it does in England, and from the same causes; but, as I shall show, all fever in India, with diarrhoea, Peyerian ulceration, and typhoid symptoms, is not necessarily derived from enteric excreta. Fevers in India differ from those of temperate climates, more in degree perhaps than in essential principles. There is no fever now prevalent in India which has not, at one time or other, occurred in Europe, nay even in our islands.

The chief factors in the causation of fevers seem to be vicissitudes of temperature, meteorological states, emanations from marshy or dry places, or from ground polluted by fecal or other organic matter, from impure water; such also being determining causes of cholera, dysentery, and diarrhœa. The specific poisons which produce typhus and enteric fever are probably as active in India and other tropical countries as here; but I submit that fever, with Peyerian ulceration, occurs from other causes as well as fecal contamination; nor is there, I venture to believe, any physiological or pathological objection: for that which in one man produces a congested spleen, stomach, or liver; in another congestion and ulceration of the colon; may, in a third, under modifying circumstances, have the effect of congesting, and finally ulcerating, the lungs, and its glandular structures.

With reference to the natural occurrence of febrile and cholera, I would remark that they seem to be closely etiologically linked with, and in some respects present a closer resemblance to, levers, than may at first sight appear, though they are not always under the same epidemic law of prevalence. (*Wide Table.*)

Annual Deaths from Cholera in Mexico, and from other diseases, from 1817 to 1850.

Ancient Hindu writers mention three varieties of a person, types of their nature: "good natured", literally "those with a good nature"; and "evil nature", literally "those with a bad nature"; and "mixed nature", literally "those with both good and bad nature". It is not clear whether the term "mixed nature" meant, as it still does in the rest of the world, and, especially, among our modern Western Americans, in the broadest sense.

No part of the fever in India is exempt from intermission, fever, though it may be continuous in character. When it is continuous and does not intermit, the fever term is a continuous fever and is not a fever of India, and intermission, however, is not essential to the definition of a fever, for a remittent fever is still a fever, though it may be continuous.

So, then, we have fever, Typh fever, Typhal fever, Bangal fever, Dumb fever, Postague fever, Malar fever, Malar fever, Nag fever, and fever, merely as expressions for

varieties with no fundamental differences, though there may be certain subordinate features which distinguish each, depending on the local climatic and meteorological conditions which originate and govern epidemic prevalence, when, under the dominion of seasonal influences, certain localities are prolific in supplying the cause. Let me give a recent example.

A telegram from Lahore, dated October 4th, 1881, ran thus: "Two thousand two hundred and sixty-five persons died at Amritsar during the eleven days ending with the 1st instant. One-half of these were children. The heavy mortality is almost wholly owing to choleraic fever, which still prevails in many towns in the Punjab."

Dr. Ross says: "The fever was of a special type, which appears in cholera years, and resembles relapsing fever very closely. The course and progress of the disease was distinct from ordinary malarious fevers, and neither typhus nor typhoid existed. Some 12,000 people died in two months or thereabouts. The heavy rainfall, which commenced in June, caused immense collections of water over a tract of canal-irrigated ground to the north and north-east of the city. The water-level rose to an unprecedented height; all the wells became thoroughly polluted, and the water tasted distinctly brackish. The fever prevailed with its utmost force in September and the early part of October. There were rigors (fearfully severe), headache, insomnia, disordered bowels, fever, suppression of urine, with death from coma frequently within a few hours after seizure; but the rice-water evacuations and vomit of cholera appeared in very many instances during the course of an attack of the fever. The people, by the end of October, began to show the exhausting effects of the fever: enlarged spleen, anæmia, debility, jaundice, and the usual sequelæ; told fatally on their enfeebled constitutions."

Moreover, writing twenty-six years ago, says: "Intermittents, which are most frequent throughout India, attack the European and the native in nearly the same proportion; the mortality in both approximating equality. Sanitary work has made great strides in India since then; and the result is, that the death-rate from fever is three instead of thirteen in the thousand: it continues higher in the native, simply because they are not subject to the same sanitary control as the Europeans."

is much the same in India as elsewhere. There are the ordinary chills and fevers, called by various names, diaphoresis, and an interval of freedom; congestion and functional derangement of various organs; and the same typical forms—the quotidian, tertian, and quartan. These have been further divided into double quotidian, double tertian, triple tertian, double quartan, and so on; whilst, on the other hand, fevers have been extended to weeks, months, and years.

The average duration of the 6t is about sixteen hours in the quotidian, and the 6t is found in the quotidian in places as distant as South America, where it is reported to be only one day for the quotidian, and the tertian, the 4t, and the quotidian. For example, in the Sudan, in Egypt, in the Sudan, in Africa, the West Indies, and the 6t is the quotidian in the 4t, 5t, 6t, 7t, 8t, 9t, 10t, 11t, 12t, 13t, 14t, 15t, 16t, 17t, 18t, 19t, 20t, 21t, 22t, 23t, 24t, 25t, 26t, 27t, 28t, 29t, 30t, 31t, 32t, 33t, 34t, 35t, 36t, 37t, 38t, 39t, 40t, 41t, 42t, 43t, 44t, 45t, 46t, 47t, 48t, 49t, 50t, 51t, 52t, 53t, 54t, 55t, 56t, 57t, 58t, 59t, 60t, 61t, 62t, 63t, 64t, 65t, 66t, 67t, 68t, 69t, 70t, 71t, 72t, 73t, 74t, 75t, 76t, 77t, 78t, 79t, 80t, 81t, 82t, 83t, 84t, 85t, 86t, 87t, 88t, 89t, 90t, 91t, 92t, 93t, 94t, 95t, 96t, 97t, 98t, 99t, 100t, 101t, 102t, 103t, 104t, 105t, 106t, 107t, 108t, 109t, 110t, 111t, 112t, 113t, 114t, 115t, 116t, 117t, 118t, 119t, 120t, 121t, 122t, 123t, 124t, 125t, 126t, 127t, 128t, 129t, 130t, 131t, 132t, 133t, 134t, 135t, 136t, 137t, 138t, 139t, 140t, 141t, 142t, 143t, 144t, 145t, 146t, 147t, 148t, 149t, 150t, 151t, 152t, 153t, 154t, 155t, 156t, 157t, 158t, 159t, 160t, 161t, 162t, 163t, 164t, 165t, 166t, 167t, 168t, 169t, 170t, 171t, 172t, 173t, 174t, 175t, 176t, 177t, 178t, 179t, 180t, 181t, 182t, 183t, 184t, 185t, 186t, 187t, 188t, 189t, 190t, 191t, 192t, 193t, 194t, 195t, 196t, 197t, 198t, 199t, 200t, 201t, 202t, 203t, 204t, 205t, 206t, 207t, 208t, 209t, 210t, 211t, 212t, 213t, 214t, 215t, 216t, 217t, 218t, 219t, 220t, 221t, 222t, 223t, 224t, 225t, 226t, 227t, 228t, 229t, 230t, 231t, 232t, 233t, 234t, 235t, 236t, 237t, 238t, 239t, 240t, 241t, 242t, 243t, 244t, 245t, 246t, 247t, 248t, 249t, 250t, 251t, 252t, 253t, 254t, 255t, 256t, 257t, 258t, 259t, 260t, 261t, 262t, 263t, 264t, 265t, 266t, 267t, 268t, 269t, 270t, 271t, 272t, 273t, 274t, 275t, 276t, 277t, 278t, 279t, 280t, 281t, 282t, 283t, 284t, 285t, 286t, 287t, 288t, 289t, 290t, 291t, 292t, 293t, 294t, 295t, 296t, 297t, 298t, 299t, 300t, 301t, 302t, 303t, 304t, 305t, 306t, 307t, 308t, 309t, 310t, 311t, 312t, 313t, 314t, 315t, 316t, 317t, 318t, 319t, 320t, 321t, 322t, 323t, 324t, 325t, 326t, 327t, 328t, 329t, 330t, 331t, 332t, 333t, 334t, 335t, 336t, 337t, 338t, 339t, 340t, 341t, 342t, 343t, 344t, 345t, 346t, 347t, 348t, 349t, 350t, 351t, 352t, 353t, 354t, 355t, 356t, 357t, 358t, 359t, 360t, 361t, 362t, 363t, 364t, 365t, 366t, 367t, 368t, 369t, 370t, 371t, 372t, 373t, 374t, 375t, 376t, 377t, 378t, 379t, 380t, 381t, 382t, 383t, 384t, 385t, 386t, 387t, 388t, 389t, 390t, 391t, 392t, 393t, 394t, 395t, 396t, 397t, 398t, 399t, 400t, 401t, 402t, 403t, 404t, 405t, 406t, 407t, 408t, 409t, 410t, 411t, 412t, 413t, 414t, 415t, 416t, 417t, 418t, 419t, 420t, 421t, 422t, 423t, 424t, 425t, 426t, 427t, 428t, 429t, 430t, 431t, 432t, 433t, 434t, 435t, 436t, 437t, 438t, 439t, 440t, 441t, 442t, 443t, 444t, 445t, 446t, 447t, 448t, 449t, 450t, 451t, 452t, 453t, 454t, 455t, 456t, 457t, 458t, 459t, 460t, 461t, 462t, 463t, 464t, 465t, 466t, 467t, 468t, 469t, 470t, 471t, 472t, 473t, 474t, 475t, 476t, 477t, 478t, 479t, 480t, 481t, 482t, 483t, 484t, 485t, 486t, 487t, 488t, 489t, 490t, 491t, 492t, 493t, 494t, 495t, 496t, 497t, 498t, 499t, 500t, 501t, 502t, 503t, 504t, 505t, 506t, 507t, 508t, 509t, 510t, 511t, 512t, 513t, 514t, 515t, 516t, 517t, 518t, 519t, 520t, 521t, 522t, 523t, 524t, 525t, 526t, 527t, 528t, 529t, 530t, 531t, 532t, 533t, 534t, 535t, 536t, 537t, 538t, 539t, 540t, 541t, 542t, 543t, 544t, 545t, 546t, 547t, 548t, 549t, 550t, 551t, 552t, 553t, 554t, 555t, 556t, 557t, 558t, 559t, 560t, 561t, 562t, 563t, 564t, 565t, 566t, 567t, 568t, 569t, 570t, 571t, 572t, 573t, 574t, 575t, 576t, 577t, 578t, 579t, 580t, 581t, 582t, 583t, 584t, 585t, 586t, 587t, 588t, 589t, 590t, 591t, 592t, 593t, 594t, 595t, 596t, 597t, 598t, 599t, 600t, 601t, 602t, 603t, 604t, 605t, 606t, 607t, 608t, 609t, 610t, 611t, 612t, 613t, 614t, 615t, 616t, 617t, 618t, 619t, 620t, 621t, 622t, 623t, 624t, 625t, 626t, 627t, 628t, 629t, 630t, 631t, 632t, 633t, 634t, 635t, 636t, 637t, 638t, 639t, 640t, 641t, 642t, 643t, 644t, 645t, 646t, 647t, 648t, 649t, 650t, 651t, 652t, 653t, 654t, 655t, 656t, 657t, 658t, 659t, 660t, 661t, 662t, 663t, 664t, 665t, 666t, 667t, 668t, 669t, 670t, 671t, 672t, 673t, 674t, 675t, 676t, 677t, 678t, 679t, 680t, 681t, 682t, 683t, 684t, 685t, 686t, 687t,

the same time, the natives, and the natives in the past. In the
the same time, the natives, and the natives in the past. In the
the same time, the natives, and the natives in the past. In the

...and, in the case of the latter, the fact that the same is not found in the same place. The fact that the same is not found in the same place is not a proof of the fact that the same is not found in the same place. The fact that the same is not found in the same place is not a proof of the fact that the same is not found in the same place.

[illegible]

Many are very similar, two to one, three to one, and the same old. Children are not about the same size, but their mortality is 1 per cent. (1900).

They are not, however, contagious, the fruiting of the scabian; but it has been observed to me that the "dry and hot" of the residence of the natives may sometimes induce them. They are certainly very peculiar to the high, dry, and feverish, and in the present season the patients may be more numerous. The early use of antiseptic remedies may modify the natural course of the disease; and, when they do not pre-

vent, may render the return of the paroxysms irregular, or transform remittent into ague, or the reverse. Determinate periods are not of much pathological significance. When a man contracts ague, the type will depend on himself, his antecedents, and his surroundings, not on difference in the nature of the disease.

Table showing Admissions and Deaths from Intermittent Fever in Madras Army, British troops.

Europeans of Madras Army at large Stations for Ten Years.	Strength of each Class.	Admissions Intermittent Fever.	Deaths from Intermittent Fever.	Percentage Admissions to Strength.	Percentage Deaths to Strength.	Percentage Deaths to Admissions.
Men	75,121	6,014	57	8.125	0.075	0.950
Officers	2,319	98	0	4.226	—	—
Women	6,559	249	0	3.796	0.45	1.204
Children	9,877	524	0	5.315	0.81	1.526

I need not discuss the various theories of fever which place the *fons et origo mali* either in the blood or in the nervous system; the cause being something inhaled, ingested, or autogenetically produced, which operates directly through the blood as a carrier, or through the blood itself, altered by the poison. Ague clearly is a neurosis in the outset; the *materies morbi*, acting on the central nervous system, sets up vaso-motor irritation, dilatation and engorgement of the vessels supplied by the splanchnic, the skin and external parts being brought into an opposite condition. The result is the rigor and pallid shrunken skin; whilst there is internal congestion, which is followed by reaction, when the skin and exterior parts become vascular, but pyrexia increases, followed by profuse sweating, and then a return to the normal condition.

The light thrown on the functions of the nerve-centres enables us to indicate the part disturbed; but we know no more of the intimate nature of the molecular changes which result, than we know how quinine diminishes blood-pressure or affects periodicity, or how a drop of cobra-virus so instantly changes the respiratory centres as to paralyse them; but we do, to a certain extent, know how to modify, control, or even prevent them.

The cold stage is generally preceded by lassitude, muscular pains, dull aching sensations extending along the course of the limbs, yawning, sighing, anorexia, thirst, headache, occasionally a coated tongue, nausea, or vomiting; sometimes loose dark-coloured motions. Slight rises in temperature, sometimes followed by chills, and then diaphoresis, may, especially in those who have suffered previously, constitute the whole paroxysm, and, passing away, leave the patient well as before; but frequently they usher in a rigor; preceding this, there is increased elimination of urea (as shown by Professor Parkes and Sidney Ringer), which is continued through the cold and pyrexial stages, diminishing until, in the intermission, it falls below the standard of health. The amount of urea and the temperature stand in relation to each other, the result of increased metamorphosis. Parkes found that the watery part is increased before and during the cold stage; most abundant at the termination of the cold, but decreases slowly during the hot, rapidly during the sweating stage; nor does it appear to stand in relation to the quantity of water drunk. The uric acid is also increased considerably during the fit, and after it; urates are deposited freely, though to this there are occasional exceptions. The chloride of sodium is increased during the hot stages (Traube and Ringer) to five times its amount, and phosphoric acid by one-eighth.

The chilly feeling, as if cold water were running down the back, soon passes into rigors; the features are shrunken and pallid; the fingers shrivel and turn blue; the skin is rough (goose-skin); the body is in a state of tremor; the teeth chatter; and the muscular system is convulsed until the bed or couch is shaken. Often there are nausea, sickness, and headache. The temperature, notwithstanding the feeling of cold, is high, and there is a sense of internal heat which is very distressing; this and the nausea or retching are due to the highly congested state of the gastro-intestinal mucous membrane. The temperature begins to rise before the chilly sensation comes on, and attains its maximum, which may be 104° to 106° , towards the end of the hot stage. In typical cases, the temperature returns during the interval to its normal standard. This cold stage varies in duration from a mere passing chill with a barely perceptible rigor, to severe shiverings lasting two or more hours; reaction then takes place, bringing in the hot stage.

Impey found that the average duration of the cold stage in 108 cases was 1 hour and 25 minutes; of the hot, 2 hours 3 minutes; and of the sweating, 48 minutes. But there were great variations. In 3 cases, there was no cold stage at all. In 2, it lasted 10 minutes; in 5, not more than 15 minutes; and in 9, about half an hour. The longest duration was 9 hours. In 240 cases treated by Dr. Waring

in Mergui Civil Hospital, there was no distinct cold stage in 116 cases. The cold stage is not always free from danger: when the action of the poison has been very intense, the nervous force seems to be overwhelmed by it; an algid state supervenes, the heart fails, the skin becomes cold and clammy, and the patient may die in a state of collapse; or, after remaining for hours—it may be forty-eight—in this condition, reaction takes place, and the hot stage sets in; in other cases, after partial reaction, the symptoms of collapse supervene; and this so closely resembles the collapse of cholera, that if the patient be seen for the first time when in that condition, there might be some doubt as to the diagnosis. Instances are recorded by MacCulloch and others, and I have seen them, of persons having died in a few hours, in the Maremma of Tuscany, from the intensity of the poison! During the cold stage, the spleen and other abdominal viscera and gastro-intestinal mucous membrane are much congested. Cardiac action is depressed, and the pulse fails. After a certain duration, reaction takes place; the skin becomes hot and flushed; the pulse quickened; the temperature rises to 103° or 104° —sometimes as high as 105° or 106° , the urine is diminished, and there is thirst; the heart and arteries pulsate violently; the head aches; the temples throb; and delirium may supervene. This stage lasts for an uncertain period, from an hour to twelve or fourteen hours (I saw a case recently in which it had lasted fourteen), but at length gives way; moisture bedews the forehead and gradually the whole body, until the patient sweats so profusely as to saturate the clothing and bedding. This continues for a variable period, when a condition of apyrexia is established, and the patient feels relieved, though greatly exhausted; the state continues till the recurrence of the next paroxysm, which is not free from danger, for fatal syncope or exhaustion may occur. When this seems to threaten, the patient should be warned against an attempt to rise or make any exertion. This has been impressed on me by more than one case. A staff officer in Calcutta, who had just gone through a paroxysm when I saw him, lay pale, exhausted, and bedewed with cold clammy sweat, but felt much relieved, and was reading; he expressed a desire to remove into another room; but, observing his depressed condition, I instructed his attendants not to allow him to move. Shortly after I left, he rose, made a few steps, sank, and died on the floor.

The period of incubation varies, depending, probably, on the intensity of the miasm and the susceptibility of the individual; and the virulence has been so great as to induce immediate collapse, or so slight as to cause simply *malaise*, or anomalous symptoms known as masked malarious fever; and it is worthy of note that some persons say quinine itself produces similar symptoms. Those who have suffered before seem to be most susceptible; a chill, without the intervention of fresh malarial influence, is sufficient to develop fever, as is often seen in cold and damp climates. A few days—it may be a month—intervene after exposure to malarial influences before a well marked attack of fever appears, though *malaise*, headache, etc., may have been present for days. Where a party of men have been exposed to malarial emanations, different types of fever may result; one will have ague, another remittent, a third only feel rather ill, another have dysentery, or even choleraic symptoms. I have known a month to elapse after exposure before the first paroxysm of ague. Simple ague, however, generally occurs in a few days. Among the inhabitants of notoriously malarious districts, a considerable proportion do not suffer from fever at all, but present a sallow anæmic appearance, with blanched lips and eyelids, pearly eyes, tumid abdomen, weak and irritable heart, hæmic murmurs, and a general appearance of cachexia and hebetude; it may be neuralgia, asthma, albuminuria, or anasarca and ascites. The spleen is enlarged, and the liver also, but not so frequently as the spleen. The bowels are irritable, diarrhoea is not unfrequent, and, as the cachexia progresses, there is a tendency in the diarrhoea to assume the white appearance of the so-called tropical diarrhoea. The cachexia becomes more profound, and death follows from asthenia, or from coagula in the right heart or pulmonary artery.

The appearance of the first paroxysm of ague is not to be regarded as determining the duration of the period of incubation, for symptoms of a less definite kind often precede it, and which at last culminate in the fit; sometimes no distinct febrile paroxysm occurs at all, and the patient gradually lapses into the state of cachexia I have described. Europeans, who generally get away before matters have advanced so far, are often surprised by having a first attack of ague after leaving. I have repeatedly seen people from Assam and other parts of Bengal, who, during a long residence there, have never had fever, become affected on board-ship, or after arrival in England. In this state, especially where the spleen is enlarged, the patient becomes hæmorrhagic or scorbutic, and there is a tendency to ulceration or gangrene;

noma, gangrene of the scrotum, and cancrum oris, frequently occur among natives, and the slightest abrasion or ulceration is apt to pass into a state of phagedæna. There is a tendency to the formation of fibrinous coagula in the heart and arteries; death occurs rapidly, with symptoms of apnoea. The tendency to embolism in the arterial circulation is shown in the gangrene of limbs and other parts. And here I would call attention to another morbid susceptibility impressed on those who are the subjects of malarial cachexia, and on others living in a malarious climate—the so-called urethral fever, very apt to follow on catheterism. The mere passage of an instrument will produce a severe attack of rigors, followed by fever and sweating, and it may give rise to symptoms of a pyæmic nature.

I may also notice a form of fever connected with a malarial origin, in which the spermatic cord, epididymis, scrotum, and occasionally the prostate gland, are congested and swollen, attended with great suffering, and sometimes accompanied by gastralgia, nausea, and vomiting. This form of fever not unfrequently attends the periodic hyperæmia which leads to permanent hypertrophy—a condition frequently associated with a disordered and dilated state of the lymphatics, and accompanied by periodic returns, which the natives attribute to lunar influences; and by the presence of filaræ in the blood, as pointed out by Lewis, Manson, Bancroft, and others. These febrile recurrences are sometimes called elephantoid fever, and the hypertrophy elephantiasis, which thus seems to be closely related etiologically to other forms of malarial fever.

(To be continued.)

THE LUMLEIAN LECTURES ON INFLAMMATION.

Delivered before the Royal College of Physicians.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College, London.

LECTURE II. PART I.—ÆTIOLOGY OF INFLAMMATION.

IN the last Lecture, I endeavoured to show that if we take the word inflammation to mean what it has always meant, namely, an acute local disorder, in which the affected part is hot, red, and swollen, we can account for the concurrence of these objective changes completely on the theory that they are the direct physiological effects of injury; the ground for this view being the observation that, by acting on an organ in such a way as merely to depress or impair its vitality, without destroying its texture or otherwise interfering with its continuity with surrounding parts, we induce in that organ a state of things which, although not inflammation, is so immediately related to it, that out of it, without any intervening process of development, inflammation at once declares itself.

For what I attempted to show in last lecture was, that it is possible, under favourable circumstances, for inflammation to come into existence *de novo*. That in general its development is gradual, arising from the gradual action, extension, or dissemination of the cause; but if the cause be of such a nature that it damages a considerable area at once and in the same degree, as when for a time you cut off the circulation from an external organ, or subject it to the action of high temperature, the physiological effect follows directly on the injury. What we saw in the case of the rabbit was that, immediately after it had been exposed to a temperature not high enough to speed its tissues, there was no visible effect whatever; the circulation was normal, and no sign except that the heat had been applied. But soon afterwards it became hot, red, and swollen. The invisible change of which these physical signs were the inevitable consequence, and which I have previously labelled *inflammation*, being understood that we mean by the term the state of things which immediately precedes the inflammation, whatever may be the nature of the agent that produces it.

I now will venture to give a simple conception of the origin of *inflammation*, of a pathological process, by reason of its very simplicity, extremely difficult to grasp. Inflammation is itself a pathological thing, and we are apt to think of it in connection with a state of general excitation, that it is a hard indeed to reason, by the mind, as regards its phenomena, not as outward signs of an inward process, not

as visible indications of disordered function, but merely as the expressions of loss and failure.

The question with which I have to deal to-day lies behind the one which was discussed in the first lecture. In saying that the immediate antecedent of inflammation is local damage, and that it may consequently be defined as the physiological effect of injury, it might appear as if we had already settled the question of its origin. Thus, for example, when we see the state of inflammation brought into existence as the immediate result of damage due to an obvious cause, we could not be accused of inaccuracy in attributing the pathological result produced to the injury inflicted, and most people would regard it as mere quibbling to suggest that some other agent, to which the obvious cause was merely auxiliary or predisposing, lay concealed behind it. Yet it is suggested, and even dogmatically asserted by some pathologists, that, in the genesis of every inflammation, however definite may be the relation between the antecedent damage and consequent reaction, this relation is, after all, merely secondary. The true cause is the introduction into the damaged tissue from the atmosphere of invisible germs.

This theory of the etiology of inflammation, when so presented, appears exaggerated and even absurd. There is, however, much more to be said in favour of it than at first sight appears; and it will be the purpose of this lecture to endeavour to come to a right conclusion as to the way in which, if not germs, minute organisms, co-operate, as they unquestionably do, with other more easily recognised conditions, in the production of inflammation.

I think I shall best present to you the points which require consideration by again beginning with inflammation of the cornea, as being more within reach of experimental investigation than any other. The particular case to which I will ask your attention—that of the superficial inflammation of the cornea, which occurs after severance of the fifth nerve—is advantageous for our purpose, first, because the antecedent injury is remote from the seat of pathological change, and exercises no direct influence in producing it, so that free play is given for the operation of other concomitant circumstances; and secondly, because the organ primarily affected is so transparent and so superficial, that the slightest change in it can be appreciated by the naked eye; at the same time, that its structure is so simple, that the finer details of such change can be easily investigated by the microscope. Let me first state what these changes are, and in what order they occur.

As regards the eye, the immediate effects of the severance of its afferent nerves are, of course, the abolition of the protective reflex of winking and the arrest of the secretion of tears, whereby the corneal surface is exposed to a variety of accidental injuries, at the same time that it is deprived of the mechanism by which, under natural conditions, foreign bodies are removed from the surface of the cornea and conjunctiva. The subsequent effects are as follows.* About twelve hours after the section of the nerve (in the rabbit), the cornea begins to lose its brightness. By the end of twenty-four hours, the turbidity is distinct; and it, at this period, the animal be killed and the cornea excised, it is found that the epithelium has become partially detached. Up to this time, there is no congestion of the limbus, no exudation of leucocytes from the dilated veins—in other words, no inflammation. These soon afterwards follow, but as yet the change is apparently a very slight one, and it is confined to the surface of the cornea. What is its nature? To find this out, we have to appeal to the microscope. Sections of the cornea at this stage show that the corneal corpuscles have, in the peripheral parts, simply wasted away. There is no “proliferation”, nothing to be seen suggestive of disorder of nutrition in the sense of Gossard and Bowman. What has happened is, that the surface-layers of corneal tissue have died, and, in consequence, that the epithelium is beginning to separate. If we look at the same eye about thirty-six or forty-eight hours later, the state of things is very different. The cornea is surrounded by a ring of inflammation which has extended to the whole circumference; its surface is uneven and opaque, and, on microscopic examination, it is found that its whole tissue is pervaded by cellular corpuscles, some of which have escaped from the capillary vessels, while others have entered from the conjunctival sac. Now, at a still later stage, you find it way into the anterior chamber, and the destruction of the eyeball eventually involves the whole eyeball, I need not dwell on this in descending; for to us the whole value and interest of the process I have described relates to its mode of origin, not to its progress.

Let me first state what evidence we have that the damage of the cornea, which, in any other case, is the immediate antecedent of inflammation, can be attributed to the cutting off from an organ so richly supplied with nerves as the cornea, of whatever trifling or other nature the injury be concerned in it by the section of its afferent nerves. Without

* See also the Lecture on the Physiology of the Eye, delivered at the Royal College of Physicians, London, in 1879, and the Lecture on the Physiology of the Eye, delivered at the Royal College of Physicians, London, in 1880.

going so far as to deny the possibility of such influence, it is demonstrably inadequate to produce the result; for it has been conclusively proved that if, after section of the trigeminus on one side, the eye be carefully nursed, *i.e.*, protected from what may be called rough accidental injury during the process, no change whatever ensues; and, further, that if both eyes be subjected simultaneously to irritation of the same kind and degree, the paralysed eye is not one whit more affected than the sound one;* so that there is no ground, so far as the cornea is concerned, for supposing that loss of innervation acts either as an exciting or as a predisposing cause of inflammation.

This being admitted, it is evident that the real cause of damage is traumatic, *i.e.*, it is dependent on the fact that the unprotected and feelingless eye is brought by the animal repeatedly into collision with surrounding objects in such a way as to spoil the surface of the cornea; and we are justified in this conclusion by the observation that a spoiling of exactly the same kind can be produced experimentally by mechanical means, provided these are of such a nature as to leave the epithelium intact. But the question which now interests us lies behind this. What we have to ask is, not how the surface was damaged, but how it happens that this damage leads to inflammation. A dozen years ago, we should without hesitation have said, the disordered nutrition of the non-vascular cornea extends by virtue of continuity of structure to the vascular limbus, causing the vessels to exude liquor sanguinis, and the connective elements in their neighbourhood to proliferate. Such an explanation is no longer possible, for we know that the primary damage has nothing to do with proliferation; its condition is simply (to borrow Mr. Lister's expressive language) "approximated to the condition of ordinary matter." The question is, how does this purely negative change acquire the power of so affecting, or as we may, without assuming too much, call it, infecting, the surrounding vascular tissues? The answer which modern pathologists make to this question is simply—micrococci; and this, indeed, is the only one that can be given; for neoparalytic keratitis is a type of what may be called a mycotic inflammation, one of which the spread from tissue to tissue is accompanied by the growth and multiplication of those organisms.

Twenty, or even ten, years ago, we should, for want of the means of observation, have failed to recognise them. Now, their existence can be determined (thanks to recent methods of preparation) with as much certainty as pus-corpuscles, and almost as easily. Admitting all this, we have still not got to the root of the matter. In the case of the cornea, it is scarcely necessary to show that, however probable it may be that micrococci are the agents by which the primary lesion extends its influence to the surrounding vascular structures, their appearance on the scene is subsequent to the damage of which they are, in fact, among the pathological consequences. In other words, while their presence is the proximate cause of the secondary iritis and conjunctivitis, it does not follow that they are but originators of the whole process. The question of the mode of origin of acute abscesses is a similar one. Dr. Ogston has, I think, pretty conclusively shown that micrococci invariably take part in this process, and act as if they were the sparks from which every such inflammatory focus is kindled.† All this we may admit, and at the same time demur to the inference that he seems to draw from it, namely, that acute inflammation in general depends on the morbid action of septic organisms. As regards this particular instance, we have sufficient reason for demurring, in the consideration that an acute abscess is no more a primary inflammatory lesion than the conjunctivitis and iritis with which we have compared it. An abscess does not come into existence in a healthy organ *d'emblée*; it must always have been preceded by an inflammatory process. The proof, therefore, that micrococci were concerned in its origin, even if it could be carried so far as to show that around them the first pus-corpuscles grouped themselves, leaves the question of the origin of the preceding inflammation still open.

In a paper published in the Royal Medical and Chirurgical Society's *Transactions* in 1873‡, I endeavoured to show, on the ground of experiment, that the only inflammations to which minute organisms stand in relation are those which, from their proved dependence on previously existing inflammation, may be properly termed secondary or infective; and, consequently, that the organisms in question were, in all probability, not so much mischief-makers as mischief-spreaders. That is to say, although an inflammation may come into existence without their aid, their presence communicates to it, after it has come into existence, the power of reproducing itself in previously healthy tissues, whether by extension or by dissemination. During the ten years which have

elapsed since 1872, the question of the intervention of micrococci, which was then strange even to professed pathologists, has become familiar to every one, and now the tendency exists to believe that germs explain everything; so that, whereas formerly one had to vindicate the very existence of such things as parts of pathological processes, it has now become one's business to protest, with all needful vehemence, against the attribution to them of functions which they do not possess. I will perhaps tend to clearness (which, in relation to so complicated an inquiry, is a matter of moment), as well as to the saving of time, if I submit to you at once the propositions which seem to represent the actual state of our knowledge on the subject. They are (1) that the exudation of a normal inflammation is not infective; (2) that no organisms endowed with inflammation-producing (for which term the word phlogogenic may be conveniently substituted) functions exist in the atmosphere, or in the ordinary aqueous liquids with which our bodies come into contact; (3) that whenever an inflammation becomes infective, it owes that property to chemical change in the exudation liquid, of which the presence of microzymes is a necessary condition; (4) that the introduction into the lymphatics, and eventually into the blood-stream, of microzymes which have been grown in septic exudations, is one of the mechanisms by which the seeds from which secondary or infective inflammations spring, are disseminated. Thus we attribute to our organisms two distinct functions, that of developing what may be called the phlogogenic infection, and that of conveying it to all parts of the body. What we deny is, that there exists at present any evidence that the infection in question actually originates in any other way than by the development of a septic process inside the organism. These several points I will endeavour to establish on the basis of experiment.

[To be continued.]

THE GULSTONIAN LECTURES

ON

PULMONARY CAVITIES: THEIR ORIGIN, GROWTH, AND REPAIR.

By WILLIAM EWART, M.D. Cantab., F.R.C.P.,

Assistant-Physician and Pathologist to the Brompton Hospital for Consumption; Physician to the Belgrave Hospital for Children; Demonstrator of Physiological Chemistry at St. George's Hospital.

LECTURE III.—PART I.

MR. PRESIDENT, FELLOWS, AND GENTLEMEN,—I turn with a feeling of relief, which you doubtless share, from the consideration of the destructive activities of phthisis to the methods adopted by nature for the healing of the pulmonary lesions. The doctrine of the curability of pulmonary excavation is comparatively young. Although Hippocrates had noticed the beneficial effects of the rupture of pulmonary abscesses into the bronchi, and founded upon this discovery a method of treatment by succussion, the recognition of cavities during life remained matter of inference rather than of observation; and speculations as to the possibility of their healing were controlled by no scientific test, until, with the progress of medicine, it became possible to follow the history of a cavity from its origin to its ultimate stages. To Laënnec belongs the credit of having pointed out the reparative action frequently observed in phthisis (see Cases XVII to XXIII, *Traité de l'Auscultation Médiate*). By him, two degrees are recognised in the healing of cavities: (1) the transformation of an ulcerating excavation into what he terms a fibro-cartilaginous fistula (see Cases XVII to XIX, *loc. cit.*); (2) absolute closure by means of cicatrisation.

With Laënnec, we are justified in considering the dwindling of cavities and the fibrous metamorphosis of their walls to be a step towards cure; and I have no hesitation in stating that a fair proportion of pulmonary cavities not resulting from acute phthisis undergo more or less of this reparative action. Of the complete cicatrisation of cavities, I am unable to speak with the same confidence. Roger and Boudet's observations on the frequency of concretions and scars in the lungs (present, according to them, in four-fifths of the necropsies performed on subjects beyond seventy years of age) give us a high idea both of the prevalence of cavities and of their complete obsolescence. More recently, Heitler ("Ueber die Spontan Heilung der Lungen-Schwindsucht", *Anzeiger der k. k. Gesellschaft der Aerzte in Wien*, 3 Juin, 1880), from a study of the *post mortem* registers of the Vienn

* Senfleben, "Nachträgliche Bemerkungen", Virchow's *Archiv*, vol. 72.

† "Micro-Organisms in Surgical Diseases", BRITISH MEDICAL JOURNAL, March 12th, 1881.

‡ "On the Infective Product of Acute Inflammation", *Med.-Chir. Trans.*, vol. vi, p. 345.

Pathologisch-Anatomische Anstalt for a period of ten years, has collected seven hundred and eighty instances of healing or of obsolescence of tubercular lesions, among which he mentions several cases of more or less complete cicatrization of cavities; and he admits the curability even of large caverns, provided the latter be strictly confined to the upper lobe.

But the opposite side of the question is supported by weighty authorities. By Andral, the alleged remnants of an ancient phthisis were viewed with some scepticism. They failed to convince Louis, who says that he never found at the apices those masses of membrane with dilated bronchial ramifications terminating in them, which Laennec records as cicatrices of tuberculous cavities. Dr. Walshe alludes to the subject in very guarded terms as follows: "If on a small scale, cavities may probably cohere by their opposite walls, of the cicatrization of a large excavation I have in vain looked for an example; and, without meaning to assert the sheer impossibility of the event, I must maintain it to rank among the *mirabilia* of morbid anatomy." (*Practical Treatise on Diseases of the Lung*, 4th ed., p. 470.) A limit is undoubtedly given to the cicatrization of cavities by their size. It would be rash, however, to state that the smaller cavities alone are susceptible of healing. I am informed by physicians of experience that vomicae of considerable dimensions, which had come under their observation during life, have been recognised after death to have perfectly healed. Instances of this nature are given in the late Dr. H. W. Fuller's *Treatise on the Disease of the Chest*, p. 405-10. Mine has not been the good fortune to witness hitherto this happy result, nor do I possess any specimens illustrating complete healing of large cavities. If for no other reasons, such specimens are probably rare, owing to the long interval of life which may succeed the disease. But partial cicatrization I have occasionally witnessed in cavities of good size, and an example of this kind will be placed before you.

On the other hand, the array of clinical evidence in favour of the healing of vomicae is imposing. The number of cases in which cavities cease to give signs of their presence is very large. As an instance of this class, let me briefly allude to the following case.

Henry S., aged 22, a tall thin man, of pale and rather muddy complexion, first applied for treatment at the end of January 1881. He had suffered from slight cough for three years; but this symptom had only during the last three months become distressing; and during the same comparatively short period his general health had failed noticeably, although not to an alarming extent, for he had followed his daily occupation as a tailor up to five days previous to his first visit. On examination, gurgling cavernous sounds and pectoriloquy were found to extend anteriorly over the upper two-thirds of the left chest; the right lung yielded normal breathing sounds. He made rapid progress under treatment. On March 8th, the cavity was found to have materially diminished; and when he was again examined, on May 24th, a remarkable change had taken place. The cavity was reduced to small proportions, whilst the resonant note of the healthy right lung could be obtained for a considerable distance beyond the middle line of the sternum. The heart was in a great measure uncovered. Measurement of the chest taken the same day gave 14½ inches for the right side, 14¼ inches for the left. He was subsequently admitted into the hospital under Dr. R. E. Thompson's care. On June 29th, no cavernous breathing could be detected; but the signs of chronic disease were well developed at the upper and outer part of the left lung, and large crackling rales and an almost gurgling "suction-sound" were audible in the upper half of the axillary region. He left the hospital much improved in strength on July 17th, a striking instance of the rapid and permanent disappearance of the signs of excavation. Unfortunately, two days later he was seized with severe hæmoptoe, an accident very liable to intervene in cases of excavation undergoing cure; and he died on July 27th, after several recurrences of the hæmoptoe. No post-mortem examination was performed.

The case of a similar nature is far from uncommon, in which life is prolonged for months or years, but at the close of the physical signs of excavation there is usually a nearly complete cicatrization. It is almost too good to be true, that the cavity is rather a *trap* than a *cesspool*; and that, in a strict sense, healing has not been accomplished.

I freely confess that, after careful consideration, my conclusions do not materially differ from those of Dr. Walshe. Alas! to declare curability in cases of moderate size, but in less common than important connection with implication of the vital organs, reaches larger cavities, although in rare instances they may completely heal, as pointed out by the reparative process too slowly to reach cicatrization, and too late to be of much use.

Even when the local efforts at repair, observable in cavities, are not evidence that a favourable course is taken by the disease itself. Whilst

cavities are approaching closure, consumption may be fatally progressing. Conversely, the activity of phthisis may have become extinguished where some excavation still persists as an abiding danger; I would insist upon this last combination, which practically represents the full measure of the hopes we entertain in the majority of cases. What I have said not only provides an excuse, but points to a necessity for an independent study of the local processes of healing.

Arrested phthisis is a correct expression as applied to the lung-disease, but it inadequately describes the condition of cavities which have ceased to extend. The latter are not only arrested, but in retrocession. Cavities are never at a standstill, but must either grow or decrease. The course, degree, and the mode of the reparative changes within them are mainly governed by the following factors: 1. their size and number; 2. their situation; 3. the facilities for contraction; 4. the facilities for compensatory hypertrophy.

Let me begin the discussion of these various influences with a brief allusion to the subject of *compensatory hypertrophy*. A vicarious development of the spongy tissue is not only seen in cases of recovery, but among the fatal cases in all those where the disease runs a chronic course. Upon cavities the beneficial influence of this compensation is twofold: it not only acts indirectly by improving the general condition of the system, but it will be shown by its gentle and sustained pressure mechanically to assist the contraction of cavities. A question spontaneously arises as to the nature of this hypertrophy. According to Dr. Douglas Powell, the practical results will decide in each case whether the hypertrophy is of a true or of a false kind. In true hypertrophy, recovery may be practically complete, the breathing is easy, the chest of fair size, the fitness for exertion good. Conditions are different in the other instance: the chest may be large, but the patient is constantly breathless on the least exertion; the lung is in the condition so well described by you, Mr. President, as "hypertrophous emphysema", in which the bulk of the organ is not a measure of its power.

I am not convinced that we have to deal in either of these cases with a genuine hypertrophy, in the sense of new formation of parenchyma. The bronchial tree, with its appended air-sacs, must be considered as originally perfect and not admitting of reconstruction; and we are assured by Dr. Waters that air-cells are incapable of being regenerated. I believe that the differences between so-called true and false hypertrophy are susceptible of a simple explanation by the more or less of development of the vascular system of the alveolus. As long as the alveolus is submitted to a tension, for which neither its walls nor its capillaries are fitted, impaired respiratory function and impairment of circulation must follow. But supposing the energy of growth be sufficiently great to accommodate the air-cells to new conditions, the alveolus may be enlarged, and yet not suffer from over-stretching. This view readily explains the recovery of younger subjects, even after extensive loss of breathing-surface; and the opposite result observed in the aged, where the formative powers are too feeble to adapt the dilated alveoli to their increasing duties.

Thanks to this secondary expansion, the damaged organ, even after extreme excavation, may reconquer almost the whole of the thoracic space allotted to it; but, in the majority of cases, the work of compensation devolves upon the healthy lung. Of this unilateral hypertrophy, the specimen which I have placed on the table is a striking illustration. When opened after death, the chest in the case presented for inspection anteriorly as far as the left axillary border nothing beyond right lung and heart, the left lung being entirely hidden from view. Had the comparatively healthy right lung been tied down by adhesions, such a remarkable degree of vicarious development would have been obviously impossible. We are reminded by the specimen, not only of the value of compensatory hypertrophy, but also of the importance which attaches to the presence or absence of pleural adhesions.

From practical surgery we learn that the healing of large tracts of tissue is usually effected at the cost of considerable contraction. In the skin this is well exemplified after destructive diseases or lesions, and a similar contraction is the means of recovery in visceral affections like, syphilis, infarcts, scirrhus, &c. Thus, it may be stated generally that the facilities for healing are commensurate with the opportunities afforded for the essential preliminary. As applied to pulmonary excavations, the term "contraction" is clearly a figurative expression. Strictly speaking, cavities cannot originate, but only suffer contraction. They are entirely dependent for any alteration in their shape upon external agencies, and, above all, upon the condition of the tissue by which they are surrounded. The boundary zone may be in one of five conditions:—(1) in recent consolidation; (2) in chronic pneumonia with fibroid tendency; (3) in simple fibrosis, due to collapse of lung,

tissue; (4) in simple fibrosis connected with thickening of the pleura; (5) in a normal spongy state.

The first or pneumonic condition is absolutely unfitted for contraction. The acutely pneumonic lung is too much stiffened by inflammatory deposits, or sudden from oedema, to be the subject of any noticeable shrinking. But if chronic, and sufficiently moderate, the pneumonic action in phthisis is usually combined, as I have elsewhere insisted, with more or less of fibrosis, which may ultimately arrest all further progress of the disease, whilst it lays slowly the foundation for further contraction.

The fibrous ring, to which the contraction of cavities is mainly referable, is not necessarily an inflammatory product. It often becomes developed, as it were, passively, from a layer of areolar tissue which has become compressed or collapsed. A zone of unexpanded lung-tissue is habitually observed at the periphery of pneumonic excavations, being the outcome partly of the pneumonia and partly of the softening. All pneumonia implies relative fulness of the inflamed air-cells, and imperfect expansion of the neighbouring alveoli. In fibrinous pneumonia, this fulness is rendered manifest by the rib-marks at the surface of the lung. Whilst admitting, with Dr. Douglas Powell, that this indentation is in a great measure due to the collapsed state of the thoracic wall, and to the fixation of the ribs in a position of expiration, it appears to me undeniable that the lung-tissue is, relatively to this expiratory condition, expanded. Similarly, in catarrhal pneumonia, the relative distension of the affected districts is evidenced by the sharp outline and often slightly tumefied surface of the deposits, by the side of which the surrounding tissue is imperfectly expanded. The zone of lung-substance thus compressed generally survives, whilst the pneumonic consolidation softens into a cavity; and it supplies the basis of the fibrous wall of the cavity.

But the process of excavation itself is the chief cause of the alveolar collapse to which I have alluded. Softening invariably leads to an interruption of the supply of air over a corresponding region, whether from ulceration of the bronchioles, from their inflammatory occlusion, or from tubercular deposit within them.

The zone of pulmonary collapse constitutes an important factor in the subsequent contraction, owing to the elastic elements which its tissue abundantly contains; but, sooner or later, fibrosis is set up within it, and a fibrous contraction is substituted for the elastic forces natural to the pulmonary structures.

The formation of fibrous tissue around cavities is greatly assisted, whenever the cavity is superficial, by the existence of pleural adhesions. The supply of fibrous tissue from this source is not subject to any limitation; indeed, exuberance of fibrous growth may in its turn become a danger, inasmuch as it opposes the constriction of cavities under expiratory efforts, and the voiding of their contents by the agency of cough. The best results due to the contractility of fibroid tissue are seen in the thin walls of cavities situated at a distance from the pleura, in the midst of healthy lung-tissue. Here the contraction of the fibrous element receives material assistance from the pressure of the adjoining spongy substance, provided the cavity-membrane, although free from rigidity, be sufficiently strong to resist expansion under the weight of the atmosphere. These conditions are often combined in the cavities, which result from the sudden discharge of the products of softening into the bronchus. Relieved from internal pressure, the elastic and fibrous constituents of the investing layer spontaneously contract.

The influence which atmospheric pressure may exert in aiding or in opposing this contraction deserves to be briefly discussed. If an ordinary cavity, which I will suppose to possess a patent bronchus, could be imagined to be connected on all sides with the parietes of the thorax by means of some unyielding substance, lateral traction would be exerted around it equal to the inspiratory expansion of the chest. Let the connection be established by means of spongy tissue, by nature remarkably yielding, then not only will the outward traction mentioned above be removed from the cavity, but some degree of pressure will be exerted upon its outer wall by the expanding alveoli. These views are illustrated in the accompanying diagram: *w*. represents the atmospheric pressure acting upon the inner surface of the cavity, where it is supported by a resistance *R*. equal to it. Similarly, the weight of the atmosphere acts upon the inner surface of the alveoli where it is opposed by a smaller force *E*. *R*., which represents the elastic resistance of the spongy tissue. It appears from these considerations, that any inherent tendency (*C*.) to contract present in the fibrous wall would be assisted during inspiration by the quantity ($w - E$. *R*.). I am aware that the compressing force which I have described is very fractional, and that its importance must be measured by its continuous action. The bronchial orifice which I have supposed to be patent is, however, very frequently occupied with secretion more readily allowing the egress than the entrance of air. In such a case, the deep

inspiration which precedes muscular strain or the effort of coughing is directly utilised against the outer surface of the cavity.

We shall see elsewhere that the atmospheric pressure may be transmitted to cavities by the thoracic walls, but its influence is nowhere more striking than when, gaining access to the pleural cavity, it acts directly upon the external surface of the lung. The collapse of tissue and of cavities induced by internal perforation of the lung, is so striking as to have suggested to some the employment in excavating disease of artificial pneumo-thorax as a possible means of treatment; but of this aspect of the question it is not my province to speak.

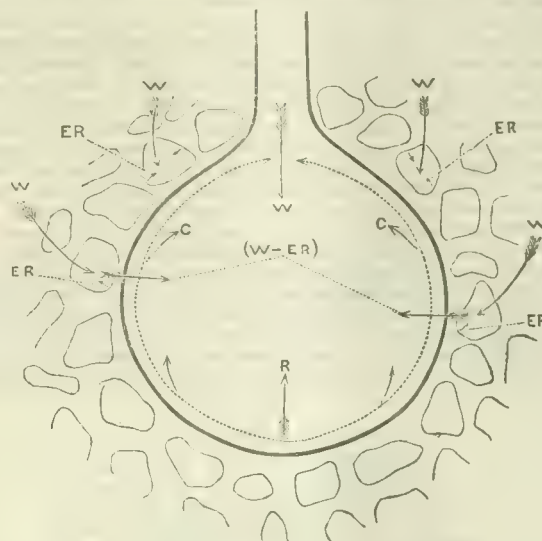


Fig. 5.—Forces favouring and opposing Contraction of Cavities (Alveoli should have been depicted in a state of distension). *w*. Atmospheric Pressure. *R*. Resistance (equal to *w*.) offered by Cavity Wall. *E.R.* Elastic Resistance not equal to *w*.) offered by Alveolar Wall. $w - E.R.$ Balance of Pressure acting from without upon Cavity Wall. *C*. Spontaneous Contractility of Fibrous Tissue of Cavity Wall.

The influence of the compensatory dilatation of the neighbouring tissue, added to the natural contractility of the cavity-wall, may suffice to induce gradual collapse of the smaller cavities, leading to those solid scars, rather larger than a hemp-seed, which occasionally are found at the centre of the lung abruptly terminating an air-tube of good size. The relations of the common cavity situated near the surface are not so favourable to contraction. The pleural adhesions, which are seldom absent, restrict vicarious expansion around it; whilst encroachment from the opposite lung rarely exercises any lateral pressure upon the cavity. Contraction in these cases is rendered possible by two circumstances, which are usually associated: 1. falling-in of the thoracic parietes; 2. shrinking of lung within the thorax.

The alteration induced in the outline of the thorax may be general or local. From a consideration of the architecture of the chest, and of the interdependence of its component parts, it is, at first sight, easier to conceive a general than a local collapse of its walls.

Uniform flattening of one side of the thorax may occur, and is sometimes clearly traceable to excavation. But the local depression limited to the seat of excavation is undoubtedly a more common change. The mechanism of its production is somewhat complicate. If we bear in mind the remarkable power of recoil exhibited by any part of the thorax after the application of temporary pressure, it is evident that the permanent falling-in, to which I have alluded, must have been of very gradual origin. The first impression is made prior to the establishment of excavation. Ribs overlying the inflamed districts become dissociated from the concerted movements of the intercostal muscles by a species of local paralysis, and ultimately they remain motionless. Dr. Ransome, from careful examinations by means of his stethometer (an instrument which deserves to be better known and more extensively used), has proved that the minimum of respiratory excursion is afforded by those parts of the chest which conceal active pulmonary mischief. At this time, the other ribs are actively at work, and become more and more independent of the paralysed ribs, whilst the costo-sternal joint of the latter, having acquired considerable looseness, permits the sternum to follow without hindrance the movements of the healthy

ribs. The preliminary steps which I have described having paved the way for local retrocession, the thorax becomes gradually depressed with the progress of excavation. Exceptions to this rule are sometimes seen in which no marked depression is occasioned even by large cavities. In rare cases, as in the specimen which I place before you, the whole upper lobe may be completely excavated, and so adherent to the chest-wall, that for a long period the chest may present no striking collapse. In this special case, the lower part of the lung was completely adherent and hyperdistended, and the absence of fibrosis argued a more moderate degree of pleural irritation than usually accompanies excavation so superficial and so extensive.

Collapse of the thorax has its final limits in the perfect approximation of the ribs. When contact has occurred between the latter, any further retraction of cavities must entirely depend upon the fibrous shrinking of the lung itself. In fibroid phthisis, this shrinking attains a remarkable degree. At the base, owing to the yielding nature of the diaphragm, a retraction of the lung and a contraction of the cavities are specially favoured; and the most usual result of the contraction of large cavities in this situation is a shortening of the thoracic space, in consequence of which the position of the liver, the stomach, the spleen, and other viscera may suffer appreciable alterations.

Neither the shrinking to which I have alluded, nor the secondary hypertrophy, can occur without some disturbance of the normal relations between the visceral and the parietal surfaces of the pleura; and, conversely, rigid pleural adhesions are detrimental, not only as opposing contraction of the cavities, but as preventing the free expansion of the healthy tissue, and its gradual insinuation between the pleura and the wall of the cavity. In the diagrams and specimens before you, the extent to which the spongy tissue may expand is strikingly shown by the

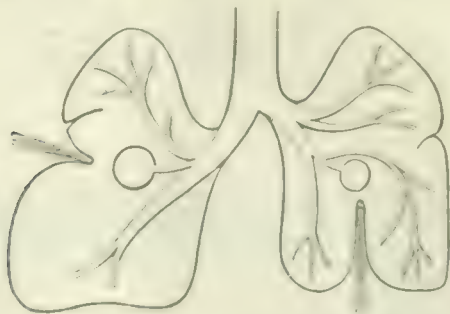


Fig. 6.—Band-like Adhesions of Pleura, strictly limited to Surface corresponding to Cavity.

length of the band connecting the retracting cavity with the pleura. In these cases, adhesion was strictly limited to the point at which the cavity originally approached the surface. I believe that, in any other case, we should have rendered such a result impossible. It follows that the absence of adhesion over the healthy parts of the lung forms a most important element in our diagnosis. Especially important is the question as to the extent of the inferior surface. I need not insist upon the value of an unfettered respiratory mobility of the diaphragm. It is equally important to be able to move the latter; but the anatomical alterations which they introduce into the lung are not less important. It will probably be the absence of adhesions to the diaphragm, or rather rather the absence of the latter, and consequently curtail the retracting surface of the lung.

In connection with these great considerations, the only factor accruing from pleural adhesions in regard to the contraction of the cavity is the growth of fibrous tissue, to which I have already referred. The remarkable thickness sometimes assumed by the pleural membrane, in consequence of this growth, often causes the lung to adhere to the chest-wall, and, in some cases, even to the ribs. I have seen many specimens of this kind, and have seen many others in which the growth of fibrous tissue has been so extensive as to cause the lung to adhere to the chest-wall, and in some cases even to the ribs. I have seen many specimens of this kind, and have seen many others in which the growth of fibrous tissue has been so extensive as to cause the lung to adhere to the chest-wall, and in some cases even to the ribs.

In connection with this consideration, there is one other point of the greatest practical importance, where the extent of the adhesions will be the greatest element. In the ordinary case, the adhesions are limited to the point at which the cavity approached the surface, and the retracting surface of the lung is not less important. It will probably be the absence of adhesions to the diaphragm, or rather rather the absence of the latter, and consequently curtail the retracting surface of the lung.

observed over the site of contracting cavities. (See Fig. 7.) The favourite situation is the internal surface of the ribs, as originally pointed out to me by Dr. R. E. Thompson. A contracted lung, removed from the chest in connection with the adherent pleura, usually presents deep parallel grooves, which alternate with prominent ridges,

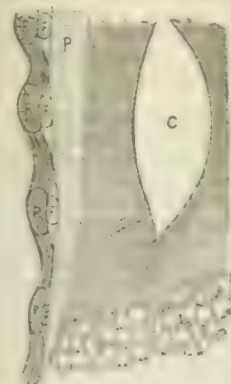


Fig. 7.—Transverse section of a rib, illustrating the internal surface of the ribs, with labels P and C.

suggesting an analogy with the costal indentations of a pneumonic lung, but in reality presenting the exact counterpart of this condition. In pneumonia, the groove corresponds to the bed of a rib; in the contracted lung, the position of the rib is marked in relief, and that of the intercostal space by a depression. The retraction of the fibrous lung usually draws inwards the soft parts: but a similar in-bending of the rib is clearly impossible: in this situation the visceral layer of the pleura is drawn from the periosteum, and the interval between pleura and bone is filled by fat.

[To be continued.]

REMARKS ON BALD TINEA TONSURANS AND VEGETABLE PARASITES.

By ROBERT LIVEING, M.D., F.R.C.P.,

Physician to the Department for Skin-Diseases at the Middlesex Hospital.

On several occasions, I have called attention to the occurrence of smooth bald patches in tinea tonsurans, exactly resembling alopecia areata. I have also mentioned the fact that when, in these cases, one patch remains bald, the others quickly follow suit. A remarkable example of this has lately come under my observation. Two brothers have been under my care for some time past with ordinary well marked tinea tonsurans, with abundance of the trichophyton. Their parents, however, after various treatment, and therefore mild remedies only have been used, which have not at any time produced the slightest soreness. The patches are bald, or even separate spots of tinea tonsurans, and, during the last fortnight, every one of these spots grew and spread, becoming gradually bald, smooth, and shining, with a well defined margin of a few hairs. What I wish especially to call attention to is, that the patches of the change, so that the bald spots are strictly circular, and are gradually covered with tinea tonsurans, not a trace of having been on any other part of the head. In the instance, there is a single hair to be found, though, when I previously saw them, the patches were thickly covered with stumps and hairs. In connection with this kind that I have not with, it has been generally observed, and one or two stumps left either on or at the margin of the bald spot, by the microscope examination, of which the nature of the bald spot is determined. When the baldness is as perfect as it is in the present case, we may probably regard it as a spontaneous cure. In the present case, the tinea tonsurans has run an ordinary course. I have not thought it necessary to say whether we should regard a case of this kind as a spontaneous cure, or as a case of tinea tonsurans, or as a case of alopecia areata, or as a case of tinea tonsurans. Nor do I think the question of much importance, provided that we remember that the baldness is not always removed, or, in other words, that the baldness is not in every case so complete as to remove all the stumps, and with the baldness of the hair. A want of knowledge of the fact that, in most cases, baldness is not the one, that alopecia areata is a true alopecia, and the other, that it is a spontaneous cure.

It has been pointed out by several observers that, in almost all chronic scaly affections of the skin, one can, by a diligent examination of the scales under the microscope, find the spores of a vegetable parasite commonly called *Torula vulgaris*. I can quite confirm this fact from my own observations. I would remark, however, that those who are not aware of it are sometimes misled into the belief that they have discovered a parasitic disease, when, in truth, they have only found *Torula vulgaris*, which is quite harmless, and which is a consequence rather than a cause of the disease. An example of this lately came under my observation in the case of a lady about thirty years of age, who had suffered nearly all her life from a well known chronic folliculitis of the eyebrows and scalp depending on constitutional causes; the skin was scaly, and the hairs fell out before they had arrived at maturity. She was told by two medical men abroad, who had examined the scales and hair under the microscope, that the cause of the disease was a vegetable parasite; the result of the treatment was, however, not satisfactory. When she subsequently came under my notice, it was not very difficult to find here and there *Torula vulgaris* in the scales attached to the hairs, but the hairs themselves were quite free; the mistake was thus easily explained. I have met with several other examples of similar mistakes.

With regard to an affection of the skin which I have described as a form of circinate lichen, and which has been supposed by some observers to be pityriasis versicolor, and of course of parasitic origin, I would remark that a very careful series of observations, extending over several years, quite satisfied me that the two diseases are quite distinct. I am quite prepared to admit that, when pityriasis versicolor becomes a little inflamed, as it sometimes does in those who happen to have a tendency to eczema, it bears a close superficial resemblance in appearance to this variety of lichen circinatus; but the microscopical characters of the two are always quite distinct. As to the name circinate lichen, I lay no stress on it whatever; I adopted it to avoid the introduction of a new name; the disease has, however, since been described under a new name.

I hold that it is now quite out of our power to alter to any considerable extent our nomenclature of skin-diseases, however much we may object to some of the terms in use. Many objectionable synonyms will gradually drop out of use; and this is nearly all the improvement we can expect. The most vigorous efforts have been made to get rid of the name typhoid fever; but the word is still as much used as ever. The story of the emperor who failed in an attempt to change a quantity in a Latin word should not be forgotten by the inventors of new names for old diseases.

SEWER-GAS AND PUERPERAL SEPTICÆMIA.

By JOHN C. FERRIER, M.D. Lond.

IN the number of the BRITISH MEDICAL JOURNAL for March 10th, Dr. Playfair refers, in his "Note on the Sanitary Condition of Bagshot Park," to the causation of puerperal septicæmia by sewer-gas. The following cases seem interesting, as showing this connection.

CASE I.—Mrs. S., a multipara, was confined on the morning of February 2nd, 1881. Labour was normal; the child was at full time, and living. A few hours later, I found her feverish, but the temperature was not noted. The next day, she had headache and slight abdominal pains; temperature 102.2° Fahr. She continued ill for more than five weeks (until March 10th), with symptoms of blood-poisoning. The temperature was sometimes very high—over 105° on one occasion. After the illness had lasted a few days, she had pleurisy on the left side; and, towards the end of the attack, abscesses formed in the axilla, groin, labia, and gluteal region. There was no sore-throat and no pelvic inflammation. The lochia were not at any time very offensive. There were only slight rigors, and milk was secreted for some days. She recovered. Two or three weeks before her confinement, the water-pipes being frozen, the trap of the water-closet became blocked; and Mrs. S., while directing the removal of the obstruction, got a strong whiff of sewer-gas, and exclaimed at the time that she was afraid it would give her diphtheria. She was not seen medically before her confinement; but her husband said she had been feverish and ill for a week before it took place, and that she "felt so hot in bed that he was obliged to move away from her." There was no history of exposure to any other poison than sewer-gas. In the same house, two years before, several of her children had diphtheria from defective drains; but these were put to rights, and there was no further trouble until the water-supply was cut off by the frost.

CASE II.—Mrs. H., a multipara, was confined prematurely, at seven months, on July 22nd, 1881. The child lived one day, and died cyanosed. She was ill for several days before confinement, with

pyrexia and abdominal pains. There was no local trouble to account for it. The day before confinement her temperature was 103°. Afterwards, she was better and less feverish for a day or two; but the temperature was never normal. She soon became much worse, and had severe rigors nearly every day; one wrist-joint became red and swollen, also the first metatarso-phalangeal joint of one foot. There was no throat-trouble; the lochia were not offensive. Milk was secreted for some time, and required belladonna to stop it. She died on August 25th, one month and six days after confinement. There were not any cases of infectious disease in the house, nor could any fault be found with the sanitary arrangements. But, a short time before her illness, Mrs. H. had noticed a strong smell from a sewer, while she was out walking.

In both cases, the illness commenced before confinement; local mischief only showed itself after the pyrexia had gone on for some days; and there was nothing in the history, symptoms, or progress of either case to lead me to suspect that any other poison than sewer-gas had been at work.

THE THERAPEUTICAL ACTION OF ACONITE.

By EDWARD J. TILT, M.D.

ACONITINE has attracted so much attention of late, that I will mention how large a dose of tincture of aconite (*B.P.*) was given by me in a very severe case of cerebral neuralgia, to a highly nervous lady, at the change of life. One or two attacks occurred about every week; and the attacks of pain were so severe that she was obliged to stop in bed, and in a dark room, for two or three days—the pain being sometimes accompanied by vomiting, oftener by salivation. There was but little dark-coloured urine passed at the beginning of the attack, and it ended by an abundant flow of limpid urine. The liability to these attacks has now lasted twelve years, and they still occur. What was suggested by Dr. Handfield Jones, Dr. Russell Reynolds, and Dr. Ogle had not the slightest effect on the attacks. The application of six leeches to the temples shortened them; going out of town kept them in abeyance, once for six weeks; and the only medicine that did the same was aconite. The patient took the tincture of aconite, in an aromatic infusion, for sixteen weeks, beginning with five drops, and gradually increasing the dose till she took twenty-five drops, three times a day. That dose caused so great a sense of fulness in the throat, and of tingling and numbness of the tongue, that I lowered it to twenty drops, three times a day, which caused only slight physiological effects. The remedy kept off the attacks for two, three, and once for four weeks; but it did not in the least diminish the intensity of the attacks. I therefore thought a sixteen weeks' trial of a dangerous medicine sufficient, and gave up its use.

As I am not aware that tincture of aconite has ever been given in such large doses, I will add that the prescription was made up at a respectable druggist's in Kensington, and that I am quite sure my patient took the doses I have mentioned. Whether my patient's idiosyncrasy made her able to bear large doses of aconite, or whether there was something wrong in the tincture, I cannot say; but I should follow the same course in a similar case. Dr. Greenhalgh told me he once nearly lost a patient, to whom he had ordered an enema containing nine drops of tincture of aconite.

NEW METHOD OF URETHRAL IRRIGATION.

By WALTER WHITEHEAD, F.R.C.S.E., F.R.S.Ed.,

Surgeon to the Manchester Royal Infirmary.

IRRIGATION, judiciously employed in suitable cases and at a proper stage of the complaint, is unquestionably a valuable adjunct to the treatment of gonorrhœa. In the first place, the prolonged stream of water effectually removes the inflammatory products of the disease, which obstinately and intimately adhere to the surface of the urethra, and protect the mucous membrane from the immediate influence of the remedies we endeavour to bring into action, either through the urine medicated by the administration of balsamic drugs, or by the more direct influence of antilemnorrhagic injections. The tenacity with which the secretions adhere has, no doubt, much to do with the difficulties encountered in the treatment of gonorrhœa. It must be remembered that the urethra in health is an elastic tube tolerant of reasonable dilatation; but when invaded by inflammatory changes, it is converted into a comparatively unyielding tube, intolerant of any force having a tendency to expand its calibre; consequently, irrigation, to be safe and successful, must be conducted on a principle consistent with the laws of hydrostatic pressure; and as we propose to use irrigation in a disease which involves conditions opposed to distension, it is required that the mode of

irrigation, whilst insuring a continuous and copious stream of fluid, should be free from any undue tendency to stretch the walls of the urethra.

These conditions I have obtained by the following apparatus and mode of procedure.

I have had catheters made, some in vulcanite and others in soft India-rubber, by Messrs. J. and W. Wood, of King Street, Manchester, with a deep spiral groove from tip to stem on their outer aspect. The catheter ends, as represented in the accompanying engraving, in a hollow bulb perforated with two large apertures directed backwards. The other extremity of the catheter is adapted for the ready attachment of India-rubber tubing. The groove in the catheter is made with a depth double the capacity of the central tube, so that the facilities for the return of injected fluids are greater than the requirements; and, in consequence, there is no excessive pressure on the urethra, the outflow being more than ample for the inlet of the irrigating fluid.

In using the irrigator, it is passed to different lengths of the urethra, after the manner of an ordinary catheter, according to the nature of the case, the aim being to get well behind the furthest limits of the diseased surface. The distance can be roughly estimated by the clinical features of the case, and by testing how far back the discharge can be pressed out of the urethra.

When introduced, a length of India-rubber tubing is attached to the irrigator; and the other end of the tube, passed through a leaden weight, is placed in a vessel containing the fluid to be used, and elevated above the body of the patient. The tube being made to act as a syphon, the strength of the stream can be regulated by the height of the vessel, and by this means a simple and complete control can be exercised over the force brought to bear upon the surface of the urethra and the feelings of the patient. The bulbous extremity of the catheter practically restricts the action of the fluid to the urethra in front, and prevents any of the irrigation from passing backwards into the bladder. The direction of the stream is also influenced by being diverted forwards within the hollow bulb. The irrigation of the urethra being regarded merely as a measure preliminary to treatment, it remains, after the mucous membrane has been thoroughly cleansed, to apply one or other of the various topical remedies we are in the habit of using; and this can be easily accomplished by connecting a syringe to the irrigator after the rubber tubing has been removed.

ON TAPPING THE BLADDER FROM THE PERINEUM THROUGH THE HYPERTROPHIED PROSTATE.

By REGINALD HARRISON, F.R.C.S.,

Surgeon to the Westminster Hospital.

IN the JOURNAL of December 24th, 1881, I reported a case where I had performed puncture of the bladder for retention of urine from the pressure of a very enlarged prostate. I am now enabled to communicate the history of that case.

After the bladder was tapped, for about a week my patient passed urine through the puncture naturally. The bladder was improved, and he was able to get about as if nothing had happened. Then it was noticed on one day that urine was passing in a quantity larger than the flow through the natural passage, so much so that he was unable to

that, for some reason or other, the prostate was ceasing to obstruct micturition.

On January 28th, I removed the prostatic cannula; the puncture healed in the course of a few days, and with this the bladder gradually proceeded to recover its natural function and power. It must be remembered that, for over two months, I had resolved the patient's act of micturition into the simple mechanism of turning a tap. During the day-time, he now holds his urine for two or three hours, and at night he gets up twice, and sometimes thrice, to micturate. It may be said that all functional symptoms of enlarged prostate have ceased to exist.

On the day of his admission into the infirmary, when the puncture was performed, rectal examination, made both by my house-surgeon, Mr. Laimbeer, and by myself, left no doubt that the prostate was greatly enlarged. Upon this point, there could be no other conclusion. Now we find that the enlargement has almost disappeared: in fact the finger, by the rectum, discovers but little that may be regarded as abnormal—a strong contrast to what previously existed. Here, then, we have a case where a surgical proceeding on an enlarged prostate was followed by its rapid atrophy, a result which, so far as I know, has not been noted before. It may be urged that rectal examination affords evidence that only one side of the enlarged gland has thus become reduced; it must, however, be remembered that a return of the power and function of micturition warrant a conclusion that a corresponding change has taken place in the vesical aspect of the gland.

Though I am only at present able to narrate one case, it will be taken for what it is worth, and as capable of being imitated.

I desire to record it as bearing upon the radical treatment of an affection for which little has hitherto been done.

Appended is a short description, with an illustration, of the instruments I have devised for this operation, which have been made for me by Messrs. Keane and Sesemann.

The trocar is hollow, and urine escapes through it as soon as it enters the bladder. The shield on the tube (Fig. 1) is movable, and can be fixed at any desired position to suit the varying thickness of prostate and tissues. The instrument is adapted for other purposes than that referred to in this communication.

POISONING BY PHOSPHORUS BY THE RECTUM.—Landerer relates in the *Archiv der Pharmacie* for the present year a case in which a woman, in order to come into the possession of a large inheritance, poisoned a boy, aged 18, by introducing the sticks of phosphorus into his rectum. The boy died the same night, with very severe pain and inflammation of the rectum. The next morning comatose death took place after her apprehension.

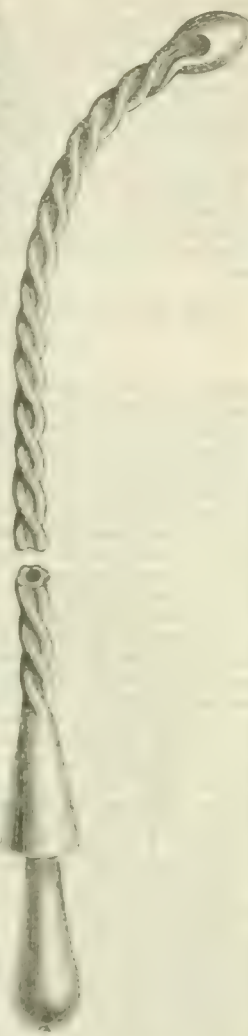


Fig 1



Fig 2



Fig 3

The shield on the tube (Fig. 1) is movable, and can be fixed at any desired position to suit the varying thickness of prostate and tissues. The instrument is adapted for other purposes than that referred to in this communication.

ON THE TREATMENT OF ECZEMA BY BANTINGISM.

By BALMANNO SQUIRE,

Senior Surgeon to the British Hospital for Diseases of the Skin.

It is familiar to every practitioner that eczema is specially common amongst infants, and particularly amongst lymphatic infants, that is to say, fat and pasty-looking infants. I do not refer only to those instances in which the very fatness of the infant is the mechanical cause of the complaint; that is to say, where "a fold" of skin in the fat infant becomes raw and discharging (intertrigo); but I refer to the well known fact that infants of this constitution are more liable than others to eczema (of the scalp and other parts), not coming under the head of "intertrigo," and that their eczema is more profuse in its discharge, whether that discharge be serous or purulent, than it is in other infants; it is also more obstinate.

I recently recorded in the JOURNAL some experiments I had made with iodoform as an application in such cases, and which succeeded very well as a means of reducing the eczema of such infants from the discharging to the dry condition pretty rapidly. As to that, I was supported by other writers.

But from some observations I have recently made, I have reason to think that Bantingism as applied to such infants is as rapid in its effects, and if sustained, is of more permanent efficacy. Some years ago the late Mr. Banting was under my care for eczema, and I had an opportunity of conversing with him pretty frequently on the system of which he was the apostle. It is through this accident that the idea suggested itself to me.

I have used the word infant for the sake of convenience, but I refer rather to very young children. To Bantingise a suckling infant is, of course, not very practicable, but a child of two or three years old can be dieted very readily. It does not appear necessary to the end in view that the diet should be restricted in quantity as well as in quality, which of course was essential under the *regimé* laid down by Mr. Banting, or rather by the late Mr. Harvey (the aurist) for him. It is simply necessary to limit the fat-producing elements of food for the amelioration of eczema in lymphatic young children. At least so I have found. By this means their excessive obesity becomes diminished and their eczema very remarkably improved within ten days of commencing the regimen, and that without any injury whatever to their general health, so far as I can judge.

In place of pure milk, they should take milk diluted with an equal or even a double quantity of water. In place of bread and butter they should take dry toast or dry biscuits; and with these particular articles of food they may be supplied indefinitely. All the fat is to be carefully cut away from such meat as they may partake of, and they should not be allowed pork, veal, or lamb. They may have poultry or game, or fish, except the oily kind of fishes, such as herrings, salmon, eels, etc.; and the fish they partake of should be broiled (not fried). They may eat boiled vegetable tops, but not vegetable roots, such as potato, parsnip, beet-root, turnip or carrot. Beef-tea (the melted fat being carefully skimmed off) is permissible in any quantity, and so also toast and water. Cooked fruit (not sweetened) may also be allowed.

But the principles of the Banting treatment are universally known. It only remains for me to say that cod-liver oil (the favourite remedy, *par excellence*, for the condition of which I am speaking) is quite incompatible with the treatment I am advocating. Of course, the health of the child should be watched; and it should be weighed at the commencement of its dieting, and afterwards from week to week.

INJURY PECULIAR TO CHILDREN, PROBABLY
DISLOCATION OF EITHER END OF RADIUS.

By WILLIAM SNEDDON, M.D., Beith.

A SHORT article, entitled "Dislocations of the Elbow-joint in Children," by Mr. S. H. Lindeman, which appeared in THE BRITISH MEDICAL JOURNAL, March 18th, interested me, because it is the only notice I have observed of this injury, except the one referred to in Mr. C. Heath's *Minor Surgery*, and is one which has attracted my attention, as I have notes of several cases. From what little has been written on the subject, there is great diversity of opinion as to the seat of the injury and its nature. The injury is described by Heath as being rare, but I have seen ten cases in as many years, and Mr. Lindeman says he saw ten in a year; the injury would either appear to be so trivial as to be beneath the notice of publication, or else we must be acute observers (perhaps too acute), to which qualification personally I do not lay any claim. So far as my observation has gone, it is generally

confined to children who are delicate and atonic, and who are not more than six years old.

A typical case is this. A child is brought who is suffering pain in the arm, with inability to lift the fore-arm, or to catch anything offered to it, with the arm not quite semi-flexed, and the fore-arm fully pronated as a rule. The injury, in seven of the cases, was situated at the elbow, though in three it seemed to be at the wrist. There is seldom any deformity to be seen or felt; but, when the fore-arm is supinated and then flexed, a slight *click* is usually heard or felt, and the pain vanishes in a minute. If one now offer a coin to the child, it will lift its arm and catch hold of it at once. Sometimes this manipulation is not sufficient, for, besides supinating the fore-arm, the hand must be flexed on the arm. The injury is very apt to recur, and may not do so at the same seat, for I had one case in which the injury seemed to be situated at the wrist twice and once at the elbow. Another case had it thrice at the elbow; once when the child was on a visit. The surgeon who examined it could detect nothing, but after making his examination it was better. This I believe to be one reason of its so-called rarity; for, on making the customary examination for some probable dislocation, it is rectified, and it is quite a possible thing that some cases rectify themselves, for the displacement is so slight.

Mr. McNab, of Epping, who was the first to write about it in this country, thinks it is the lower end of the radius which is dislocated from the ulna. M. Goyrand says it is a displacement of the interarticular cartilage of the wrist, at the end of the ulna. Other French surgeons, also Dr. Hodges of Boston, and Mr. S. H. Lindeman, think that it is the head of the radius which is displaced at the elbow. Mr. C. Heath thinks it occurs sometimes at the wrist, and other times near the elbow, and this is my opinion. I am not prepared to say what the exact nature of the injury is; but, in those cases at the elbow, it seems to be a slight displacement of the head of the radius forwards and probably outwards. In one case at the wrist the injury was not remedied, though I supinated the arm and flexed the wrist, till I moulded the parts, as it were, surrounding the wrist-joint. This, I thought, might be a case of displacement of the ulnar interarticular cartilage, but I am more inclined to think that the injury at the wrist is due to displacement of the lower end of the radius.

The majority of the cases which I have seen were caused by some one catching hold of the hand of the child, who was then dragged towards them. In a few cases, where I could get more reliable information, a nurse-girl stood behind the child, who was sitting, caught it by the hand, which caused it to rotate, as it were, on its elbow-joint, with its arm fully pronated, and raised it at the same time from the floor.

CLINICAL MEMORANDA.

PREGNANCY COMPLICATED BY ACUTE RHEUMATISM:
PREMATURE DELIVERY AND DEATH.

S. A. P., aged 31, was seven and a half months advanced in her fifth pregnancy. She had rheumatic fever in her childhood, and again eight years ago. The heart was said to have been then affected, but of this no trace was left. The recent illness began on the morning of March 6th. When she was first seen that day, both wrists and the finger-joints of the right hand were affected. Temperature 103.8. There were no cardiac symptoms. She was treated with salicylate of soda. On March 7th, the pain was relieved; but there was great dyspnoea. A loud systolic apex murmur was heard. Temperature 103.2°. On March 8th, in the morning, there was no pain; the dyspnoea was relieved. Temperature was normal. She complained of vague pains in the abdomen. In the evening, the patient was delivered, by a single pain, of a dead child. When she was seen, within half an hour after delivery, the temperature was 100°; pulse 120; respirations 56. A mucous rattling was heard in the throat, and moist sounds over the larger air-tubes. The placenta came away easily and without hæmorrhage. Stimulants and expectorants were administered. On March 9th, in the morning, she was comfortable; the breathing was easy, and the temperature normal. In the evening the temperature was 99.80. Pain had returned in the right wrist and ankle. On March 10th, in the morning, the temperature was 104.5; the pain was no better. The dyspnoea had returned, and there was much bronchitis. She gradually sank, and died soon after midnight. The chief points of interest about this case are: the extreme rarity of acute rheumatism as a complication of pregnancy; and the fact that delivery did not take place when the pyrexia was at its height, but after the temperature had been lowered, and when the patient was feeling comparatively well.

ALFRED HARVEY, M.B., Lozells, Birmingham.

which, if one kidney were tuberculously diseased, the other kidney and other parts of the urinary tract were free from disease. At any rate, after nephrectomy for tuberculous kidney, a portion of ureter similarly diseased would be left.—Mr. KNOWSLEY THORNTON had had a tolerably large experience in operations on the kidney; he had performed lumbar nephrotomy three times, and abdominal nephrectomy three times, and all the patients had recovered. He was thus in a position to speak from experience as to each method, and he had no hesitation in giving the preference to the abdominal section, by incision outside the rectus abdominis, instead of in the median line. This was advocated by Langenbeck, of Berlin, at the Congress, and Mr. Thornton had found it most satisfactory. There was even less hæmorrhage from the parietes than in the median incision; there was little or no exposure of the general peritoneal cavity, the renal vessels could be reached and ligatured before the kidney was enucleated, and much hæmorrhage thus saved; and there was much less hæmorrhage in enucleating through the outer layer of the meso-colon, than through the inner layer, where most of the vessels lay. He had twice operated by this incision during the last few weeks, and both patients had recovered with but little fever; indeed, convalescence was almost as rapid as after an ordinary ovariectomy. He had brought out the end of the ureter in each case, and fixed it in the wound; and this he regarded as important in avoiding sepsis. He had in one of the cases previously performed lumbar nephrotomy, hoping to cure by free drainage, but the only result was to increase the difficulty of the after nephrectomy, as in Mr. Morratt Baker's case; and he could not at all agree with Dr. Goodhart as to the advisability of making nephrotomy an introduction to nephrectomy. He had, however, found it possible to destroy the existing sepsis by the free use of tincture of iodine. In his last case the kidney weighed four pounds seven ounces, and contained twenty pints of pus, and it would have been quite impossible to perform the operation through the loin. From a careful consideration of the published cases, and from his own experience, he would strongly advocate Langenbeck's incision in all cases, and he believed that, with experience and care, the operation, though performed through two layers of peritoneum, might be made practically an extraperitoneal procedure, the peritoneum being closed immediately the opening for enucleation had been obtained. In reply to Mr. Morratt Baker, he might mention that he had had several cases of abdominal operative surgery, under the carbolic spray, lasting two, or nearly three hours, and that he considered the chance of danger from the spray was very little indeed.—Dr. BARLOW said that, in a case, operated on by Mr. Couper, the patient, a girl, was in good health several months after the operation. In her case the pyelitis, as in many other instances known to him, had been located in one kidney only.—Mr. BARKER said that, as to the removal of the last rib, in one case where the end of the rib was resected, the patient became cyanosed, with all the symptoms of a collapsed lung, and had died. In another case, operated upon by himself, he had unintentionally removed the end of the last rib in cutting down upon the kidney; no ill result had followed.—Mr. REEVES said that, although he had never had occasion to do nephrectomy, he had cut down on the kidney for exploratory purposes, and had seen nephrotomy and excision of the organ in three or four instances. The incision adopted was the usual oblique one as for lumbar colotomy, but nearer the rib. If more room were needed, this incision might be increased, or one at an angle to it added. He thought that intraperitoneal excision of a portion of the last rib was justifiable in cases where the organ could not be extracted without it, but he quoted a case in which a large kidney was removed by pulling up the last rib, and thus getting an inch to an inch and a half more room. This mobility of the last rib should be utilised as much as possible before proceeding to the somewhat severe measure of excising a part of it. There were some cases of cystic kidney, which could not be removed by the lumbar or extraperitoneal method; and he had recently assisted at such a case, which, before and during operation, had closely simulated an ovarian tumour, so as to deceive experienced ovario-momists. Had it been attempted to remove this through the loin, the operation would either have failed, or only been concluded with serious and unsurgical damage to the peritoneum. He, therefore, thought that large cystic kidneys should be removed by the intraperitoneal method, although two layers of peritoneum were incised, as now-a-days there was little risk in properly selected abdominal operations.—The PRESIDENT said he was pleased to hear that the means adopted by Mr. Thornton to render the wounds aseptic by the free use of tincture of iodine were efficacious. He had recently seen a lady, aged 24, sinking, with pus in the urine, in whom it was doubtful as to whether there were calculous or scrofulous kidney. Under chloroform, the kidney was felt to be large. Upon puncture of the organ, pus escaped; no calculi were discovered. The wound in the kidney-substance was en-

larged, and cavities were detected, from which four or five ounces of pus escaped. Two large drainage tubes were introduced; the wound was sewed up, and covered with eucalyptus gauze. It might be asked why was this done? Because, in some such cases, after the letting out of such offensive pus, the next day only a serous oozing would occur, although bacteria might have been present when the pus was first discharged. Antiseptic treatment answered its purpose completely in such cases. That patient was now recovering; the discharge was lessening, and the wound was healed. Even if the kidney had proved to be tuberculous, and had had eventually to be removed, his patient could not at that time have survived the major operation of nephrectomy. He had never known the carbolic spray injure the patient, although used during a long abdominal operation.—Dr. GOODHART said that, as to the question of the removal of a part only of the disease, he believed the disease commenced in one kidney, then went to the bladder, and up the other ureter to the other kidney, which, after a year or two, became diseased. He did not think it was an argument against the operation that the suppuration in the urine lasted afterwards, for it very soon diminished, and then ceased entirely.—Mr. GOLDING-BIRD said the patient was collapsed before he was put to bed, and did not die from the morphia, as he had quite roused. Neither did he think the pleura could have been hurt in any way. He thought each case must be decided on its own merits, so far as the question of nephrotomy or nephrectomy was concerned.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, MARCH 3RD, 1882.

G. M. HUMPHRY, M.D., F.R.S., President, in the Chair.

PROFESSOR HUMPHRY, on taking the chair, made some complimentary allusions to the late President and Mr. J. CARTER moved, and Mr. E. CARVER seconded, a vote of thanks to Dr. Paget for his services in the chair during the last two years.

Sarcomatous Tumour of the Humerus Involving the Parts about the Shoulder-joint.—PROFESSOR HUMPHRY brought forward a case of malignant tumour of the right humerus, in which he had amputated at the shoulder-joint, removing also the forepart of the scapula and clavicle. The patient was of cachectic look, and the axillary glands were much enlarged. The arrest of hæmorrhage from the artery was greatly facilitated by the use of an apparatus devised by Mr. Wherry, for compressing the subclavian, by means of which the vessel was controlled without trouble for about thirty minutes. Dr. Humphry observed that the disease in this case was mostly outside the periosteum, and had insinuated itself between and invaded the muscular fibres, whereas it is usually seated beneath the periosteum, the fibres connecting the periosteum with the bone being frequently stretched, hypertrophied, and ossified, these ossified fibres radiating from the bone into the substance of the tumour. Usually also the disease invaded the interior of the bone; and when attended in that situation, as well as on the exterior, with bony transformation, it constituted the osteoid tumour of some pathologists.

New Artery-Compressor.—Mr. WHERRY exhibited an instrument, devised by himself, more especially useful for compression of the subclavian artery. It was T-shaped, the vertical limb was padded, and from each extremity of the cross-piece an elastic band extended in front and behind the chest to be fastened round a cushion in the opposite axilla. If the right subclavian had to be commanded, a cushion was placed in the left axilla, and the apparatus so applied that one elastic band passing in front of the chest and another behind, pulled upon the bridge across the right clavicle and pressed the vertical limb towards the vessel with a force, the resultant of the two forces produced by the tension of the elastic bands. The surgeon should stand behind the patient, should feel the vessels pulsating with his left forefinger and direct the instrument with the other hand on to the passive forefinger. This apparatus was of especial value when the artery required control during a long operation as in Professor Humphry's case, where the artery was completely commanded for half an hour by the watch. Mr. Weiss had made the instrument from Mr. Wherry's model. The apparatus acted as surely as digital compression, without the risk of fatigue of the fingers which was likely to lead to loss of blood at the critical period of an operation.

Perforation of Popliteal Artery after Excision of Knee-joint.—The patient was a girl aged 17, under the care of Mr. CARVER. She suffered from chronic synovitis of the left knee, with a history of phthisis, old cornitis and diseased left elbow. A month after excision of the knee-joint sudden hæmorrhage occurred four times in two days. Amputation was deemed necessary, and after this it was found that the popliteal artery was ulcerated through by contact with a rough point of bone in a carious state. The patient made a good recovery in a month.

Cylindrical Epithelioma of the Stomach.—Mr. SHANN showed the stomach of a patient, aged 33, who had been under the care of Dr. Paget, in Addenbrooke's Hospital. For five years he had been subject to dyspeptic symptoms, with periodical attacks of vomiting, and gradual loss of colour. During the twelve months preceding his admission the vomiting had been more frequent, the anæmia had become rapidly more pronounced, and on two occasions there had been hæmatemesis, but no melæna had been observed. When admitted into the hospital he was in a state of great prostration, and highly anæmic. There was inability to retain food in the stomach, and the exhaustion increased, death occurring a few days after he came under observation. On the posterior wall of the stomach, close to the middle of the greater curvature, was found an area, about two inches square, covered with soft, fungating, extremely vascular, pedunculated masses. On the anterior wall, a little below its centre, was a single pedunculated growth of like nature, the size of a filbert. The mucous membrane elsewhere was perfectly healthy, even close to the margin of the disease, and there was no affection of the liver, or of the glands in the neighbourhood. On microscopic examination the new growth was seen to consist of a nucleated alveolar stroma, the alveoli being large and lined with a single layer of columnar epithelium, and their cavities filled with polygonal nucleated cells, which in the more central parts were undergoing degenerative changes. —Dr. HUMPHRY observed that this disease, in its general characters, resembled very closely villous disease of the bladder. He thought that, if the diagnosis were more certain, it would be feasible to open the stomach and remove the growth, as had been done in the case of the villous growth of the bladder by himself and some other surgeons.

Contracted Toe.—This specimen, exhibited by Dr. ANNINGSOON, had been removed by Mr. G. Wallis. The pathological explanation of the case was the contraction of the tissues intervening between the long flexor tendon and the joint. —Dr. HUMPHRY had dissected other examples of the same deformity, and had found, as in this case, that the deeper tissues were the seat of the contraction. In the contraction of the fingers, which usually attacks first the ring-finger, the change was probably of gouty or rheumatic nature and seated in the palmar fascia, or in the tissue lying between the palmar fascia and the skin. —After some remarks by Mr. WHERRY, Dr. ANNINGSOON showed a specimen of destruction of biceps tendon from rheumatic disease of shoulder joint.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 15TH.

J. BASSETT, M.D., in the Chair.

Fracture of Base of Skull.—Mr. J. F. WEST showed a specimen of fracture of the base of the skull, caused by a violent blow on the nose, taken from a healthy man aged 48. The patient, while shaping a pair of bellows at a circular saw, was struck violently in the face by the flying upwards of the wood. There were no cerebral symptoms until shortly before death, forty-eight hours after the accident. At the *post mortem* examination, a fracture of the orbital plate of the frontal bone was found on the right side, close to the crista galli. The ethmoid bone was completely smashed, as were the septum nasi and turbinated bones. Blood ran into the ventricles and at the base of the brain also existed.

Foreign Body in Eye.—Dr. WOOD WHITE exhibited a patient who had been completely blind with the right eye for over eleven years. A piece of iron, two eighths of an inch long, having lodged in the capsule of the lens. The foreign body was removed by Dr. White, at the Birmingham Eye Hospital; and a few weeks afterwards, with a three and a half inch lens, vision was normal.

Intestine in the Bladder.—Mr. T. F. CHAVASSE exhibited a man, aged 41, with enlargement of the bladder, upon whom it was proposed to perform a lithotomy operation to cover in the organ.

Laceration of the Peritoneum.—Dr. MALINS read a paper on laceration of the peritoneum. After enumerating the causes and symptoms of this condition, the author stated that he was able, from his own experience, to verify the statement of American physicians, that the lesion was not uncommon, if carefully looked for; and that the symptoms manifested on the body were probably a little milder than over the marks. Dr. Malins described the operation necessary to remove the intestine, and cited several instances under his own care which had been cured by this means.

Acute Necrosis of the Testis.—Mr. WEST read a paper on Acute Necrosis of the Testis, in which he gave a description of the disease, and a description of the various anatomical changes which were observed in the testis. Mr. WEST also gave a description of the mode in which the thermal treat-

ment is carried out at Aix; and spoke highly of its value in cases of rheumatic arthritis, gout, and in the various forms of constitutional syphilis. He also strongly advocated the springs of Ervan in lithiasis, and those of St. Gervais in eczema and other inflammatory diseases of the cutaneous system, and gave a brief description of both of those picturesque health-resorts.

WEDNESDAY, MARCH 1ST.

J. MANLEY, Esq., President, in the Chair.

Calculi removed from Perineum.—Mr. T. F. CHAVASSE showed five calculi extracted from an opening in the perineum of a young man upon whom lithotomy had been performed eight years before. A few weeks previously, while he was riding in a bicycle contest, the perineum was bruised, and an abscess formed in the site of the old wound. The fistula not closing, Lister's ear-probe was introduced, and the calculi extracted simply from the sinus; the opening shortly healed.

Disease of Hip-joint.—Mr. CHAVASSE exhibited a specimen taken from a man, aged 32, suffering from hip-joint disease. The head of the femur was removed, together with a large portion of the floor of the acetabulum. Under Listerism the case progressed satisfactorily.

Keloid.—Mr. SPOFFORTH (Kidderminster) introduced a man, aged 37, who had several large patches of true keloid developed on the chest. These commenced to form about ten years ago; the pain experienced was of a screwing nature; the general health remained unaffected.

Inflammation of the Bladder.—Mr. WALFORD (Dudley) exhibited the bladder of a man, aged 41, in which there was a rent of the size of a shilling on the outside of the vesicula seminalis. The patient had sustained a fall, and when admitted into the Guest Hospital, Dudley, was suffering from extreme collapse, the other symptoms being ill-defined. A large catheter introduced into the bladder drew off a little urine and some clotted blood; with a little manipulation the point of the instrument could be passed through the rent in the viscus. Death took place twenty-eight hours after the accident. At the *post mortem* examination there was no general peritonitis, but about a quart of urine and blood clot were removed from the right side of the pelvic cavity. Mr. Walford remarked that, in the present instance, it would have been useless to fasten a catheter in the bladder, and the condition of the patient was a bar to laparotomy or perineal section being performed.

Myxomatous Polypus of Bladder.—Mr. LAWSON TAIT showed a myxomatous polypus that he had removed from the bladder of a woman.

Infective Endocarditis.—Dr. CARTER read a paper based upon the following case of so-called ulcerative endocarditis. A lad, aged 16, was admitted into the Queen's Hospital, Birmingham, on January 30th, suffering from acute rheumatism. There were no complications, cardiac, or otherwise. On the third day after admission, pleurisy supervened on the right side, and two days later on the left also. The patient gradually lapsed into a typhoid state. On February 15th, for the first time, a soft systolic murmur was heard on the precordia, which could not be precisely localised. Five days later he became comatose and died. On *post mortem* examination the following lesions were found:—double pleurisy, small metastatic abscess (embolic) in both lungs, several infarcts in both kidneys, an enlarged softened spleen and perforative ulceration of the tricuspid valve. The other orifices and valves were healthy.

Stricture of Ureter.—Mr. BENJAMIN MAY read a paper on a case of stricture of the ureter with hæmaturia and supposed obstruction to the ureter by blood clot. The symptoms indicating the latter were the sudden disappearance of blood from the urine, and the simultaneous occurrence of very severe pain in the loin. Mr. May, believing that urine was accumulating either in the pelvis of the kidney and ureter, or in the perinephric space, introduced a fine passing needle on the outer side of the crista, and close under the last rib, aiming for the pelvis of the kidney. After passing in some distance, fluid was tapped, and seven ounces of bloody urine withdrawn. Within a few hours blood disappeared from the urine, and the patient, a young man, rapidly recovered. Mr. May discussed the question of the possible locality of the blood drawn off, coming with the deduction that it was encapsuled in the tissues outside the kidney into which it had escaped through a small rent in the capsule.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

THURSDAY, FEBRUARY 16TH, 1882.

J. W. TERRY, M.D., President, in the Chair.

Quarantine.—Mr. TERRY read a paper on Quarantine, in which he considered that a long period of quarantine—such as

eight or ten weeks, and sometimes four months—was to be deprecated in the case of children recovering from scarlatina; he himself, for many years, had isolated cases for a fortnight, and in some instances for a week only, after the departure of the fever, and he had never heard of any evil result accruing from such a course. He next mentioned various cases in large schools, which served to explain his views as to the causes of scarlatina. The first outbreak of which Dr. Carpenter made mention was, in his opinion, entirely caused by a cesspool situated in the school yard, which was the recipient of washings from a slaughter-house; and, once a week at least, the aerial contents of this cesspool were displaced into the closets of the boys, situated in close proximity to it. As soon as this cesspool was emptied, and the drains properly directed into the sewer, scarlatina ceased to appear in the school. Want of proper ventilation in the soil-pipe and drains belonging to the building, caused an outbreak of scarlatina in another school—the drains being in direct communication with the main sewer of the district, and scarlatina being also at that time very prevalent in the neighbourhood. Dr. Carpenter believed that the nature of the blood, into which the poison was received, aided more materially in increasing the mortality from scarlatina than the character of the poison itself; and, in support of this theory, he instanced two outbreaks of this disease, in one of which the mortality had been excessive, fourteen persons having died out of seventy-five who were attacked; and, in the other outbreak, only three deaths occurred, though the total number of cases was one hundred and eight. Dr. Carpenter attributed this difference in the mortality to the surroundings of the children; in the one instance, the conditions were on the whole healthy; while, in the other, the children were exposed for a much longer period to an impure atmosphere, and were badly cared for at home. The cause of the two outbreaks was similar in character: the excreta of the first case of scarlatina, in each school, passed down unventilated drains, which communicated directly either with class-rooms inhabited by the children, or with closets used by them. In conclusion, Dr. Carpenter said that he believed scarlatina more often arose from sewage-emanations, or from sewage-contaminated with scarlatina-germs, than from personal contact. He considered that, in many cases where the cause of the disease had not been discovered, it might have been found, on careful investigation, to proceed from some accidental inhalation of sewer-air; and that persons who were constantly exposed to such an atmosphere were liable to more severe attacks of scarlatina and diphtheria than those who inhaled the poison for a short period only. Dr. Carpenter also suggested that the discharge of hot water and waste from steam-engines into the sewers, was a source of danger in producing scarlatina and diphtheria.—In the discussion which followed, the President, Dr. Churchill, Dr. Child, Mr. Jacob, Dr. Kelly, and Mr. Shirley Murphy took part.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

J. DRESCHFELD, M.D., PRESIDENT, in the Chair.

Lupus.—The PRESIDENT exhibited numerous sections of lupus from the upper lip, and demonstrated the development of giant-cells from the epithelium of the sweat-glands. Sections taken from a part where the disease was only just commencing, showed the process to consist of an infiltration of the sweat glands and the surrounding tissue, with embryonic cells; there was also marked proliferation of glandular epithelium. Sections from other parts showed enlargement of the lumen of the sweat-glands, and their distension with small cells, or, in some instances, with a more homogeneous material, showing numerous well-stained elongated nuclei; further, the gradual changes of these altered sweat-ducts, resulting in the formation of giant-cells, were observed in different parts of the section. In parts representing older growth, the giant-cells were found to show a hyaline central portion—a peripheric zone, with rod-shaped nuclei—and processes which passed into the surrounding embryonic cell-masses. The oldest giant-cells were atrophied, horny, and showed no nuclei. The changes seen resembled very much those described by Arnold (Virchow's *Archiv*, 1880), in the formation of giant-cells from biliary ducts in tubercle of the liver.

Epithelioma of Lung, with Secondary Growths in the Kidneys and Bones.—Dr. DRESCHFELD showed the organs and sections from a case of pavement-cell epithelioma. The most careful examination during life, and after death, did not reveal the presence of any growth, either affecting the skin or the mucous membranes. The tumour in the lung was about the size of a walnut, and was whitish in colour, and of soft consistency. It surrounded a large bronchus, and led to the rupture of a large artery into this; the resulting hæmorrhage being the immediate cause of death. Secondary tumour masses, showing central softening,

were found in the kidneys, in the bodies of some of the vertebrae, and in one rib. All the tumours presented characteristic histological appearances, showing large epithelial cells with numerous cell-nests.

Sarcoma of the Eyeball.—Dr. A. H. GRIFFITH exhibited sections of an eye, which showed a new growth, apparently connected with the sclerotic coat, and pushing forward the greater part of the choroid, the tumour intervening between these tunics. The growth, which was rounded, and of a whitish colour, extended from the fundus almost as far forward as the lens. It was almost entirely composed of long spindle cells, which at one part showed slight pigmentation.

Rodent Ulcer.—Dr. GRIFFITH also showed sections of a rodent ulcer which had been excised from the lower eyelid of a man aged 50. In this case, the gap left by the removal of the ulcer had been filled up (by Dr. Mules) with a piece of skin transplanted from the arm. The patient was brought before the members of the section. There was hardly any deformity, and no ectropion.

Perichondroma, Enchondroma, etc.—Mr. A. H. YOUNG showed sections of a large perichondroma of the femur—others of an enchondroma of one of the phalanges of a finger—and also sections from a case of myeloid sarcoma of the femur.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MARCH 1ST, 1882.

EDWARD LUND, F.R.C.S., President, in the Chair.

Tubercular Ulceration of Intestine simulating Typhoid Fever.—Dr. SIMPSON showed the lungs and a portion of the intestine from a case of tuberculosis. The interest lay chiefly in the close resemblance to enteric or typhoid fever. Mary P., aged 21, domestic servant, was admitted to the Manchester Infirmary November 17th, 1881. The health had been good up to six months before. Since then, she had felt increasing weakness, but became much worse three or four weeks before admission, with cough and expectoration. On admission, the evening temperature was 104°; pulse 128. There were morning remissions. Slight flattening, with diminution of resonance and some moist râles, existed at the left apex. Sonorous and cooing rhonchi and moist râles were heard, indeed, over the greater part of the chest, but the latter were constant at the left apex. The abdomen was natural, not tumid. There was no pain nor gurgling on pressure in the iliac fossa; but a few rose spots, exactly like those of typhoid, were scattered over the surface. The tongue was a little furred, but moist. The bowels were slightly confined. The spots appeared and disappeared in successive crops through the whole course of the case. There was high temperature in the evenings, with morning remissions. On November 27th, diarrhoea set in, and the motions speedily assumed the "pea-soup" character. The expression, the mental hebetude, the character of the delirium, all closely resembled what is seen in typhoid. She died on December 18th. Both lungs were congested at the bases. A small cavity of the size of a walnut was found at the left apex; while numerous miliary nodules were scattered through the surrounding lung-tissue. In the middle lobe of the right lung was a caseous mass of the size of a filbert, with some scattered miliary tubercles. The peritoneum was normal, and also the mucous membrane of the ileum till near the lower end, where numerous small rounded and oval ulcers were found. Their margins were thickened; the floor was formed by the muscular, and in some cases the serous coat, but there was no perforation. The ulcers extended transversely round the intestine, contrasting markedly with those found in typhoid. They extended through the whole length of the large intestine. The other organs were healthy.

Dementia resulting from Hereditary Syphilis.—Dr. BURY remarked on the very scanty allusions to the possibility of such a connection by either writers on insanity or on syphilitic nervous diseases. He mentioned three cases. One was shown at the meeting; a girl, aged 14. She "snuffled when a baby, and was covered with brown spots". There was a distinct family history of syphilis; none of insanity or fits. There were now scars at the angles of the mouth, a shallow notch in the edge of each upper incisor, also advanced disseminated choroiditis. Her memory had been failing for three years, and there were other signs of progressive dementia of mild type. There was slight tremor of tongue, and the cheek-muscles; and partial loss of control over micturition. Dr. Bury gave *post mortem* evidence of importance of syphilitic arteritis as a factor in these cases, starving, and so causing gradual atrophy of the brain.

Progressive Facial Hemiatrophy.—Dr. DRESCHFELD showed a girl, aged 9½, affected with this very rare form of disease. The atrophy affected the left side of the face. It came on without any particular cause four years ago, and seemed to be gradually progressing. The parts affected were the skin, the subcutaneous tissue, and the lower

October 1880. About Christmas of the same year he was suddenly seized with very severe dyspnoea. In March 1881, he went into the Royal Infirmary for his cough, and remained there six weeks. In November he felt a "downy fluttering" in his larynx, chiefly on the left side, which had persisted since that time. When seen for the first time he looked as if he had been a strong man who had fallen off in flesh lately. He had an anxious expression. There was a loud stridor in breathing, now and then broken by cough, and great dyspnoea on exertion. On laryngoscopic examination, the left vocal cord was seen fixed, while the right moved freely during phonation and breathing. Laryngeal whistling sound was heard over the tracheal and laryngeal regions. The apex-beat of the heart was seen in the sixth interspace in the mammary line. The cardiac area was enlarged outwards, and to the right of the sternum at the level of the fourth cartilage. There was a low systolic murmur over the site of the apex beat. The aortic second sound was very loudly accentuated. No well-marked area of dullness in the aortic region. In the track of the right carotid were two well-marked pulsating tumours, each about the size of a walnut, one just above the clavicle, the other below the angle of the jaw. Radial pulse, normal and equal in both wrists. He stated that his family had all been long-lived and strong, and that he had lost three stones in weight. Iodide of potassium in twenty-grain doses was ordered to be taken three times a day, with cod-liver oil. He improved under this treatment, sleeping and eating better, and having more strength; and in a month he could lie on his back easily, and also on his left side, though not quite so well. There was no gain in weight, but cardiac impulse was stronger, and the pulsation in the carotid tumours was much less. The case was brought before the society, not so much for the interest attached to the aneurysm, as on account of the somewhat unusual presence of paralysis of a vocal cord.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, FEBRUARY 10TH, 1882.

B. W. RICHARDSON, F.R.C.S.I., in the Chair.

Resection of the Knee-joint.—Mr. WHEELER showed the patella and portions of the tibia and femur, which he had removed ten days previously in resecting the knee-joint. C. K., a delicate boy, was admitted into the City of Dublin Hospital on December 15th, 1881, stating that three years before he had received a hurt on the knee, which caused severe pain in the joint a fortnight afterwards, and that the pain always returned in frosty weather. Before operation, the circumference of the sound limb below the patella was nine inches and a half; that of the diseased limb was ten inches and a half. Above the patella, the sound knee measured ten inches and three-quarters, and the diseased one eleven inches and a quarter. There was little pain, but the knee was habitually semiflexed. The specimens showed the presence of "pulpy disease" of the knee-joint. The patella was free from caries, but the surrounding structures were thickened. The femur was only slightly carious, but the tibia was considerably diseased; whilst the internal semilunar cartilage was nearly destroyed. The case was doing well since the operation.

Cancer of the Œsophagus.—Mr. CROLY showed the stomach and œsophagus of a man aged 60, who was admitted into the City of Dublin Hospital on December 27th, 1881, suffering from intense dysphagia. Whenever he attempted to swallow, after a few spasmodic efforts, the food was forcibly ejected. There was no history of syphilis, nor was there evidence of disease in the stomach. The diagnosis of epitheliomatous growth of the œsophagus was made; and an operation became imperative. Gastrostomy was performed, and a tube inserted; but the man only survived for twenty-four hours. The specimens showed extensive but sharply defined cancerous disease of the œsophagus just below the crossing point of the left bronchus. There was no disease in the lungs, liver, heart, or other viscera. The adhesion between the mucous membrane of the stomach and the external skin, to which it had been stitched in the operation, was remarkably complete, considering how short a time (twenty-four hours) he had survived. He (Mr. Croly) believed that, once the diagnosis was arrived at, and the necessity of operation recognised, the sooner it was performed the better, for delay only served to allow emaciation, which took place with startling rapidity in such cases, to reduce the chances of success to a minimum.

Compound Dislocation of the Ankle.—Mr. THORNLEY STOKER showed the foot and adjoining parts, which he had amputated in consequence of a compound dislocation received by a sailor whose ankle was entangled in a chain on the quays. It was an instance of the least usual form of dislocation of the ankle—viz., the foot inwards, and the bones of the leg outwards. The malleolar process of the fibula was fractured transversely, and remained attached to the foot.

The malleolar process of the tibia was fractured obliquely, and also remained *in situ*.

Mammary Cancer.—Mr. ORMSBY showed two specimens of scirrhus disease of the female breast.

Lithotomy in a Boy.—Mr. CORLEY described a case of vesical calculus in a boy aged 8, on whom he had performed lateral lithotomy about three weeks previously, and in which he experienced unusual difficulty. The operation took about a quarter of an hour to perform, the delay being caused by the difficulty in entering the bladder with the blunt-pointed knife in the groove of the staff. Such difficulties were often experienced if the assistant who held the staff allowed his hand to fall on to the abdomen of the patient, for then the tip of the staff was thrown forwards into the membranous portion of the urethra, and protruded into the space between the bladder and rectum; and it was into that space that he at first feared he had opened; but, on again using the sharp-pointed knife, he divided the opposing structures, and, entering the bladder, removed the calculus.—Mr. STOKER said that the difficulties attending the operation of lateral lithotomy in the adult and the child were so totally different, that the two operations could hardly be placed in the same category.—Mr. O'GRADY thought that the surgeon often got blame where the assistant really deserved it, for allowing the staff to get out of its proper place; otherwise, he did not see how the bladder could be missed if the groove in the staff was followed.—Mr. ORMSBY thought the bladder was often best reached by following the concavity of the staff rather than the grooved convexity.—Mr. RICHARDSON thought a very important point was to use as large a staff as the urethra would admit.—Mr. WHEELER was in the habit of using the same knife, the sharp-pointed one, throughout the whole operation, and he had never experienced the difficulty felt by Mr. Corley; he believed the cause of his trouble was the yielding structures of the child's urethra being pushed in front of the blunt-pointed knife.—Mr. BENNETT agreed with Mr. Ormsby that the concavity of the staff was often the best guide to the bladder.—Mr. CORLEY, in reply, said he would hesitate to follow the concavity of the staff, as the structures being soft, could be very easily pushed before the knife.

Division of the Neck of the Femur in Cases of Ankylosis.—Mr. STOKES read the notes of a case of complete angular ankylosis of the hip-joint occurring in a boy, Nicholas B., aged 14, who was admitted into the Richmond Hospital on March 1st, 1881. The right thigh and leg were atrophied, not only as regards the soft structures, but also as regards the bones of the limb; arrest of development in the tibia on the affected side, as well as in the femur, being well marked. The thigh was strongly flexed and rigid, rendering the limb perfectly useless to the patient, necessitating the use of crutches. The affected limb was three inches and an eighth shorter than the sound one, and the region of the hip-joint was surrounded by numerous cicatrices left after the closure of sinuses, other sinuses being still open. The disease was the result of injury received nine years previously. Forcible extension of the limb had previously been tried in another hospital, but without satisfactory result. Division of the neck of the femur was therefore performed. A straight incision behind the great trochanter, three inches and a half long, was made, commencing three-quarters of an inch above it, from the upper portion of which a further incision was carried in a curved direction upwards, backwards, and slightly downwards. The soft parts having been dissected through, the head of the bone was found rigidly fixed to the acetabulum, the neck being shortened and atrophic; there was no evidence of any part of the bone being softened. A medium-sized osteotome was then used to divide the neck of the bone, which was easily effected, and the limb straightened. Carbolic acid solution, 1 in 40, was used to wash out the wound, and a drainage-tube inserted, and Lister's dressings applied. During the convalescence of the patient, a moderate extension of the limb was kept up. After six weeks, the patient could get about the ward by the aid of a stick, without crutches; soon after, the stick was discarded, and the boy went home. Three months after this, Mr. Stokes saw the boy, and believed that a false joint had formed; the boy could walk without a stick. Mr. Stokes then gave a historical *résumé* of the various modes of performing osteotomy for angular ankylosis of the hip, from the writings of Rhea Barton to those of Adams, who devised a saw for the purpose of dividing the bone subcutaneously; the advantages of which, however great before the introduction of antiseptics, were now more than counterbalanced by the desirability of the surgeon seeing what he was doing; and the presence of bone-detritus in the wound, acting as centres of ossification, was probably the cause of movable joints not being obtained by Adams's method.—Mr. BENNETT said an important point was the *modus operandi*, whether by subcutaneous section, as recommended by Mr. Adams, or by free incision, as in Mr. Stokes's case. Unquestionably, when Adams pro-

BRITISH MEDICAL ASSOCIATION. SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 8TH, 1882.

DEATH FROM LEAD-POISONING.

Public and medical attention can hardly fail to be given to the facts of an inquest held by Mr. George Collier at Hoxton on Saturday, April 1st, respecting the death of Hannah McCarthy. Mary Eason, nurse at the Shoreditch Infirmary, and Dr. Donald Forbes, the resident medical officer, testified that, through the deadly trade the young woman had been engaged in, she bore the appearance of being between forty and fifty years of age, whereas she was only twenty-seven. She was a single woman, living with her friends, and some few days since was brought to the infirmary suffering from lead-poisoning, and was so ill as to be at once admitted to the infirmary, where she died on Thursday. The *post mortem* examination made by Dr. Forbes showed symptoms of lead-poisoning. The gums, where they joined the teeth, were blue all along, and the cause of death was effusion into the ventricles of the brain consequent on this poisoning. Dr. Forbes stated that he had had at least sixteen cases under his treatment during the past twelve months from the different factories in the neighbourhood; and the nature of the occupation was so deadly that, in one case, a young woman who had been in the lead works only two weeks was so poisoned, that it took five months' stay in the infirmary to cure her. The coroner stated that these cases were, unfortunately, not uncommon, the powdered lead obtaining access to the lungs, and so poisoning the body; and in the case where the material used was wet, it became absorbed into the system through the skin. He thought that men were in some measure protected by their whiskers and moustaches from taking in the powder into their lungs; but, in the case of women, the manager of these works ought to be compelled by law to provide them with respirators. Several of the jury, who delivered a verdict of death from lead-poisoning, stated their opinion that the masters ought to be compelled to look after their workpeople, and see that they were better protected against the evils of such a trade. The coroner said he could only take that as their opinion, for the managers were not compelled by law to take any steps, nor need women work in these places unless they liked. Dr. Forbes remarked that, from his experience, the workers at these noxious trades ought to be better protected by law.

The following directions and regulations relating to factories, workshops, and timber-yards, where the manufacture or manipulation of lead and its compounds is carried on, are prescribed by law in France. They have recently been forwarded to us by M. Gautier, and this is an appropriate moment at which to call attention to them.

Workshops where white lead, yellow lead, and red lead are manufactured, should be easily ventilated, swept, and thoroughly scrubbed throughout. The operations of clipping, cleansing, and rolling white lead and yellow lead should be performed under water, or on materials just taken dripping out of the water. The rubbing down and sifting of white, yellow, and red lead should be done in closed apparatus with sides of rivetted iron plates. The scraping, crushing, grinding, and brushing of these substances should, as far as possible, be effected by mechanical means. Direct manipulation with the shovel, and transport in open carts and wheelbarrows, are prohibited in the case of dry materials. Roasting furnaces may be constructed in workshops, on the condition that all necessary means for carrying the lead dust and

fumes into the outer air shall be adopted. Every week, the wood-work, walls, and floors of the workshops should be thoroughly scrubbed, so as to carefully remove all noxious particles. A water-pipe, with tap for the use of at least three men, should be placed at the entrance of the workshops, so that the workmen can attend to personal cleanliness at least twice a day. The foremen of works should see that the working coats and other working garments of the workmen should be left at the factory whilst the operatives go out to get their meals. These garments should be brushed and beaten several times a week out of workshops, and at a distance from the workshops. The use of oil in the manufacture of white lead diminishes in a very efficacious manner the objections noted in the manufacture of dry or moist white lead. A special register, inspected daily by a medical man, should show whence the workman comes, his pathological precedents, his previous occupations in the factory, the nature of his present employment, and his state of health at the time of the daily visit. The workshops and yards of house-painters, colour-grinders, polishers, etc., should be well ventilated and very open to the air wherever dust is produced by the grinding, pumicing, and burning of lead paints and colours. These openings should be left wide open, whenever white-lead paintings are hung on the walls and furniture, until they are quite dry. The siftings, changes from vessel to vessel, and mixtures of colours, should not be made in the localities where the workmen usually live. All parts of the factory should be thoroughly scrubbed whenever noxious dust is produced and deposited on the walls, woodwork, furniture, etc. The master, or, in his absence, the foreman, is responsible for strictly superintending the carrying out of these precautions, and of assuring himself that his workmen, before going to take their meals, should remove their working coats and use the necessary precautions of cleanliness. The grinding by hand of white lead is utterly condemned, as well as its mixture with oil by means of the grindstone. This practice is the cause of a large number of accidents. It is preferable by far, in order to grind the white lead with the different colours, to take that which has previously been mixed with oil in factories. Wherever lead, its alloys, and other preparations, are handled, the foremen of workshops should avoid everything which must uselessly bring the workman into contact with crude lead and its compounds. They should watch over the minute cleanliness of the workshops, and, by repeated cleansings, exclude from them all lead-dust. They should, as far as possible, avoid all beating, shovelling, and shaking about in close rooms where the men work; these operations produce and diffuse dangerous lead-dust. In any case, the workman will not be obliged to grind or sift lead-preparations such as enamel-powder, flint-glass, tin-putty, paint-lead-ashes, white lead-colours in powder, in any other way than in closed vessels. The workmen should not be allowed to remain, or still less to take their meals, in situations where dust containing lead is known to become disengaged. Workmen who handle any form of lead whatsoever, metal, alloys, soluble or insoluble preparations, should consider it as a certain fact that the absorption of the poison may be effected by simple contact with the skin, and that it especially takes place by the mouth, the nostrils, and the mechanism of respiration. They are, consequently, under an obligation for the common weal to prevent any disengagement of lead compounds in the condition of dust, and to avoid all useless direct contact with lead and its preparations. The cleanliness of their persons, clothing, tools, and especially of their hands, face, and more particularly their mouth, at meal-times, is an indispensable condition as regards their health. These precautions, joined to nourishing diet, especially if all excess be avoided, and notably in the abuse of alcoholic drinks, would suffice to render their occupation very nearly harmless. Every workman leaving a white lead factory, lead-works, house-painting works, glass-works, enamel-works, should, therefore, wash the hands, face, nostrils, and rinse out the mouth with the greatest care. For this purpose, after having sharply rubbed the hands, arms, and nails with sand or rottenstone provided by the master, he will sluice himself with running water. He will then go on to wash his nostrils, mouth, and face, brush his out-of-door garments, sponge his foot

blood. That the rhythmic contractions are really due to the splenic muscular fibre, and are not merely of arterial mechanism, is shown by the analysis of curves in which the "Traube-Hering" rhythm has happened to supervene; the regularly irregular trace which appears under these circumstances, evidently results from the interference of two series of waves at different rhythms; the one series (that of the specific splenic contractions) having a slower rhythm than that of the other series (that of the arterial contractions), which gives rise to the Traube-Hering waves in the spleen, as in other parts and organs. The reaction of the splenic muscle to vaso-motor excitation, direct or indirect, is similar to that of arterial muscle. Excitation of the vaso-motor centre by dyspnoea, or by faradisation, causes strong splenic contraction simultaneous with the increased blood-pressure due to arterial constriction; excitation of the central end of the divided vagus or of the sciatic nerve causes contraction; or, if the organ happen to be in a contracted state, increase in the extent of the natural waves; and it is noteworthy that such centripetal excitation will cause splenic contraction after section of both splanchnics and vagi, thus indicating that there is some further efferent channel to the spleen. Peripheral excitation of the splanchnics or vagi, right or left, cause strong contraction; simple section of the splanchnics or vagi is not followed by expansion, nor is the rhythm altered, facts which go to prove that the splenic muscle is not maintained in tonic contraction, and that its rhythm, unlike the Traube-Hering rhythm, is not of central, but of local administration. With regard to the vagus, there appears to be some peculiar influence upon the heart's action proceeding along this channel from the spleen to the medulla, as shown by characteristic "vagus-heart" pulsations during the splenic systole—by section of the vagi, the character of the former is abolished, the latter remain unaltered. For details of the method, we refer our readers to Dr. Roy's paper; it will suffice to state here that the volume of the organ was measured and recorded from the displacement of fluid contained, with the organ, in a rigid case.

This important accession to our physiological notions of the spleen will doubtless be extended, in Dr. Roy's promised communication of the effect on the splenic circulation of the injection of various chemical substances into the blood. The observations throw light into an obscure corner of physiology; and, while deprecating the building of flimsy pathology upon limited foundations, we may reasonably expect that these and further observations should help us to realise pathological aberration and therapeutic rectification of splenic function. But to judge of the influence on the economy of the physical function of the spleen, its blood-forming function, also, must be more precisely known than it is at present. We know, for instance, that we can, in man, modify, by electrical means, the bulk and muscular action of the spleen, but we are yet comparatively ignorant of alteration in the blood which we thereby increase or diminish. But whatever our wants may be in respect to information and speculations upon the relation of the spleen to the blood-corpuscles, the knowledge of its autonomous circulation is an important addition.

THE library of the Royal Medical and Chirurgical Society is closed from Friday, April 7th, to Monday, April 10th, inclusive.

THE death of a boy fourteen years of age happened recently, at the Birkdale Farm School Reformatory, from tobacco-poisoning.

ACCORDING to a telegram from Berne, the United States Government has given in its adhesion to the Geneva Red Cross Convention.

THE number of small-pox patients in the Metropolitan Asylum Hospitals, which has steadily declined in the ten preceding weeks from 504 to 350, was 367 on Saturday last.

It has been stated pretty freely in the public press that at Guy's Hospital one hundred beds are closed for want of funds to keep them open; and that Westminster Hospital has been compelled to sell £4,000 of its stock to meet current expenses.

At the meeting of the Pathological Society of London, held on Tuesday last, the President announced that Professor Donders, of Utrecht, Professor Panum, of Copenhagen, and Professor Pasteur, of Paris, were unanimously elected honorary members of the society. The announcement was received with applause by a crowded meeting.

INTELLIGENCE reaches us that Dr. E. A. Adams, one of the most popular physicians at the Michigan Insane Asylum, at Kalamazoo, Michigan, was last month stabbed with a pocket knife, in the abdomen, by one of the inmates, from the effect of which injury he shortly afterwards died.

A SOCIETY has been formed in Austria, called the Society of the White Cross, to aid in the labours of the Red Cross Society by providing and superintending convalescent homes in healthy places for invalided and wounded soldiers.

THE President of the Metropolitan Counties Branch, Mr. E. Saunders, has issued cards for a *conversazione* at the South Kensington Museum, on Wednesday evening, May 10th, at 9 o'clock.

WE are requested to state that Mr. Barraud's picture of the International Medical Congress, to which we referred last week, is published by Messrs. Baillière, Tindall, and Cox, of King William Street, Strand. The picture is open to the inspection of all members of the profession, without reference to their becoming subscribers.

IN London last week, 2,647 births and 1,655 deaths were registered. Allowing for increase of population, the births exceeded by 8, whereas the deaths were 228 below the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which had been equal to 22.7 and 24.5 per 1,000 in the two preceding weeks, declined to 22.2.

THE Bath Rural Sanitary Authority have made an arrangement with the board of guardians to appoint a joint committee to consider what steps should be taken towards providing hospital accommodation for persons suffering from infectious diseases. This step has apparently been taken in consequence of the arrangement with the Bath Urban Sanitary Authority for the joint use of the Claverton-Down Hospital having been terminated.

At the recent meeting of the Surgical Aid Society, the Lord Mayor, in the course of his address, said ten per cent. of the population of the United Kingdom were in need of some kind of instrument such as the society provided. There were thirty-six million inhabitants in the United Kingdom, of whom 3,600,000, or about the population of the metropolis, were in some way crippled, and required aid such as that supplied by the society. There were a hundred thousand persons in London who required either false arms, eyes, legs, or something else of the same kind. The society, like all the hospitals in the metropolis and the country, is suffering from depression.

THE QUEEN'S RESIDENCE AT MENTONE.

THE health of Her Majesty, and of the Royal household, has continued to be most satisfactory during the last week. Her Majesty takes daily walks and drives, and seems much to enjoy the scenery. The weather has been perfect from the 26th March to the 3rd April, with scarcely any variation. The maximum temperature has been 60° to 61°; the minimum about 46°. The wind has been north-east; the sky clear, blue; the sea calm, with a slight swell. The fine clear weather on the Genoese Riviera is almost invariably with north-east or north-west winds, which blow over the mountains into the sea, miles from land, leaving the sheltered coast-line steeped in sunshine. When the wind is in the south, if slight, the sky becomes more or less covered with fleecy clouds; if it be strong, the clouds darken, collect on the mountains, and rain falls. South winds, coming from the sea, are necessarily moisture-laden, which explains this fact.

THE LAMSON CASE.

IN Lamson's case, Dr. Vonklein of Hamilton, Ohio, and Dr. Casey of Auburn, New York, have made affidavits about his reckless use of aconitine in Bucharest Hospital during the Turco-Russian war. Representations have also been made as to the hereditary frequency of insanity, in the form of dementia, in his family. These have been urged on the attention of the Home Secretary by the American Minister, in obedience to instructions from the United States Government. Sir William Harcourt has ordered a respite, pending the consideration of the papers which will be presented. Humanity and the courtesy of nations demand such a course.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AT the ordinary meeting of Fellows on Monday last, a communication from the Home Office was read, relative to the sale of poisons. The question was referred to a committee, consisting of Drs. Southey, Moxon, Stevenson, Brunton, and Poore. The new by-laws and regulations were finally approved. Drs. Wilks and Bristowe were appointed examiners for the Murchison Scholarship; Sir Risdon Bennett referee. The ballot was then taken for the election of President for the ensuing year; Sir William Jenner was declared duly elected.

THE ANTIVIVISECTION DISCUSSION.

MR. LAWSON TAIT writes to us: "The statement made by your Birmingham correspondent, that I am one of the chiefs of the antivivisection party, is not correct. So far, I have declined to belong to any party on the question. There has been a discussion here on the subject, which will shortly be renewed. The case in favour of vivisection has been put by Dr. Saundby, Dr. Carter, Dr. Haycraft, Mr. Sawyer, and others; and it has consisted of a series of statements, not one of which stands the test of critical investigation. When a good case is made out, I shall be quite ready to support vivisection as a method of research; but here, at least, those who have argued for it have proved its greatest enemies." This is a letter to which it is hardly needful to reply. If Mr. Lawson Tait occupies the nearly unique position in the medical profession of not considering that a good case has been made out for experiments on animals after reading what Virchow, Simon, Fraser, Paget, Lauder Brunton, have so recently had to say on the subject, his Birmingham colleagues could hardly expect him to find their arguments convincing; and, in the eminent position which he occupies, he is, perhaps, too modest in disdaining, under such very special circumstances, the description of being one of the leaders of the opposition to such experiment. So far as we know, indeed, of the scientific position of any living medical man in this country who shares the opinion which Mr. Tait avows, he might be considered as *the* leader.

MURDER TRIAL IN THE NEIGHBOURHOOD.

SOME striking evidence was made at an inquest recently held at a tavern in the neighbourhood, on a man, a resident of Bethnal Green, who had died from injuries received by a quantity of earth falling upon him. From the first view of the body, the coroner informed them that, through some accident or other, the dead body at the rear of the church of St. Clement Danes, in which parish the church occurred, was dislodged, and the body had to be removed to St. Mary's Church. The jury then proceeded along the Strand, and, when opposite King's College, were asked to view the body, which lay in a coffin supported on trestles, framed in such a way that it opened and exposed the corpse to the general public. Great astonishment was expressed that the coroner had not been satisfied for the body and, on the request of the jury, Dr. Williams, the senior medical officer of the coroner's court, was called in to examine the body, which he found to be a man, aged 40 years, who had died from injuries received by a quantity of earth falling upon him. The jury then proceeded to the church, and, when opposite King's College, were asked to view the body, which lay in a coffin supported on trestles, framed in such a way that it opened and exposed the corpse to the general public. Great astonishment was expressed that the coroner had not been satisfied for the body and, on the request of the jury, Dr. Williams, the senior medical officer of the coroner's court, was called in to examine the body, which he found to be a man, aged 40 years, who had died from injuries received by a quantity of earth falling upon him.

speedily altered, and the jury appended to their verdict a recommendation "that, for the sake of public health and decency, a suitable mortuary should be erected in the neighbourhood." Several similarly distressing instances are reported by Mr. Liddle in a recent report on the sanitary condition of Whitechapel. In one case, two dead bodies were found in two different rooms which were occupied by families: one was that of a young woman, which, at the time of the visit, had been kept unconfined for four days in the room where the father and two young children lived and slept. The other case was that of a man who had died suddenly. An inquest had to be held; but it was some time before the wife and relatives allowed the body to be removed for the purpose of holding the inquest. After this had taken place, the body was brought back to the same room in which the man died, and was kept there for seven days. In this room, three persons lived and slept. The health-officer properly adds that it is full time a proper mortuary was built for the use of the district, in which a dead body might be kept under the control of the officials until the day of the funeral. The present condition of London as regards mortuary accommodation is, indeed, as we have before pointed out, disgraceful in the extreme; and it seems desirable that the duty for their provision should be placed in the hands of some central body, such as the Board of Works, or the Asylums Board.

M. PAUL BERT.

THE *Times* correspondent telegraphs from Paris that M. Paul Bert was on Monday elected a member of the Academy of Sciences in the place of the late M. Bouillaud. The medical section, on whom the recommendation devolved, had presented as in the order of fitness—(1) M. Davaine; (2) M. Charcot; (3) MM. Paul Bert and Brown-Sequard *ex æquo*; (4) M. Sappey. But the contest lay between M. Davaine, the precursor of Pasteur, whose treatises have repeatedly been "crowned" by the Academy, and M. Bert, Claude Bernard's most brilliant pupil. M. Bert was elected by thirty votes to twenty-six. Curiously enough, the extremists on both sides represent his success as a political one. The *République Française* declares that he is avenged on his assailants; while the *Univers* describes his election as a scandal, and speaks of "the vivisection, Paul Bert", as "owing his notoriety solely to his contemptible political rôle". Both injudicious friends and relentless foes are certainly mistaken. M. Bert has simply obtained the due recognition of his scientific merits; and, even had he this time been defeated, it would merely have shown that the Academy thought his competitor's age entitled him to priority.

WHAT IS ACONITINE?

MR. F. STERN MEHL has endeavoured to show, in letters to the *Times* and *Standard* newspapers, that the term aconitine is properly applicable to the German, or comparatively inert, rather than to the English, or more lethal, preparation, sold under the name of aconitia or aconitine. He complains that no mention was made by the experts who gave evidence at the late trial of Lamson, of the differences in the properties of English and German aconitine; and that it was never suggested by the defence that the aconitine might have been administered on the basis of one of the numerous continental preparations, or on the basis of former experiments made by the condemned criminal with continental—that is, with comparatively inert—aconitine. We must repeat what has been before said, that the term aconitine, always applied to an alkaloid extracted from *Aconitum Napellus*, should be preserved for this comparatively inert alkaloid, and not for the more lethal preparation of German patent. Moreover, the term aconitine is commonly used by the name of the *Journal de Pharmacie* to the active alkaloid of *A. Napellus*, which produces prolonged tingling and numbness; and the inert body known to be a property of the commercial German aconitine. We presume that, had Lamson been in the habit of prescribing German or any other form of the root drug, the fact would have been laid before the court when he tried him. Moreover, his letter stating that he had given the root to Percy John, and that, if anything had caused his death, it must have been in Mr. Lamson's report, was fatal to the

theory that aconitine might have been administered medicinally by Lamson. Any persons who were present in court when the experts gave their evidence, and when Mr. Montague Williams made his speech for the defence, can speak positively to the fact that Dr. Stevenson did lay stress upon the difference between German and English aconitine. He said that German aconitine was a quite different thing from English aconitine; and that certain doses of aconitine laid down as proper by Flückiger, applied to the German and not to the English aconitine. He spoke also of a case in which death resulted from the internal use of a dose of one-sixteenth of a grain of nitrate of aconitine. This is one of the celebrated Tresling cases, where Petit's French preparation was dispensed instead of German aconitine. This is, we believe, the only fatal case of aconitine poisoning recorded before the death of Percy John. Mr. Springmuhl speaks of a fatal suicidal case of poisoning by German aconitine, which came under his own notice. He would confer a boon upon the profession by placing on record the details of this perhaps unique case.

ABDOMINAL SURGERY.

THE last meeting of the Clinical Society was characterised by an interesting discussion on two of the procedures which the enterprising abdominal surgery of the present day comprises within its ordinary rôle. The questions discussed were those of splenectomy and of nephrectomy: the former introduced by the Surgical Secretary to the Society, Mr. Warrington Haward; the latter jointly by Dr. Goodhart and Mr. Golding-Bird—both discussions being reported at length in the BRITISH MEDICAL JOURNAL of last week and to-day. The patient who had the enlarged spleen was a woman aged 49, who sought surgical aid for an abdominal tumour. She did not look anæmic, and had no sign of leucocythæmia, except that the microscope revealed an increase in the number of the white corpuscles of the blood. Mr. Haward removed the enlarged spleen through an incision in the median line of the abdomen, ligaturing the enlarged vessels near the hilus in several separate portions, with carbolised silk. The patient became collapsed at the end of the operation, but revived; sickness, however, supervened about five hours subsequently, which produced rapid exhaustion, ending in death the same evening. The fatal result was not caused by hæmorrhage, but seemed to be due to disturbance of the great sympathetic plexuses, and the consequent shock and vomiting. In the discussion which followed, Dr. S. Mackenzie raised the question whether removal of the spleen in leucocythæmia was justifiable, quoting Mr. Collier's tables, which show that though the spleen has been excised successfully in several cases, in no case has the operation succeeded when performed for leucocythæmia. Dr. Mackenzie thought possibly the operation was justifiable when the blood-disease was not too advanced and the subject was a young one, as there were grounds for believing the spleen was primarily at fault. Mr. Lucas thought a less serious operation, such as ligature of the splenic artery, might be adopted. Mr. Lister considered this a dangerous proceeding, and would like first to know its effect when tried upon the lower animals. Can the spleen survive the ligature of its main vessel? And are animals, who appear to be equally with man affected with leucocythæmia, cured by removal of the spleen? Perhaps these necessary experiments can be tried in a country more fortunately circumstanced for physiological inquiries than is the United Kingdom. Mr. Reeves also advocated experimental researches upon the lower animals, on several grounds; and thought that only early favourable cases should be selected for surgical treatment. Dr. Goodhart, in reply to the question whether a mere excess of colourless corpuscles in the blood was of itself sufficient so to interfere with the coagulability of the blood as to condemn an operation, said that in the *post mortem* room he had always found the coagula in the heart and great vessels in these cases of leucocythæmia peculiarly flimsy. He also thought it a question as to whether an operation, with its resulting pyrexia, was advisable, seeing that these cases bore fever badly. Thus it would seem that, for the present, surgical interference in leucocythæmia is narrowed down to splenectomy in selected early cases in young subjects,

or to the substitution of some less formidable operation, such as, possibly, ligature of the splenic artery. The case of nephrectomy for scrofulous kidney, related by Dr. Goodhart and Mr. Golding-Bird, was a favourable one for operation, inasmuch as the patient suffered from scrofulous pyelitis of the right side only, and the other viscera were healthy. The disease, although at first local, spreads later on to other organs. Nephrectomy at the right loin was, therefore, performed; but this patient also died in collapse, shortly after the operation, which had been difficult, and for its completion had necessitated the removal of part of the twelfth rib subperiosteally. Mr. Clement Lucas had performed a preliminary nephrotomy in a case six years before he had removed the kidney in the same patient. That patient was now living and well. He disliked the administration of morphia after operations, never employing it, even after herniotomy, except after the patient's recovery from the chloroform, thinking it added to the risk of collapse. Mr. Godlee thought nephrectomy for scrofulous kidney must be generally a defective operation, as it contemplated the removal of only a part of a widespread tuberculous disease. Mr. Marrant Baker thought a preliminary nephrotomy simply increased the difficulty of the major operation, as the tissues around the kidney meanwhile became much matted together. Mr. T. Smith thought it rare to find strumous pyelitis limited to one kidney. Mr. Knowsley Thornton strongly advocated the abdominal section, as practised by Langenbeck, as easier of performance; he had recently done the operation twice, and both patients had recovered. He brought out the end of the ureter, and fixed it in the abdominal wound. He was also opposed to the performance of a preliminary nephrotomy. Mr. Lucas and Dr. Barlow said that in their cases the passage of pus, after the operation, had lasted for months, and then ceased, showing that the serious trouble had been limited to the excised kidney. Mr. Reeves thought more room might be obtained at the lumbar incision by pulling up the last rib; whilst excision of part of that bone should only be resorted to in extreme cases. He also advocated the intraperitoneal method for the removal of large cystic kidneys. Mr. Lister had punctured the kidney, and, treating the wound antiseptically, had found the pus, as in the cases of other foetid abdominal abscesses, shortly become converted into an oozing of simple serum. He, therefore, advocated, in advanced cases where the patient was too weak for nephrectomy, the less serious procedure of opening the kidney through the loin. Dr. Goodhart, in reply, thought the disease began at one kidney, whence it spread to the other urinary organs. The consideration of this subject is to be resumed at the meeting of the Society on Friday next, when, probably, other interesting points connected with the surgical treatment of renal diseases will receive ample attention.

SCENE AT AN INQUEST.

OCCASION for public disagreement between doctors should certainly be avoided rather than courted. At a recent inquest at Stockton, on a case of manslaughter, the senior surgeon, Dr. Farquharson, is reported to have cast a somewhat uninvited imputation on the method of treatment adopted by a Mr. Bott, who is a registered practitioner, but not on the hospital staff. The deceased was stabbed in the abdomen, the bowel protruding, and being wounded. The wound was dressed in a private surgery, a wire suture being used; and the patient was subsequently taken to the infirmary, where he had the advantage of the attention of the house-surgeon, Mr. Hull, and Dr. Foss. He died on the fifth day, of peritonitis, as confirmed by *post mortem* examination. Dr. Farquharson, according to the newspaper report before us, frequently interrupted the proceedings by "mutterings" and queries, which he stated were in the interests of the hospital, "as", says he, "we on the hospital get the credit of these deaths". The senior surgeon is entitled to entertain, and at a proper time and place to explain, his objection to the use of a wire suture under such circumstances; but this was neither the time, place, nor audience. The introduction of a wire suture was known at the time of admission, and

there was time for the experienced members of the staff to rectify it, if they thought well. But, whether Dr. Farquharson were right or wrong in this view, we cannot consider that there is sufficient ground for publicly imputing the cause of death to the suture used, and so involving a brother practitioner in censure, for acting upon a surgical emergency according to his views of practice.

THE SAFEGUARDING OF OUR MILK-SUPPLIES.

THE Chadderton Local Board has the merit of being the first sanitary authority of a district other than a borough to take measures for itself in the safeguarding of its milk-supplies from contamination. Under the Contagious Diseases (Animals) Act of 1878, town councils happen to be also the authorities for the regulation and registration of dairy-farms, which in places outside municipal limits is the duty of the county magistrates. The Chadderton Local Board, not content with this latter supervision (which, there is reason to believe, is, in the great majority of cases, of the most shadowy and delusive kind), seek for authority, in the Bill that they have now before Parliament, to undertake themselves, for their own district, the duties imposed upon the county by the Act of 1878; and, if it shall appear to them, on the report of the medical officer of health or two medical practitioners, that the supply of water to any farm or premises, whether within or without the district, from which milk, butter, or other dairy-produce is sold for use in the district, is inadequate, or impure, or liable to be contaminated, to issue an order prohibiting the sale of such milk, etc., within their district until the water-supply of the farm is improved to their satisfaction. The Bill also contains provision that, if the existence of infectious disease at any farm or other dairy premises within or without the district make it desirable to prohibit the sale within the district of milk, etc., from such place, the board may by order prohibit its sale; and that any person who purveys milk in the district, whether living in it or not, is, on becoming aware of the existence at his house of any infectious disease, forthwith to report the existence of such disease to the medical officer of health. Wilful offence against any of these requirements is to be punishable by a fine of five pounds for each offence. These regulations, if properly carried out, would undoubtedly do much to prevent the spread of epidemics caused by infected milk in the particular district that is sensible enough to make them. But the safeguarding of our milk-supplies is not a matter in which one authority only is concerned; and it is obvious that what is necessary at Chadderton is equally necessary for every other place in the kingdom, and should be dealt with by an enactment that shall have general, and not only local application.

ATTEMPTED ASSASSINATION OF DR. JOHN P. GRAY OF UTICA.

THE numerous friends in this country of Dr. John P. Gray, the distinguished head of the State Asylum of New York at Utica, and the editor of the *American Journal of Insanity*, will be grieved to hear that he has been shot at and injured by an intending assassin. Dr. Gray was reading in his study in the evening of the 16th ult., when a man appeared outside the window and shot at him with a navy revolver, the bullet entering at the external angle of the right eye, and passing through the middle of the left cheek. No bad symptoms had arisen, according to the last accounts, and the doctor was doing well. The intending assassin was one Henry Renshaw, an old soldier. He is now known as a lunatic, and certainly has not been a patient in the Utica Asylum. When imprisoned, he was found to be provided with quite an armory of revolvers and derringers, with their ammunition. He has charged names from Dr. Gray, on the ground that he had sought him out while attending or discharging Dr. Gray in the Turkish baths in the town; but at present it would seem uncertain whether he is not what the Americans call a dangerous crank, or a lunatic. In all probability, however, he is an unregimented barbarian. We heartily trust that Dr. Gray's life will be spared to his family and to the cause to which he has been for a long period of years a most valuable servant.

CHOLERA.

It is announced from Constantinople, under date April 4th, that the International Sanitary Board have sent one of their number to Varna to inquire into the circumstances which induced the local authorities to establish an irregular quarantine there, and also to investigate the report that a number of Mussulman pilgrims, returning from Mecca to Varna, wholly free from any symptoms of cholera, had, in consequence of the quarantine regulations, been exposed to cold and hunger, and had died from their effects. The Board have ascertained that there are no cases of cholera at Varna.

SMALL-POX IN HAYTI.

SMALL-POX (we learn through a Reuter's telegram) is raging at Hayti, and over 4,400 deaths are reported to have occurred in Port-au-Prince and in the environs from the epidemic. The following extract from a published letter written by Mr. Henry Byron, late British Vice-Consul at Port-au-Prince, and dated Hayti, March 8th, gives a vivid picture of the condition of the place.

I for the last few months we have been living in a very anxious state in Hayti, for the country has been the scene of a very alarming prevalence of small-pox of a most virulent type. It first broke out at Cape Haytien, the most northern town of the Republic, where, and in the neighbouring places and mountains, it carried off at least 5,000 of the population within about three months. In that part of the country it was mainly among the lower classes that its ravages were made, as no doubt they neglected to attend to the advice given to them to get vaccinated or, rather, revaccinated, when the disease first appeared and before it became epidemic. This "plague"—for such it has been and still is in several parts of the country—at last reached the capital and vicinity, where its ravages have, indeed, been fearful. For several weeks the death average was 40 per day; and though many thousands of the people, both in town and country, were daily vaccinated by the medical men of Port-au-Prince, thousands of others neglected, or were unable to avail themselves of the only possible means of escape, the consequences being most disastrous. I took care to have myself and all my household revaccinated before the disease reached my neighbourhood, and to this and to God's mercy must attribute our entire freedom from attack. Very many persons, however, among my neighbours—small cultivators or working men—have died; and though the average of deaths in this part of the country has considerably diminished within the last few days, the disease is still prevalent, even in my immediate neighbourhood, and occasional deaths occur. In other parts of the Republic it is creating the same alarm, and causing similar ravages to those experienced in the north and here. It is calculated that not less than 20,000 persons will ultimately have been found to have perished in Hayti from this fatal epidemic. P.S.—A young advocate at the Bar, a nephew of my wife, has, we have just heard, fallen a victim to this disease. I add this on the 10th, and am glad to say that the epidemic is dying out in this neighbourhood now; but it is spreading rapidly in other parts of the country.

THE NOTIFICATION OF INFECTIOUS DISEASES IN WISCONSIN.

A Bill has been introduced into the Wisconsin Legislature to make compulsory the giving of notice to the authorities of each case of infectious disease as it occurs. The Bill provides that every householder or head of a family in which a case of small-pox, diphtheria, scarlet fever, or any other contagious disease occurs shall immediately give notice thereof to the health-officer, or some member of the board of health, under a penalty of fifty dollars for each day of refusal or neglect after the expiration of forty-eight hours. Any physician visiting such a case is also to give notice to the health-officer or the board of health, under a penalty of not less than twenty-five dollars and not more than one hundred dollars for each day of refusal or neglect. Every householder, head of a family, or physician, who wilfully conceals the existence of any case of small-pox, or other contagious or pestilential disease, or who with a view to assist or connive at such concealment, is liable to a penalty of not less than fifty dollars nor more than two hundred dollars per day, or to imprisonment for not less than one month, nor longer than six months. It is also proposed that the school board of any district, or the board of education of any city, or the governing body of any college, university, normal school, academy, or other in-

stitution of learning, shall have power to exclude from the institution under their charge, and that it shall be their duty to exclude therefrom, whenever advised to do so by the board of health, any child or student who, by reason of being affected by any contagious disease, or of living in any dwelling where any such disease exists, may be a source of danger to the health of others. Such exclusion is to continue until the health-officer or some reputable physician shall in writing certify that, to the best of his belief, such child or student may be readmitted to school without danger of communicating disease to others.

TRICHINOSIS IN FRANCE.

In the Chamber of Deputies, this week, the subject of the importation of American pork was discussed, the Chamber voting urgency for the Ministerial Bill, which revokes the decree prohibiting the importation of the article. M. Gaudin condemned the conclusions of the reporter of the committee, which prescribed no precautions whatever for the protection of the public health, and he proceeded to speak at length on the danger of trichinosis. M. Tirard, Minister of Commerce, replied, however, that the Government found themselves obliged to rescind the prohibition, on account of the difficulty of selecting any of the complicated measures of inspection. They had, moreover, to consider the interests of the consumer. The present Bill simplified the inspection of the meat, and the American salters would take greater precautions when they knew that their goods would be more minutely examined. So ends an episode more creditable to Chauvinism than to science.

SCOTLAND.

ABERDEEN UNIVERSITY.

THE medical classes were closed on Friday last, when the prizes and medals were awarded to the successful students. On Monday, the examinations for degrees commenced. The Queen has been pleased to approve of the appointment of Dr. D. J. Hamilton to the Sir Erasmus Wilson Chair of Pathological Anatomy. This appointment has, we believe, given great satisfaction in Aberdeen and elsewhere, as Dr. Hamilton is not only an able investigator, but he is also a brilliant and successful teacher; so that he will form a most important and valuable addition to the already strong teaching staff of this University. We understand that Dr. Hamilton will not begin his lectures or teaching in Aberdeen until next winter session. He will teach his class of practical pathology in Edinburgh in summer as usual, and continue to hold his post of pathologist to the Edinburgh Infirmary throughout the ensuing summer session; and we believe that all the necessary arrangements have been made by the University authorities for the accommodation of the new professor. We regret to learn that Dr. Pirrie has been seriously indisposed for several days; but we trust that one who has done so much for the University may long be spared to continue his lectures and to promote the interests of Aberdeen University.

ROYAL INFIRMARY SCHOOL OF MEDICINE, GLASGOW.

AT the meeting held at the close of the winter session in the Glasgow Royal Infirmary School of Medicine, after the distribution of the prizes, it was announced by Mr. McEwan, that a fund, amounting to between £6,000 and £7,000, had been obtained for the erection and maintenance of the new medical school.

MEDICAL MISSION AT SMYRNA.

THE Medical Missionary Society of Edinburgh (or, perhaps, rather of Scotland), recently sent out one of its medical missionaries, Mr. L. Prinski Scott, M.B., to Smyrna. On Thursday and Friday last week, a bazaar was held in Edinburgh to raise funds to enable the society to equip a hospital for Mr. Scott at Smyrna. Professor Douglas MacLagan opened the bazaar, and in his remarks spoke highly of Mr. Scott, and of the good such a medical mission could do, especially when there was a hospital attached to it. The amount realised at the bazaar amounted to about £500.

APPROPRIATE METHODS OF BENEVOLENCE.

THERE are various ways in which wealthy and benevolent people can aid the profession in helping the sick poor. Since the new Royal Infirmary, Edinburgh, required furnishing, it has been furnished, in wards, by private individuals, by corporations, and by combinations of certain classes of people. The most recent example of this was by a lady residing in Edinburgh, who, through Dr. Affleck, sent to the manager a cheque for £315, to be used in furnishing the wards of the Fever House in the old Royal Infirmary. The endowment of a bed, or beds, in the wards, or even of a ward itself, would aid the managers greatly in the difficulties they have to face owing to the increased expenditure in the new house.

CEMETERY MISMANAGEMENT IN EDINBURGH.

RECENTLY the attention of the Sanitary Authorities in Edinburgh has been directed to various irregularities in connection with the interment of the dead in one or two of the Edinburgh Cemeteries. Last week the Medical Officer of Health made an investigation into the matter, the results of which have not yet been made public officially, but sufficient has leaked out to show that in many instances coffins and bodies were too near the surface of the ground, a probe reaching the coffin lid at a distance of from eight inches in one case to two feet in another. As those cemeteries are rapidly becoming intramural by the extension of the suburbs, there can be no doubt this matter will be thoroughly attended to, so that any risk to the health of the inhabitants, or outrage in the decency of interments may be avoided.

GLASGOW DISTRICT BOARD OF LUNACY.

AT the meeting of this Board held on March 28th, it was decided, after considerable discussion, to adopt the suggestion made by the General Board of Lunacy in reference to a settlement of the differences at present existing with the Govan Parochial Board. The suggestion was, that the District Board should enter on an interim arrangement, and rent from the Govan Board the asylum buildings for five years, taking them under their complete control, by appointing their own officers to conduct the management and administration. It remains to be seen whether the Govan Board will accept this solution of the present differences.

THE HEALTH OF GLASGOW.

THE report of the medical officer of health for the fortnight ending March 18th shows that there were 499 deaths registered, representing a death-rate of 25 per 1,000 living. In the corresponding fortnight of last year, the mean temperature was 5.7° Fahr. lower, and the death-rate was 4 per 1,000 higher, which is fully accounted for by the excess of fatal pulmonary diseases, which caused a death-rate of 13 per 1,000. In the present fortnight, the deaths from pulmonary complaints numbered 190, which gives a death-rate of 9½ per 1,000, and constitutes 38 per cent. of the total deaths. The number of deaths from fever was 5, viz.: 2 from typhus and 3 from enteric fever; while there were 45 deaths from infectious diseases of children, viz.: 30 from whooping-cough, 9 from scarlet fever, and 6 from measles. There were 44 cases of fever registered, of which 22 were enteric, 16 typhus, and 6 undefined. There were also 125 cases of measles, 53 of whooping-cough, 40 of scarlet fever, and 21 of diphtheria registered; of which 32 were removed to hospital, and the remainder kept under supervision at home. On the whole, there may be said to be less fever in the city now than there was a month ago, there being a considerable diminution in the number of scarlet fever cases.

REGISTRAR-GENERAL'S RETURNS.

THE return of the Registrar-General for the week ending March 25th show that the death-rate in the eight principal towns during the week was 22.5 per 1,000 of estimated population. This rate is 1.0 below that for the corresponding week of last year, but 0.8 above that for the previous week of the present year. The lowest mortality was recorded in Leith, viz., 15.6 per 1,000; and the highest in Aber-

deen, viz., 26.1 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 3.8 per 1,000, or 0.1 below the rate for last week. Whooping-cough was the most fatal epidemic, and the mortality from it was most marked in Edinburgh and Glasgow. Acute diseases of the chest caused 116 deaths, or 2 more than the number registered last week. The mean temperature was 42.7, being 4.9 below that of the week immediately preceding, but 7.7 above that of the corresponding week of last year.

IRELAND.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

At a meeting of the Council held on Monday last, Mr. Henry R. Swanzy, Professor of Ophthalmic and Aural Surgery in the College, was elected an Examiner in Ophthalmic Surgery to examine candidates for the letters testimonial and fellowship of the College. This examinership has been instituted—the Home Secretary having signified his necessary approval—with the view of endeavouring to obtain a fuller and more practical knowledge of ophthalmology in candidates for the licence of the College than has hitherto been required. Former efforts in this direction have, as announced from time to time in this JOURNAL, always failed. It is to be hoped the step now taken will secure competent instruction in an important branch of medical education, and will be supported alike by clinical teachers and by the examiners in other subjects. The seat on the Council of the College, which Mr. Swanzy resigned in order to become a candidate for the examinership, has been filled by the unanimous election of Mr. Wharton of the Meath Hospital.

BELFAST OPHTHALMIC HOSPITAL.

THE thirty-sixth annual report shows that, during the past year, 1,015 cases of eye-disease and 322 cases of ear-disease were treated at the extern department; 90 patients were admitted to the wards; making a total of 51,382 cases since the foundation of the charity in 1844. The hospital has been attended by a larger number of students than usual, about thirty-three gentlemen having availed themselves of the opportunities afforded of gaining a practical knowledge of the important branches of their profession taught in the institution. The sanitary condition of the hospital is reported as excellent, the ventilation perfect; and all arrangements tending to promote the comfort and convalescence of the patients receive constant attention.

SANITARY CONDITION OF OMAGH PRISON.

THE report of Dr. Cruise on the sanitary condition of this prison shows that arrangements were in a bad state lately, but only for a time, and chiefly from repairs in connection with the drainage arising from opening sewers. The escape of foul air from these appears to have been the main cause of the fever attack from which the late governor died, and steps were speedily taken to have the defects remedied.

DEATH OF DR. WILLIAM H. HOLMES OF CORK.

We regret to announce the death of this gentleman, one of the dispensary medical officers, who succumbed on last Sunday week at his residence, South Hall, from a severe attack of typhus fever contracted in the discharge of his professional duties. Taken away at an early age, Dr. Holmes's untimely death will be regretted by a large circle of friends and acquaintances. At a meeting of the Cork Dispensary Committee held last week, the following resolution was adopted: "That we, the members of the Cork Dispensary Committee, have learned with the deepest regret of the lamented death of Dr. W. H. Holmes, who has been so long and honorably connected with the dispensary as one of its physicians; that, out of respect for his memory, the business of the committee be adjourned; and that the expression of our sympathy and condolence with his bereaved widow and family be recorded on our minutes and forwarded to Mrs. Holmes."

THE LATE PROFESSOR SIR EDWARD SINCLAIR, M.D.

At the last meeting of the King and Queen's College of Physicians, the following resolution was unanimously passed: "That the President and Fellows of the King and Queen's College of Physicians in Ireland desire to place on record their sense of the great loss which the College and the medical profession have sustained by the death of Sir Edward Burrows Sinclair, King's Professor of Midwifery in the School of Physic; and hereby offer to Lady Sinclair and the other members of the late Professor's family their respectful and heartfelt sympathy in the irreparable loss they have sustained by his premature death, at a time when he seemed likely to add largely to the great benefits he had already conferred upon the medical profession and charitable institutions of Dublin connected with the branch of medicine which he had made his special study." The governors of Sir Patrick Dun's Hospital have also passed a similar resolution.

SELECT COMMITTEE ON THE CONTAGIOUS DISEASES ACTS.

At the meetings of the Committee on the 21st and 24th March, Mr. F. Wheeler, of Chatham, a retired grocer, and a member of the Society of Friends, was called in and examined by Mr. Stansfeld. His cross-examination was conducted by Dr. Farquharson, Mr. Osborne Morgan, and Mr. Cavendish Bentinck. Mr. Wheeler, who is a very strong opponent of the Acts, first began to pay attention to their working in 1870; since then he has continued to watch their operation, recording from time to time any facts that came before him. Much of his evidence was directly at variance with that given last Session by Mr. Stigant, chairman of the Chatham Local Board.

Mr. Wheeler confirmed this gentleman's statements as to the improved appearance and more decent behaviour in public of the prostitutes in Chatham, but decidedly attributed such improvement to the action taken by the local police, and to the numerous moral and religious agencies at work, and not to the working of the Contagious Diseases Acts.

On the other hand, with regard to the conduct of the women on inspection days, when going to and returning from the examination-room, his evidence was in direct contradiction to that given by Mr. Stigant. Mr. Wheeler stated that the obscene language heard and the disorderly scenes witnessed were a scandal to the town. He had seen men and boys in numbers loitering about the road leading to the examination-room. They exchanged recognitions with and made filthy observations on the women as they passed. The better dressed women were fairly quiet in demeanour, but the shabby ones laughed and screamed and made signs to those standing about. One morning he saw a woman, on the way to the examination-room with two others, accost a wagoner walking with his waggon and horses, and their subsequent behaviour in the open street was most grossly indecent. It is somewhat strange that the witness took no steps to procure the punishment of the parties concerned in this affair, nor even reported the matter to the police. He was not able to offer any adequate explanation of the apparent supineness of the police in not suppressing such scandals if they were as notorious as he alleged, but he subsequently admitted that there was now a very great improvement. He did not accept the suggestion that possibly his own presence on the occasion mentioned had aggravated the women, and caused them to be more noisy from mere bravado. He owned, however, that they had abused him, and pointed him out as "the old — who wanted to shut up the hospital."

He did not agree that there was any decrease in the number of prostitutes; on the contrary, they were more numerous, especially the clandestine prostitutes, while he said that the number and youth of the pregnant women who applied for admission to the Union was a matter of common observation. But it would appear that these young girls had hardly entered on what may be called a career of prostitution. Probably many of them had only just fallen, and were seeking a place of refuge with a view to reformation. Again, if the number of clandestine prostitutes has so much increased as to have attracted the attention of Mr. Wheeler and others, surely they must have come under the notice of the special police, and would very soon have found themselves registered.

Mr. Wheeler admits a considerable decrease in the number of registered common prostitutes, but thinks the condition of the remainder most deplorable, and an account of the great demand for them as being guaranteed free from disease. But surely, if there were really such a demand for registered women, as being "safe," their numbers

would not fall off, nor would there be an increase in the number of clandestine prostitutes, whose bodily condition must, of course, be unknown.

The witness strongly insisted on the degradation inflicted on the women by the periodical examination, and quoted a letter received from an ex-nurse at a lock hospital, to the effect that the women were thereby deprived of all sense of shame, "and gave up all thoughts of good that were instilled in the innocent days of childhood." He could not, however, deny that women would be naturally anxious to lay the responsibility for their degradation upon anyone or anything rather than upon themselves, or that the profession of prostitution was more "hardening" in its tendency than the periodical examination. Moreover, it should be noted that "the innocent days of childhood" have had no practical existence for many of the poor women with whom the Contagious Diseases Act deals, and many a wretched outcast has owed to her stay in the lock hospital the very first ideas of a better life that have entered her corrupted mind. The witness thought that the nurse, whose letter he quoted, would be a competent judge of the moral effects of the examination, but said that he was not aware that she had been dismissed from her situation at the Aldershot Lock Hospital for improper conduct.

Great stress was laid by Mr. Wheeler on the bad impression caused by the visits of the Contagious Diseases Act police to the brothels of the district. From these visits it appeared to him that the police, instead of reproof, rather co-operated with the brothel-keepers, and by their frequent presence enabled them to carry on their business in an orderly manner. He did not believe that these visitations were made with the object of finding out women who were not on the register, and to warn young females just entering on a career of vice.

One of the main features of Mr. Wheeler's evidence was his statement of the case of Caroline Wybrow, which occurred in 1875. But as the documentary evidence bearing on this case is still incomplete, and the witness will be further examined on it at another meeting of the Committee, it will be well to reserve the details until both sides have been heard.

VOLUNTARY POWER OF DISLOCATION.

THE American acrobat Warren, whose exhibition of his remarkable power of voluntarily producing dislocation of several joints excited recently much attention in Glasgow, is now in London, and on Monday last was introduced to the Medical Society of London by the President, Mr. Francis Mason. He has also appeared at several of the London hospitals.

The following account of his exhibition in Glasgow was recently furnished to us by our correspondent in that city.

In a recent number of the JOURNAL was a short note of the fact, that there had been recently, in the operating theatre of the Western Infirmary, an exhibition of some voluntary dislocations and other acrobatic performances, which were of an unusual and interesting kind. The performer, an American named Warren, aged 34, was, up to a short time ago, a professional acrobat, being attached to one of the numerous circus companies of the United States. He is somewhat above the average height; and, when standing at rest, he could not be said to lay claim to any remarkable muscular development, though he is evidently in very good condition. His performance was divided into two parts. In the first, he illustrated the remarkable power he possesses over his muscular system, especially in regard to individual groups of muscles, whereby he is enabled to accomplish voluntary dislocation of several joints, and some other interesting feats. In the upper extremity he showed a special power of elevation of the scapulæ, with marked projection of their angles, as if they had been freed from the retaining influence of the latissimi dorsi muscles. Whether this was the case or not is doubtful; for when he stood naturally, there was no projection of these bones. It is more probable that the great projection was due to mere laxness of the latissimi dorsi muscles. In the case of the shoulder, there was no doubt as to a dislocation having taken place downwards, the ordinary symptoms of that accident being present, and there being a distinct depression under the acromion. With the elbow, Warren attempted nothing; but, with great facility, by mere flexure of the hands, both wrists were dislocated backwards. So also with the thumb; its proximal phalanx was readily dislocated backwards on to the metacarpal bone. In the lower extremity, there was the power of dislocating the head of the femur backwards, and it was interesting to observe that this could be done either with the foot free or with it fixed on the ground; in this latter case, of course, the dislocation was performed with more difficulty. As to the position of the head of the bone, when dislocated, there was some difference of opinion; but the general feeling was that it was not on the dorsum

ili, but in the ischiatic notch. Besides the hip, the knee could be dislocated inwards; but, in the case of the ankle, the movement accomplished consisted more in throwing the astragalus forward in a very peculiar manner, and could scarcely be regarded as a complete dislocation. And here it may be mentioned, that any noise heard in these different movements (and especially was this observed with the hip) accompanied the dislocation, and not its reduction—the bone returning in each case to its normal position without any sound. Lastly, there was the power of dislocating the lower jaw, either bilaterally or unilaterally. In addition to these feats of surgical interest, Warren exhibited others which illustrated well his power over individual groups of muscles. It cost him no effort to make tense the muscles of the forearm, while those of the upper arm remained flaccid and uncontracted; and, with equal facility, he kept his ribs fixed during respiration, giving an excellent illustration of diaphragmatic breathing. The difference in the girth of his chest when it was at rest, and when in full inspiration, amounted to several inches. In addition to the ability to move his ears (which, however, he could not accomplish without putting in action his occipito-frontalis muscle), Warren showed great control over his abdominal muscles, causing them to recede in such a way as to elevate the abdominal organs into the region of the chest, and leaving such a depression or sulcus that the pulsations of the abdominal aorta were made apparent to the eye. The second part of the performance was taken up with acrobatic feats, which, of course, have not the same professional interest as those just described. With apparent ease, Warren passed his body through a steel ring of about fourteen inches diameter, and assumed attitudes that made one think he was devoid of any osseous skeleton, and was merely a mass of gutta-percha tissue. The present case is one where we have the maximum of muscular development, with the minimum of ligamentous resistance. This state of matters may have been, to a certain extent, congenital inheritance; but it has no doubt been further largely developed by the line of life followed since early childhood.

We shall publish next week, with illustrations, a full account of this remarkable case.

COLLECTIVE INVESTIGATION COMMITTEE.

ON THE COLLECTIVE INVESTIGATION COMMITTEE'S "MEMORANDUM ON CHOREA".

SIR,—The great potential value, from a clinical point of view, of the work of the Collective Investigation Committee, calls for the utmost care and judgment in the laying down of its lines. The main difficulties to contend with seem to be, first, that of obtaining an adequate quantity of facts; and secondly, that of insuring their unequivocal quality. To obtain any considerable number of answers, the question must be duly limited, and put with studied clearness; for those who can afford the most valuable information have the least time at their disposal. But, to meet the second and greater difficulty, an indispensable requisition is to be made at the hands of the framers of the questions. The object of the committee's work (viz., the acquisition of new truth by the collection of facts, and facts only to be dealt with in due time) must be rigidly kept in view; and the form of the question should be such as never to suggest any prejudgment of the point at issue, or to encourage the slightest blinking or magnifying or colouring of facts. There must be a jealous exclusion of the promptings of theoretical bias.

In the form of card about to be issued with regard to chorea (described in the JOURNAL of April 1st, p. 478, with a memorandum by Dr. Stephen Mackenzie), there occur questions which, in their form, are open to the charge of undue suggestion. The extent and the nature of the relationship of rheumatism to chorea are points of importance, well known to be under discussion; and, therefore, in such an inquiry as this, call for the careful consideration or facts to settle them. But in the "Memorandum" these words are found: "As regards rheumatism, which, as most agree, bears some relationship to chorea, the observer is asked to state whether the antecedent rheumatism was well pronounced in the distinct joint-affection, or whether, *as often happens in children*, only vague pains and sometimes slight feverishness had been present" (the italics are my own). The obviousness of the question-begging in this sentence is only equalled by its (of course, only apparent) ingeniousness as a leading question. The very fact of inquiry into the occurrence of vague pains, with or without slight feverishness, is in itself almost tantamount to assuming the point at issue; and the parenthetical attempt to justify this question by the words "*as often happens in children*," completes the fallacy; for the description of "vague pains, with *sometimes* slight feverishness," as rheumatism, is but the outcome of very debatable opinion, after all; and is, moreover, frequently prompted by the very desire to neatly

round off the theory of the causal connection between rheumatism and chorea.

This theory rested partly at first on cases of unmistakable rheumatism occurring antecedently to the choreic movements. The causal connection, and indeed the extent of any connection between the two affections, being points at issue, it is clearly unscientific to class as "rheumatic", cases of so-called latent rheumatism, or vague pains, which may probably have their rheumatic origin suggested only by their co-existence with choreic phenomena. By means of such a "vicious circle" as this, we shall get no good results. It must be remembered that many doubt the causal nature of the connection between rheumatism, as such, and chorea; and assert that the existence of any connection at all between them is far rarer than is generally taught. One of the latest writers on this subject, Dr. Sturges, notices that, in this country, "we no longer seek to verify this connection, but are rather occupied in constructing some plausible explanation of it. Meanwhile, the two most prominent and unquestionable facts in regard to the causation of chorea pass unregarded: the fact that alarm or mental disquiet is its commonest cause, and the fact that female children are in overwhelming proportion its favourite subjects."

It is to be hoped that the committee will avoid any risk of appearing to prejudice the subject for inquiry; and that, in this case, the term "rheumatism" should not be so indefinitely increased in its extent, that its contents become "vague" enough to serve any or no purpose. It would seem a fair and unprejudiced way of putting the question as to antecedent rheumatism, were the observer asked to state simply whether the rheumatism was well pronounced, or whether it was equivocal. If inquiry into the occurrence of vague pains be instituted, the question should stand by itself.

All must, of course, desire that the very important work of the Collective Investigation Committee should start as well as possible. In the hope, therefore, that some alteration of the form of the question alluded to may be approved by the committee, I venture to trouble you with this letter.—Your obedient servant,
H. DONKIN.
London, April 3rd, 1882.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall on Wednesday, the 12th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary*.
161A, Strand, London, March 15th, 1882.

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, April 12th, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting, viz., March 22nd, June 22nd, September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881. FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

THE following Branch Meetings will be held in the following order:—
1. The Eastern Branch, at the Infirmary, Gravesend, on Wednesday, April 12th, at 3 p.m.; J. C. Armstrong, Esq., in the chair. Papers will be read by Dr. W. M. Ord, on "Influence of the Heart in Aneurysm"; Dr. William H. Day, Remarks on Chorea and its Treatment; etc. Dinner will take place at the Old Falcon at 5.30 p.m.—A. H. B. HALLOWES, Honorary Secretary, 11, King Street, Maidstone.

2. The Western Branch, at the Infirmary, Exeter, on Wednesday, April 12th, at 3 p.m.; J. C. Armstrong, Esq., in the chair. Papers will be read by Dr. W. M. Ord, on "Influence of the Heart in Aneurysm"; Dr. William H. Day, Remarks on Chorea and its Treatment; etc. Dinner will take place at the Old Falcon at 5.30 p.m.—A. H. B. HALLOWES, Honorary Secretary, 11, King Street, Maidstone.

3. The Southern Branch, at the Infirmary, Maidstone, on Wednesday, April 12th, at 3 p.m.; J. C. Armstrong, Esq., in the chair. Papers will be read by Dr. W. M. Ord, on "Influence of the Heart in Aneurysm"; Dr. William H. Day, Remarks on Chorea and its Treatment; etc. Dinner will take place at the Old Falcon at 5.30 p.m.—A. H. B. HALLOWES, Honorary Secretary, 11, King Street, Maidstone.

4. The Northern Branch, at the Infirmary, Leeds, on Wednesday, April 12th, at 3 p.m.; J. C. Armstrong, Esq., in the chair. Papers will be read by Dr. W. M. Ord, on "Influence of the Heart in Aneurysm"; Dr. William H. Day, Remarks on Chorea and its Treatment; etc. Dinner will take place at the Old Falcon at 5.30 p.m.—A. H. B. HALLOWES, Honorary Secretary, 11, King Street, Maidstone.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—A meeting of the above District will be held at the Infirmary, Gravesend, on Wednesday, April 12th, at 3 p.m.; J. C. Armstrong, Esq., in the chair. Papers will be read by Dr. W. M. Ord, on "Influence of the Heart in Aneurysm"; Dr. William H. Day, Remarks on Chorea and its Treatment; etc. Dinner will take place at the Old Falcon at 5.30 p.m.—A. H. B. HALLOWES, Honorary Secretary, 11, King Street, Maidstone.

CORRESPONDENCE.

THE CONSTITUTION OF THE ASSOCIATION FOR THE ADVANCEMENT OF MEDICINE BY RESEARCH.

SIR,—The announcement that an Association has been started for the Advancement of Medicine by Research will be cordially welcomed by the great mass of the medical profession. Every true disciple of medicine will be anxious to strengthen the effort to recover that freedom of research which has created modern medicine, and in which the hope of future progress must be sought. The motive of this movement stirs us all; and all will feel that they have a right to share in the work. Nor is it too much to say that the strength of the movement will be commensurate with the number of those who are permitted to take part in it. The central executive power will prevail over public opinion in proportion to its representative value. Unless this representation be large, liberal, and real, our opponents will not fail to urge that the mass of the profession do not care to identify themselves with the movement; it will be said that the executive body have no constituents; that they dare not trust those whom they profess to represent.

It must, therefore, be a source of pain to many to see, instead of a liberal organisation resting upon the whole body of the profession, and drawing strength from it, a narrow self-chosen oligarchy, arrogating to itself all power, and leaving to those in whose name it professes to speak and act the sole privilege of subscribing to the funds. What is the constitution proposed to the profession for acceptance without discussion?

1. The Presidents for the time being of the Colleges of Physicians and Surgeons, each of whom shall nominate twelve persons. Is this representation at all fair? Whom does it represent? One cannot for a moment doubt that the Presidents will nominate good men. But, after all, a nominee represents those who nominate him. And those who in this case nominate are already represented in their own persons. To vest in them authority to multiply themselves by nomination will be to impose upon them an invidious task, to create a body lacking all representative virtue; and to weaken what individual authority the nominees might justly claim.

2. The next provision is that the Presidents for the time being of the societies and certain professors in the universities shall be members. Certainly it is desirable to bind together all the universities and societies in one scientific force; and *primâ facie*, it may appear that the most natural way of accomplishing this object is to take the persons who, for the moment, occupy prominent positions in these bodies. But ever so little inquiry will show the fallacy that vitiates this method of selection. Most of the professors, presidents, and others have been appointed to their offices they hold for distinct terms for stated periods, some by the accidents of age, rotation, or special qualification; not one because fitted to represent his university or society in this particular movement.

If the universities and societies were specially called upon to send men to represent them upon the executive of this projected Association, it may safely be assumed that they would not always choose the man whom, for the time, it might be convenient to elect as Professor or President.

Third, again, when is the representation of the great body of the profession? It would be disputed that there are amongst them many persons of high scientific powers, animated by the highest scientific spirit. It cannot be denied that freedom of research is a matter that directly interests all. The mass of the profession is not represented in the selection, and only indirectly in the execution. They are left out in the cold altogether, consulted, not even consulted by the most constituted authorities.

I do not wish to go further into this. Why should a movement like this, which is intended to be permanent and continuous, not be founded among the true research workers themselves? Why should that consent be forthcoming only for a year or so?

1. Let the bodies of members of the two Colleges send special representatives.
2. Let the medical faculties of the universities send special representatives.
3. Let the medical societies send special representatives.

This scheme, if well considered, is impracticable. It is

only impracticable because the will is wanting, and because it is so much more convenient to avoid appeal to the profession.

The objection, plainly stated by the president of the meeting held at the College of Physicians, as reported, was, that "some of the most delicate questions which could come before any public body would come before the council, and it was felt that this society should be guided by those whose years had tempered their zeal with discretion; and he did not think that an elective council would carry out with discretion such objects as their society would have in view." One is tempted to ask what special security we have that the council, as self-constituted will duly temper zeal with discretion. Some of its members would hardly be chosen for their zeal in the cause; others are not conspicuous for discretion. Upon the whole, perhaps, in a movement of this kind, of the two qualities zeal is more necessary than discretion. Discretion is apt to paralyse zeal altogether. Whilst no great cause has ever been won by discretion alone, zeal, even largely leavened by what limp, timid people would call indiscretion, has often triumphed. And what is to be said of the "discretion" of the antivivisection propagandists? They owe their temporary success to zeal alone. Discretion, they know, is not a motive power. Now, although no one interested in the new Association will trust to zeal without discretion, it may be safely assumed that, truly representative councillors acting under a sense of responsibility to their constituents, to their own characters, and to the council of which they would form part, would bring more zeal and not less discretion to the work than would a self-elected Council. And how will the Council guard against irregular action, guided by more or less zeal and discretion, outside their own body? Most assuredly, amongst the mass of the profession there will be a desire to act in this matter. If not represented, they will act independently; perhaps not with that wisdom which a well-considered organisation inspires. They cannot be expected to stand by and leave all action to an irresponsible body which distrusts them. They owe no allegiance to that body. Where there is no legitimate authority there is no loyalty. Unfortunately all these reflections come rather late. No open or general meeting has been summoned to aid in the formation of the society. The scheme has been concocted in close conclave, so great has been the terror of zeal.

So great has been their terror, and so far-seeing their discretion, that the council have debarred even themselves from the power of revising their own scheme. The last resolution, most extraordinary of all, declares "That the present rules, defining the objects and constitution of the Association, shall not be altered except by the written consent of three-fourths of the entire council, after consideration at a meeting called for the specified object, on a fortnight's notice, and with the further written sanction of the two Presidents." Thus one President has it in his power, in the improbable event of the written consent of three-fourths of the Council being obtained in writing, to bar all revision of this precious scheme!

Who is the Vulcan—what hammer did he use—and who is the Jupiter who brought forth this Minerva? Or is this absolutely wise and perfect and unimpeachable constitution the offspring of zeal and discretion?

But this last resolution betrays a lack of confidence on the part of its framers. They evidently tremble lest the sacrilegious hand of the reformer should touch it. By an ingenious anticipation of the clôtüre, they bar the probability of discussing their work with a view to amendment. All that is left for us to do is to shut our eyes and open our purses.

In sober seriousness, is the scheme thus concocted and thus carried, one that is worthy to be placed before a just and intelligent profession? Is it the one best calculated to achieve the great object professed of advancing Medicine by Research for the benefit of humanity?—I am, etc.,

ROBERT BARNES.

15, Harley Street, 3rd April, 1882.

SIR,—It is clear that the influence of the Association for the Advancement of Medicine by Research on the progress of medical knowledge must, to some extent, depend on the width of the basis on which the Association is founded, and that its strength must largely depend on the active support of the entire medical profession in the United Kingdom. As the successful formation of such an Association would have been impossible if the task had not been taken in hand and carried through by the eminent men under whose auspices it has appeared, I conceive that there can be no better way of showing our gratitude to them than by discussing any suggestions that deserve to be entertained, if we are still further to consider how the usefulness of the Association may be extended.

When I first heard that there was to be a meeting connected with the proposed Association, I expressed privately to one of its active pro-

moters my conviction that its power for good would be greatly increased if arrangements could be made to associate the whole profession of these countries, as directly as it is possible to do it, with the furtherance of the objects of the movement. Medical men in towns, as well as in remote country districts, who have neither time nor opportunity for engaging in research, would yet esteem it a privilege to assist such an Association, and their co-operation will be all the more active if we make them, at least to some extent, responsible for its management.

I happened to be travelling in Scotland at the time when the Bill relating to the practice of vivisection was before Parliament, the subject being at the time freely discussed in the newspapers and in the medical journals, and I was struck by the interest taken in it by medical friends whom I met in country districts. One gentleman, I remember, who had no personal interest in the matter, had simply, from a sense of duty, taken pains to submit to the country members his views regarding the proposed legislation.

The direct representation, in due proportion, of such men on the Council of the Association, would not, I am confident, in any important way, modify its composition, or render more difficult the execution of the most delicate of its duties. The men whose nomination they would feel honoured in ratifying would of necessity be those whose wide-spread reputation was the result of age and experience, as well as of genius and talent, and I am sure that the overwhelming majority of the profession in this country would be loyal to leaders like those who are now promoting the Association.

I believe these distinguished men may feel satisfied, that if some means were devised by which the great body of the medical profession should feel themselves to some extent responsible, through their representatives, for the furtherance of the objects of the Association, not only would its management remain practically in the hands of those to whom we are all grateful for having given up so much of their time to organising the movement, but the executive would have a constituency as trusting as it would be numerous and powerful.—I am, sir, your obedient servant,

G. THIN, M.D.

April 3rd, 1881.

SIR,—The formation of a society to resist the opponents of scientific research will be most welcome to the members of the British Medical Association. Sir James Paget well said, at the meeting on Tuesday last week, that "the public needed instruction on a large number of scientific subjects." The public very often applies for that instruction to its family doctor, and many of us are called on, in the course of our daily practice, to defend the workers in medical science against the attacks of ignorant, but persistent, opponents. We have willingly done our best in defence of scientific research. We shall, in future, do so more effectually, with the help of a society so powerfully organised. The Presidents of the Society are to have the power of nominating twelve "representative" members. I trust it will not be asking too much, to express a hope that they will appoint some leading general practitioner to represent a body, who will be numerous and willing workers.—Very faithfully yours,

FRED. B. HALLOWES, President S. E. Branch,
British Medical Association.

SUPERINTENDENTS OF IMBECILE ASYLUMS.

SIR,—It is only to-day that my attention has been directed to some strictures in your issue of 25th March on remarks made by me at the annual meeting of the Larbert Asylum for Idiots, some weeks ago.

In expressing approval of the general principle of having a doctor to do doctor's work, and a schoolmaster to do schoolmaster's work, I did not necessarily express an approval of a doctor living far from his patients, which seems the gravamen of the charge against the directors of the Larbert Institution for the change they have made. It is quite true that imbeciles are often of feeble health, but I fail to see that this necessitates the actual residence of a doctor among them. It is also quite true, as Mr. Bruce points out, that many of their diseases are best treated by attention to diet, medicine, and regimen, but I have yet to learn that this cannot be done, as in private practice, by a doctor giving the orders, without standing or sitting by to see them carried out. There seems to be a little soreness in some of the letters about the termination of Dr. Ireland's connection with the asylum. With that I have nothing to do; it was effected before I even heard of it. The contrast I attempted to draw was between an asylum for the insane, the nature of the diseases of the inmates of which requires a doctor to be always at hand, and an asylum for idiots, in which I thought, and still maintain, no such necessity exists.

Dr. Fletcher Beach seems to think the case of epileptics forms an exception. He can only refer to the management during convulsions,

very gratifying to see, and was in marked contrast to the behaviour of those attending the Royal Infirmary, where the students allowed themselves to forget the respect due to themselves and to the profession of which they hope some day to be members.

ROME.

[FROM A SPECIAL CORRESPONDENT.]

COMMENDATORE Corrado Tommasi-Crudeli, Professor of Pathological Anatomy and Director of the Pathological Institute, has been appointed Professor of Experimental Hygiene and Director of the Corresponding Department in the University of Rome. Dr. Marchiafava has been appointed to the chair of Pathological Anatomy, thus vacated. Professor Marchiafava has hitherto held the office of Professor Extraordinary in the Institute of Pathological Anatomy.

The weather is fine, and the hotels are full of visitors, although a very large number of those who have spent the winter in Rome have gone on to Naples and to Sicily.

General Garibaldi, who has derived much benefit from his sojourn at Posilippo, has proceeded to Reggio and Messina, in order to be present at Palermo as honorary president. As the veteran's health is very critical, this step is not considered a wise one; but he has determined at all hazards to be present. The winter has been very dry, and colder than usual; so that there has been a considerable amount of the ordinary slighter winter ailments, but very little continued fever. Measles have been somewhat prevalent; but, as is usually the case with eruptive fevers in Rome, the type has been mild, and rarely complicated.

HOSPITAL AND DISPENSARY MANAGEMENT.

SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL, CORK.

THE number of intern patients during the year was 1,039, being 36 in excess of the previous year, and 10,370 in the extern department, or an increase of 2,248. During the year 31 deaths took place. The trustees, in their report, direct the attention of subscribers recommending patients to the use for which the institution was founded—a curable not an incurable hospital—and trust that incurable chronic cases will not be sent to them for admission. They are bound, they say, in the interests of the ratepayers, as well as the subscribers, to restrict the hospital to its legitimate use—relieving and restoring the many—not using the beds for lingering chronic cases, many of them incurable when seeking admission. Such cases are invariably the most expensive to a hospital, while medical skill can benefit them but slightly.

BALLINASLOE DISTRICT LUNATIC ASYLUM.

DR. NUGENT, inspector of lunatic asylums in Ireland, in his report for 1881, states that the asylum is not only very much overcrowded, but the regular accommodation, particularly at the female side, is restricted materially, in consequence of some rooms being rendered useless by passages being formed through them to the new building now in course of construction. The drainage also is not quite satisfactory, and he considers that there are about twenty patients whose cases could be properly dealt with in the workhouse.

THE KILLARNEY DISTRICT ASYLUM.

IN reporting on the management of the Killarney District Asylum during 1881, Dr. Oscar Wood mentions that among the patients admitted were two members of the constabulary who had had their heads injured in riots. One made a good recovery, and was discharged after a few months' residence, but the other is not a promising case, and will probably have to remain under treatment for a considerable time. His maintenance in the asylum is paid entirely out of his pension, so that his broken head has involved no burden on the district. An hereditary taint is assigned as a predisposing cause in a large number of the cases admitted, more especially in those coming from the western division of the county, where intermarriages is very common. It is noticed that lunatics from the western division of the county are always less amenable to treatment than those from its northern division. Of the deaths occurring in the asylum last year, ten were due to phthisis, and eight to bronchitis and pneumonia, so that more than one half of the whole mortality, which amounted to thirty-five, was due to pectoral affections, a state of matters of which some explanation should be attempted. It is possible that the difficulty experienced in heating the asylum,

alluded to by Dr. Woods, and the nuisance of smoking chimneys, which seems to have prevailed to an intolerable extent, may have had something to do with it. No death was due to general paralysis, and only one to epilepsy.

THE GENERAL HOSPITAL, WOLVERHAMPTON.

THE annual report, just issued, shows that the number of patients treated during the last three years had been as follows:—In patients: 1879, 1,359; 1880, 1,372; 1881, 1,389. Out-patients: 1879, 11,647; 1880, 11,604; 1881, 12,332. The cost per head had been in 1879, £49 7s. 3d.; in 1880, £52 5s. 9d.; in 1881, £50 1s. 1d. The average stay of each patient during the three years had been 29½ days, 33 days, and 33¼ days, respectively. The cost per out-patient had been 2s. 2d. in 1879; 3s. 3d. in 1880; and 1s. 10d. in 1881. Last year's receipts were lower than those of the previous year by £174. The total receipts for 1881 had been £6,873 10s. 4d.; and the expenditure, £6,705 15s. 8d., leaving a balance in hand of £167 14s. 8d.

THE LEEDS HOSPITAL FOR WOMEN AND CHILDREN.

THE 29th annual report shows that this institution is in a flourishing state and doing a large amount of useful work. During the year 1881, 393 in-patients and 1,197 out-patients were under treatment. The receipts were less by £300 than they were in the previous year; but, on the other hand, the expenditure was somewhat reduced without detracting from the comforts or advantages of the patients; so that the adverse balance was only £79. Speaking of the large number of out-patients who crowd the waiting-rooms of our free hospitals and dispensaries, the report says "the public ought to bear in mind what a serious tax this is on the time of the honorary medical officers, and greater care ought to be taken by subscribers before giving recommendations. A recent report from the Manchester Medical Ethical Association, on the working of provident dispensaries in that town, shows how great and general is the abuse of medical charitable funds. No honorary medical officers ever refuse to treat really indigent and proper cases, but they should not be expected to do so for patients able to pay for private medical advice." Nor, we may add, for patients who could well afford to enrol themselves in a provident dispensary.

LIVERPOOL LADIES' CHARITY AND LYING-IN HOSPITAL.

THE Ladies' Charity was, we believe, founded in 1796, for the relief of poor married women in childbed, the charity undertaking to supply a skilled midwife in ordinary cases, and a surgeon in serious cases, together with such medical comforts as the circumstances of the patient might require. The Lying-in Hospital was founded in 1841, for the treatment of difficult cases of labour. In 1855 a ward was added for the special diseases of women; and in 1862 a new hospital was erected, containing 37 beds. These two charities were amalgamated in 1869.

The annual meeting of the charity was recently held, and unusual interest was given to the proceedings in consequence of a proposal to confine the in-door department entirely to the special diseases of women, and to make the necessary alterations in the rules. The report of the committee was chiefly occupied with this subject. It stated that the past year had been one of great difficulty, on account of an outbreak of puerperal fever, which had obliged the committee to close the doors. Nor was this the first outbreak of the kind. These frequent attacks of fever, and their consequences, had led the committee to reconsider the whole scope of the charity, and to propose—(1) That arrangements should be made for receiving difficult maternity cases at the houses of the district midwives, instead of in the hospital; and (2) that the wards in Myrtle Street should be devoted entirely to the treatment of the diseases peculiar to women. There can be no doubt that, from a medical point of view, the committee have acted wisely in maturing these proposals; nevertheless, they gave rise to an animated discussion, in which some legal and technical difficulties were raised, and ultimately that portion of the report which related to this subject was referred back for further consideration. We cannot doubt that the friends of the charity will confer a great benefit on the poor women whom they desire to help by adopting both the proposals of the committee. If they could form a school of midwifery in connection with the charity, and train suitable women as midwives, they would confer a great boon upon the rich as well as upon the poor.

Dr. HADDEN, Demonstrator of Morbid Anatomy at St. Thomas's Hospital, has recently been made a corresponding member of the *Société Anatomique de Paris*, at the nomination of Professor Charcot, the President.

A county lunatic asylum was, I apprehend, at the time of passing of the Act of William IV. a rate-supported institution. The clause quoted by your correspondent expressly declares that a medical officer of a county or other lunatic asylum is not entitled to the fee or remuneration provided by the Act. The hospitals of the Metropolitan Asylums Board, and the hospitals or other establishments for the reception of the sick under the Public Health Act, 1875, and also union and workhouse infirmaries, are rate-supported institutions; and the medical officers connected with them are, therefore, subject to the same conditions in the matter of remuneration as is the medical officer of a county lunatic asylum.

As to what occurred before the Committee of the House of Commons relative to the clause in question, I have heard an altogether different explanation from that given by your correspondent; but, accepting his account as correct, might not the fear entertained by the members of the House of that day "that the physicians and surgeons of our voluntary hospitals would be multiplying *post mortem* examinations and coroners' inquisitions for the sake of fees," extend in our day to the medical officers of workhouse infirmaries, asylums, etc., and be equally unjustifiable? As to the non-existence of workhouse infirmaries at the time of the passing of the Act, need I say that many general and special hospitals have since been established, as well as workhouse infirmaries, all coming within the operation of the clause in question.

I am inclined to doubt the correctness of the statement that, "in fixing the stipends of those ill remunerated officials (Poor-law medical officers), boards of guardians invariably take into consideration the possible incidence of fees, whether derived from coroners or otherwise." But, if it be so, I am of opinion that, in the interest of those officers themselves, the sooner such fees cease to be paid the better, believing that they are entitled to and would prefer a certain salary commensurate with their labours and deserts, to a smaller one supplemented by occasional fees.

Personally, I am of opinion that everyone called upon to give evidence for State purposes should be paid, particularly medical men, whether attached to hospitals or not, as there is no class of the community who more promptly recognise public claims, or more loyally and cheerfully render public services without expectation of fee or reward.

The informant of "H. S." has evidently misapprehended what I said to him concerning the Middlesex magistrates; and I hope that your correspondent, in making his special inquiries, will not raise questions the discussion of which by the magistrates will not advance his own views, and may damage his professional brethren. As to the hardship experienced by the medical witness in having to go two miles to attend the inquest, I am afraid that it is one which medical and other witnesses must occasionally endure, as it is impossible to have a coroner's court in every street.

In support of decency and morality, I aided my predecessor, Dr. Hardwicke, in his endeavour to provide public mortuaries and coroners' courts; at which places, wherever they exist, all inquests are now held, and not as formerly at public houses or in private rooms. The results of those endeavours have, I believe, given general satisfaction.

I may add that the subject of this letter has been referred to the Home Secretary, and is at present *sub judice*. The concluding advice offered by your correspondent to the younger members of the profession, I regret to say, lacks the wisdom of age, and betokens the decay of good manners.—Faithfully yours,

GEORGE DANFORD THOMAS, Coroner for Central Middlesex.

Coroner's Office, Paddington, W., March 29th, 1882.

SIR,—As is no doubt more or less generally known by this time, Dr. Danford Thomas, Coroner for Central Middlesex, has refused fees to the workhouse infirmaries medical officers, under the Act 6 and 7 William IV, c. 89, s. 5. Dr. Danford Thomas, from his actions, evidently considers that workhouses do not come under the Act, he having given fees, to my knowledge, to two medical officers who gave evidence recently at inquests, upon the bodies of paupers dying in the workhouse, but refused a fee to one of these medical officers who gave evidence at an inquest, upon the body of a pauper, who had died in that portion of the workhouse set apart for the reception of the sick, otherwise called the workhouse infirmary. A workhouse infirmary, firstly, is not a "public hospital or infirmary" under the Act, because the public are not indiscriminately received as patients, but only those with certificates proving that they are paupers belonging to the parish to which the workhouse infirmary belongs; secondly, because it is neither supported by "endowments or voluntary subscriptions".

To show you the manner in which the coroner exerts his power, I will quote the following case. I was summoned to give evidence at the coroner's court, two miles distant from here, upon the body of a pauper who had suddenly died in the infirmary; my senior had also received an order to make a *post mortem* examination. The inquest was held on March 21st; the coroner, after receiving my evidence, called my senior to give his opinion upon the *post mortem* examination. He (my senior) stated that he had not made a *post mortem* examination, it being no part of his duty, as he was not paid for it. The coroner replied that he laid himself open to be committed for contempt of court, and ordered that we should both immediately make a *post mortem* examination. My senior here told the coroner that our workhouse infirmary, with seven hundred and fifty patients, was left without a medical officer, contrary to the orders of the Local Government Board; that there were many serious cases in the infirmary; that one of us should return to the infirmary; and that the other would make the *post mortem* examination. The coroner replied that he "would not have his authority questioned"; that we should both immediately repair to the mortuary and make a *post mortem* examination. I need scarcely add that we received no fees.

Will all Poor-law medical officers willing to test this matter communicate with me, when, after having received counsel's opinion, we could, if favourable, take measures for the authoritative settlement of the question in dispute?—I am, sir, yours faithfully,

STEPHEN H. MOORE,

Late Member of the Election Committee of Dr. Danford Thomas.
Holborn New Infirmary, Archway Road, Upper Holloway, N.

Copy of Letter received from the Home Secretary.

A. 14574.

Whitehall, March 30th, 1882.

SIR,—With reference to your letter of the 13th instant, concerning the refusal of the coroner to pay your fees for attendance at an inquest at his court in Islington, I am directed to acquaint you that the Secretary of State has made inquiry into the matter, and is informed by the coroner that, as the Holborn Union Infirmary, to which you belong, is used only for the reception of sick persons, he considers it to be one of the institutions to which the provisions of the Act 6 and 7 William IV, c. 89, s. 5, apply; and that he was not empowered, therefore, to pay you a fee for

attendance. Sir William Harcourt is unable to interfere in the matter.—I am, sir, your obedient servant, A. J. P. LIDDELL.—The Medical Officer, Holborn Union Infirmary, Archway Road, Highgate.—389.

THE SWAFFHAM BOARD OF GUARDIANS AND POOR-LAW MEDICAL RELIEF.

SIR,—My attention has been called to a paragraph in the *Norwich Argus* of the 11th instant, in which the *BRITISH MEDICAL JOURNAL* is quoted as stating: "About five years since, Dr. T. K. Milne of Shipdham bought the practice there. It carried with it the appointment to one of the districts of the Swaffham Union, to which he succeeded on the same terms as his predecessor, which was stated to him at the time of purchase, to be after the rate of seven shillings and sixpence per case, and the ordinary mode of attendance. There was only a verbal agreement. On receipt of his first quarter's salary, he found he had been *misinformed* as to the remuneration," etc. As the administratrix of my late husband, allow me to say that Dr. Milne carried on the practice from April 11th, 1877, to August and. During that time, nothing was concealed from him, and he had every opportunity of knowing the exact sum received in each case. When the practice was purchased, all the books were left in the house for Dr. Milne's use. Surely, he might have found out the sum due to him ere five years had passed. My husband practised thirty-eight years in Shipdham, and I believe never had a complaint made against him. I may say, *en passant*, Dr. Milne gave £960 for a good house, garden, and three acres and a half of meadow land, practice included; so he need not complain.—I am, sir, yours faithfully,

ANNIE CLOUTING.

Ufford Hall, Stamford, March 27th, 1882.

* The information on which our annotation was based came to us from sources which we held to be absolutely reliable, and therefore we felt no hesitation in writing our observations thereon. Although we regret that our correspondent should have been pained thereby, we held and do hold that no reflection was conveyed or intended against those from whom Dr. Milne purchased the practice, but against the Swaffham Board of Guardians, who, it would appear, have been wholly indifferent as to fairness of action in their treatment of their medical officer, in sending an undue number of cases for treatment, and out of all proportion to the remuneration afforded.

ALLEGED APPOINTMENT OF AN UNQUALIFIED MEDICAL OFFICER.

SIR,—The guardians of X. union proceeded, at a recent meeting, to the election of a medical officer to a district of that union, which they had duly advertised. There were two candidates, A. and B., for the appointment. A. is fully qualified and registered, whilst B. is not. Nevertheless, the guardians conferred the appointment upon the unqualified B., subject to the sanction of the Local Government Board. Does not the appointment belong to A., being the only qualified applicant? Or are there any steps which A. could take so as to prove his rights? The guardians had no reason to reject A., save the one that they had promised their votes to the unqualified B.

If guardians made it the rule to follow the example of those belonging to the X. union, it would be but small encouragement to gentlemen to get fully qualified at all, seeing that parochial appointments are conferred upon unqualified persons in preference to fully qualified ones.—Yours, etc.,

M.B.M.A.

* The nature and qualifications of every officer appointed must be reported to one or the other of the three authorities for England, Ireland, and Scotland, as the case may be. These authorities would be bound to annul any appointment, unless the gentleman selected possessed a medical, as well as a surgical, qualification.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

It has been urgently represented to the Council of the Senate that the welfare of biological studies at Cambridge demands that Mr. Balfour's department should be placed on a recognised footing. In this view the Council concur, and they accordingly recommend that there shall be established in the University a Professorship of Animal Morphology, at a stipend of £300 a year, to terminate with the tenure of office of the first Professor elected, unless the University decide that the Professorship shall be continued. It is to be the principal duty of the Professor to teach and illustrate the principles of the structure and development of animals, to apply himself to the advancement of the knowledge of these subjects, and to promote their study in the University. A Grace authorising the establishment of the Professorship will be offered to the Senate at a Congregation on Thursday, the 11th of May.

QUARANTINE IN THE SUEZ CANAL.—At a meeting of the French Academy of Science, M. de Lesseps, who has just returned from Egypt, denounced the quarantine system in the Suez Canal as seriously detrimental to commerce. These regulations, which cooped up thousands of pilgrims returning from Mecca in spots which speedily became fever beds, and which detained so-called suspected vessels without preventing people from landing or embarking, served no useful purpose, nor was there any object in introducing into the East a system disused at home and worthy only of the middle ages. Commerce was obstructed without the public health being secured, for fever beds were thus created, and such arbitrary and clumsy measures would never protect Europe from cholera. He himself was now supposed to be undergoing quarantine in Egypt. He invited the Academy to examine the question and report to the Government. A discussion followed. It was agreed that the matter should be inquired into.

CHRISTOPHER ROYSTON, M.R.C.S. Eng., L.S.A. Lond.

WE have, this week, to record the death of Mr. Christopher Royston, of Newbury, Berks. He was born at Codnor Park, Derbyshire, on April 10th, 1801, and was educated at Mr. Goodacre's Grammar School at Nottingham. He was afterwards apprenticed to the late Mr. Haden, of Derby (a relation of Mr. Seymour Haden), who was then enjoying a leading practice in that town. He subsequently studied at St. Bartholomew's Hospital, London, taking the qualifications of L.S.A. in 1823, and M.R.C.S. in 1824. He shortly afterwards commenced practice at Redditch, in Worcestershire, where he remained nearly twenty-five years. He then removed to Newbury, Berks, where he practised for twelve years, and then resigned the active duties of his profession. Subsequently, living at Bath, and at Stamford Hill, near London, he again returned to Newbury, where he died, after an illness of nearly three months, early on the morning of March 17th, having nearly completed his eighty-first year. Mr. Royston was a skilful accoucheur; and, after having given up the practice of his profession, always spoke, with much pleasure, of never having lost a patient of his own during her confinement.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology, at a meeting of the Board of Examiners, on the 3rd instant, and when eligible to be admitted to the pass examination.

Messrs. Leopold Larmuth, Thomas Calrow, Joseph E. Parker, and William O. Shaw, students of the Manchester School; George H. Weston, Edward W. Reid, and Hector W. G. Mackenzie, of the Cambridge School; William H. Wigham and Mark J. Wakefield, of the Newcastle School; Gregory Jordan and Narendra Prasanna Sinha, of the Bengal School; Siva Prasad Roy, of the Calcutta School; Arthur Morley, of the Leeds School; Hunter J. Barron, of the Edinburgh and St. Thomas's Hospital; Arthur W. Collins, of the Liverpool School; J. Harrison Scott, of the Dublin School; and Robert C. Priestley, of King's College.

Seven candidates were rejected.

The following gentlemen passed on the 4th instant.

Messrs. Frank Thorpe, John W. Talent, Richard T. Williamson, and Robert Blackwell, of the Manchester School; Henry S. Cook, Charles E. Purslow, and Arthur F. Messiter, of the Birmingham School; Harold C. Ling and Thomas B. Macfarlane, of the Glasgow School; Joseph S. Rively and James H. Crouch, of the Newcastle School; William Greenwood and Edward G. Morris, of the Leeds School; Procter S. Hutchinson and John Thomas, of the London Hospital; Herbert H. Lankester, of St. Thomas's Hospital; Charles J. Heath, of St. Bartholomew's Hospital; Charles B. Cooper, of the Liverpool School; William G. Thorold, of the Bristol School; Thornton F. W. Harragin, of the Charing Cross Hospital; James H. E. Brock, of University College; and Henry W. B. Benckraft, of St. George's Hospital.

Two candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 30th, 1882.

Clay, Augustus Frederic, Steelhouse Lane, Birmingham.
Daunt, Elliot, Little Stanhope Street, Mayfair.
Forrest, James Rocheid, Munster Terrace, Fulham.
Lota, Antoine Louis, Couloy (Var), France.
Norsy, William Augustus, Wokingham, Berks.

The following gentleman also on the same day passed the Primary Professional Examination.

Harris, Howard, Charing Cross Hospital.
Perry, Allan, London Hospital.
Whicher, James, Charing Cross Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:—

BIRMINGHAM BOROUGH ASYLUM, Winsongreen.—Clinical Assistant. Applications to E. B. Whitcombe, Medical Superintendent.

BIRMINGHAM GENERAL DISPENSARY—Resident Surgeon. Salary, £150 per annum. Applications by April 12th.

BRISTOL GENERAL HOSPITAL—Assistant House-Surgeon. Salary, £50 per annum. Applications by May 4th.

BRITISH HOSPITAL, Buenos Ayres, South America.—Resident Medical Officer. Salary, £200 per annum. Applications by May 1st.

BURNWOOD COUNTY LUNATIC ASYLUM, near Lichfield.—Assistant Medical Officer. Salary, £120 per annum. Applications by 13th April.

CAMBRIDGE COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum. Applications by the 15th April.

CHELTEMHAM BRANCH DISPENSARY—Resident Medical Officer. Salary, £180 per annum. Applications by April 17th.

CHILDREN'S HOSPITAL, Birmingham.—Assistant Resident Medical Officer. Salary, £40 per annum. Applications by April 13th.

ENNIS UNION.—Medical Officer for Crusheen Dispensary District. Salary, £110 per annum, £15 yearly as Medical Officer of Health, registration, and vaccination fees. Election on the 12th instant.

ENNIS UNION.—Medical Officers for Nos. 1 and 2 Districts. Salary, £110 per annum for each district, with £15 per annum as Medical Officer of Health, registration, and vaccination fees. Election on the 12th instant.

GLASGOW OPHTHALMIC INSTITUTION—Ophthalmic Surgeon. Applications by April 8th.

INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY.—Senior House-Surgeon. Salary, £70 per annum. Applications to J. Kirkley, 41, King Street, South Shields.

INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY.—Junior House-Surgeon. Salary, £50 per annum. Applications to J. Kirkley, 41, King Street, South Shields.

LONDON HOSPITAL, Whitechapel, E.—Aural Surgeon. Applications by the 18th April.

MIDDLESEX COUNTY LUNATIC ASYLUM—Assistant Medical Officer. Salary, £120 per annum. Applications by the 13th April.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—House-Surgeon. Salary, £50 per annum. Applications by April 24th.

QUEEN'S HOSPITAL, Birmingham.—Resident Surgeon. Salary, £50 per annum. Applications by April 10th.

RATHDOWN UNION.—Medical Officer for Newcastle Dispensary District, at a salary of £120 per annum, exclusive of sanitary registration and vaccination fees. Election on the 11th instant.

ROYAL FREE HOSPITAL, Gray's Inn Road, W.C.—Junior Resident Medical Officer. Applications by the 12th April.

SCARBOROUGH FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £200 per annum. Applications by April 15th.

SCHOOL OF DENTAL SURGERY—Teacher of Dental Metallurgy. Applications to the Dean of the Medical School, Dover Street, Liverpool, by April 25th.

TOWNSHIP OF MANCHESTER.—Resident Assistant Medical Officer. Salary, £140 per annum. Applications, endorsed "Medical Appointment", by the 15th April.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL—Physician. Honorarium of £100 a year. Applications by April 24th.

YORK COUNTY HOSPITAL—Honorary Physician. Applications by the 11th April.

MEDICAL MAGISTRATE.—Dr. Bateman, of Norwich, and of Burlingham Lodge, Alburgh, has been appointed a magistrate for the county of Norfolk.

Dr. M. ZAMPAJO, Professor at Rio Janeiro, who was sent to Europe for the purpose of studying the organisation of children's hospitals, is reported to have committed suicide at Trieste by shooting himself through the head with a revolver.

HOMATROPINE AS A MYDRIATIC.—Dr. F. C. Hotz, in the *Transactions of the Illinois State Medical Society*, 1881, thus sums up the evidence as to the value of homatropine as a mydriatic. It enlarges the pupil and paralyses the ciliary muscles as quickly and thoroughly as an equally strong solution of sulphate of atropia; but the effects of the homatropine upon the eye disappears entirely in twelve to twenty-four hours, while the effects of the atropine continues for many days, and while it lasts disables the patient for reading and writing. For this reason homatropine is preferable when temporary dilatation of the pupil is desired.

AMENDMENT OF THE LUNACY LAWS.—A meeting, convened by the Lunacy Law Amendment Society for the purpose of furthering their views, took place this week at the Holborn Town Hall, Mr. Torrens occupying the chair.—Mr. Commissioner Miller moved the first resolution:—"That the lunacy laws are highly unsatisfactory, and urgently need reform." He said that the present system of incarcerating a man as a lunatic, upon the certificate of two medical men, required altering. He contended that the soundness of the medical opinions should be tested by public examination, as no man's opinion was worth having unless it would stand the test of skilful cross-examination.—Mr. Moseley, in seconding the motion, denied that it would be casting a stigma upon a person should he be publicly examined for the purpose of ascertaining whether he is a lunatic or not. Was it fair to the public that a family, in which there was hereditary insanity, should not be known to have that taint? Ought persons to be allowed to contract marriages with them? For his own part, he considered secrecy as contrary to the public welfare; while, again, proprietors of public asylums had a direct pecuniary interest in still keeping patients after recovery. After some further discussion, the resolution was passed, as were all others calling for an inquiry into the lunacy laws, and adopting a petition to the Houses of Parliament.

PARALYSIS FROM PRESSURE.—At a recent meeting of the Academy of Medicine, M. Vulpian described an interesting case of paralysis resulting from pressure. A young woman, suffering from arthritis of the knee-joint, was ultimately obliged to walk with the help of crutches. Their leather covering gave way, and the wood beneath consequently rubbed the armpit and the brachial nerves of that region. Total paralysis of the left arm and almost total of the right arm ensued. The right arm preserved its sensibility intact, and the vaso-motor

phenomena, and those of secretion were normal, but voluntary motor power was annihilated. When the condition of the patient was slightly improved, faradisation provoked muscular movement, but the patient was still unable to execute voluntary movements. M. Vulpian concludes that there are cases of paralysis resulting from pressure on the nerve which do not present what may be termed the stereotyped alterations characteristic of paralysis. M. Panas some years ago attempted to prove that radial paralysis, termed a *frigore*, is always due to a lesion provoked by pressure. M. Vulpian now admits that the case he describes, where pressure produces a condition hitherto attributed solely to the influence of cold, renders of little value the arguments he opposed to M. Panas' theory.

CYST OF THE PANCREAS.—Dr. Nathan Bozeman presented, at a meeting of the New York Pathological Society, a cyst of the pancreas, which had been mistaken before removal for ovarian cyst. The patient was the wife of a physician of Texas, forty-one years old, robust, and weighed two hundred pounds. She had been perfectly healthy up to seven years ago, when she began to suffer from pain in the right inguinal region, hip, and thigh, and her abdomen began to enlarge. This gradually progressed up to six or seven months ago, when she was examined by an eminent physician of New Orleans, who diagnosed ovarian cyst. She was subsequently sent to Dr. Bozeman, who also thought the tumour ovarian, and decided on operation. This was done December 2nd. Instead of ovarian cyst, he found the tumour attached to the pancreas at the junction of the outer one-third and inner two-thirds. The patient had been prepared for the operation by administration of fifteen grains of salicin thrice daily, and was thoroughly cinchonised the day of the operation. The patient, after operation, progressed as satisfactorily as any case of ovariectomy. There had been no symptom of interference with the function of the pancreas before operation.

M. REGNARD has made a communication to the Paris Biological Society, describing a new temperature regulator he has invented. M. Regnard proposed, by his temperature regulator, to remove the defect of the regulation apparatuses of M. M. Friedel, Schloesing, and d'Arsonval, all of which, though admirable, require a long time to be regulated. In M. Regnard's apparatus, the thermometer regulates the temperature; for this purpose it is left open, and inside the tube is a very fine platinum wire. The mercury of the thermometer is in contact with one of Leclanché's elements, by means of a platinum wire thread soldered on to the bulb. If the free platinum wire is in contact with the other pole of the pile, as soon as it is reached by the mercury the current is interrupted. If the end of the wire thread in the tube of the thermometer be stationary at 40°, the current is interrupted when the heat of the water bath is 40°. If the thread be stationary at 50°, the current is interrupted when the heat of the water bath reaches 50°. The one important fact to bear in mind is, that when the current is interrupted, the thermometer bulb is heated. Why this is so is only explained. The gas is obliged to pass through a small bell glass, in which it is heated by a thimble, which is heated by the current. The gas is then heated by the magnet. When the current passes, the electro-magnet plunges the glass into the mercury, the gas goes out, with the electro-magnet jet, the moment current ceases, the glass is upraised, and the gas is cooled.

M. REGNARD has also made a communication to the Paris Biological Society, describing a new temperature regulator he has invented. M. Regnard proposed, by his temperature regulator, to remove the defect of the regulation apparatuses of M. M. Friedel, Schloesing, and d'Arsonval, all of which, though admirable, require a long time to be regulated. In M. Regnard's apparatus, the thermometer regulates the temperature; for this purpose it is left open, and inside the tube is a very fine platinum wire. The mercury of the thermometer is in contact with one of Leclanché's elements, by means of a platinum wire thread soldered on to the bulb. If the free platinum wire is in contact with the other pole of the pile, as soon as it is reached by the mercury the current is interrupted. If the end of the wire thread in the tube of the thermometer be stationary at 40°, the current is interrupted when the heat of the water bath is 40°. If the thread be stationary at 50°, the current is interrupted when the heat of the water bath reaches 50°. The one important fact to bear in mind is, that when the current is interrupted, the thermometer bulb is heated. Why this is so is only explained. The gas is obliged to pass through a small bell glass, in which it is heated by a thimble, which is heated by the current. The gas is then heated by the magnet. When the current passes, the electro-magnet plunges the glass into the mercury, the gas goes out, with the electro-magnet jet, the moment current ceases, the glass is upraised, and the gas is cooled.

Dr. Nathan Bozeman presented, at a meeting of the New York Pathological Society, a cyst of the pancreas, which had been mistaken before removal for ovarian cyst. The patient was the wife of a physician of Texas, forty-one years old, robust, and weighed two hundred pounds. She had been perfectly healthy up to seven years ago, when she began to suffer from pain in the right inguinal region, hip, and thigh, and her abdomen began to enlarge. This gradually progressed up to six or seven months ago, when she was examined by an eminent physician of New Orleans, who diagnosed ovarian cyst. She was subsequently sent to Dr. Bozeman, who also thought the tumour ovarian, and decided on operation. This was done December 2nd. Instead of ovarian cyst, he found the tumour attached to the pancreas at the junction of the outer one-third and inner two-thirds. The patient had been prepared for the operation by administration of fifteen grains of salicin thrice daily, and was thoroughly cinchonised the day of the operation. The patient, after operation, progressed as satisfactorily as any case of ovariectomy. There had been no symptom of interference with the function of the pancreas before operation.

perineum, that a rupture of the latter seemed inevitable. At this moment, however, the patient perhaps involuntarily, extended her limb to a line nearly parallel with that of her body, and coincidentally with this movement the foetal head passed through the vulva without any perceptible injury to the parts. The next case was that of a primipara, in which the foetal head became so tightly impacted at the vulva as to cause considerable delay, though the uterus was contracting with great force, and laceration seemed inevitable. The patient was on her back, with her knees sharply flexed and abducted. She was requested to straighten her left leg, and as she did so, the vertex became more prominent, and the forehead slid over the perineum without causing even so much as an abrasion at the fourchette. In other similar cases, extending the thigh, when the passage of the child was impeded by a too rigid perineum, was followed by the same happy result. The perineum is not only relaxed by the extension of the limbs, but the degree of its inclination is increased so as to impose less resistance to the passage of the foetal head, and *vice versa*: in the ratio that the limbs are flexed and abducted, the perineum and contiguous parts are put upon the stretch, and consequently its resistance and liability to rupture proportionately increased.

HEALTH OF FOREIGN CITIES.—Trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities are afforded by the following figures, deduced from a table in the Registrar-General's last weekly return. According to the most recently received official weekly returns, the annual death-rate in the three principal Indian cities averaged 35.1 per 1000, and was equal to 27.1 in Calcutta, 32.8 in Bombay, and 47.7 in Madras. Cholera caused 40 deaths in Calcutta and 59 in Madras, while 68 fatal cases of measles were recorded in Bombay, and fever fatality showed the usual excess in each of the three cities. The death-rate in Alexandria further declined to 26.1, although 6 of the 106 deaths resulted from typhoid fever. In twenty-two European cities, the death-rate averaged no less than 32.4, and exceeded by 9.2 the average rate prevailing last week in the twenty-eight large English towns. The death-rate in St. Petersburg, although showing a decline, was equal to 50.9; the 653 deaths included 41 from "fever", 21 from diphtheria, and 19 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 24.9; measles caused 25 more deaths in Copenhagen, where the death-rate was equal to 31.7. In Paris, the death-rate further rose to 30.7; and the deaths included 68 from diphtheria and croup, 36 from typhoid fever, and 15 from small-pox. The rate in Brussels did not exceed 23.5, whereas it was equal to 29.3 in Geneva. In the three principal Dutch cities, the death-rate averaged 25.9; in Amsterdam the rate was 26.6, and 3 fatal cases of "fever" were recorded. The Registrar-General's table includes returns from nine German and Austrian cities, in which the death-rate averaged 33.5, and ranged from 25.4 and 25.9 in Berlin and Dresden, and 41.1 in Vienna. Small-pox caused 34 deaths in Berlin and 7 in Dresden; and diphtheria caused 10 deaths in Berlin and 7 in Dresden. In three of the principal Italian cities, the death-rate averaged 31.2, the highest rate being 32.4 in Venice, 12 deaths were recorded in Milan, 10 in Rome, and 11 in Turin. The Roman return dates to the end of November.

The average annual death-rate in four of the largest American cities was 27.1, and the rates ranged from 21.4 in Boston to 33.1 in New York. Small-pox caused 14 deaths in New York and 7 in London, and the average prevalence in New York and Brooklyn, during the year, was 14 deaths in 1000.

Dr. Nathan Bozeman presented, at a meeting of the New York Pathological Society, a cyst of the pancreas, which had been mistaken before removal for ovarian cyst. The patient was the wife of a physician of Texas, forty-one years old, robust, and weighed two hundred pounds. She had been perfectly healthy up to seven years ago, when she began to suffer from pain in the right inguinal region, hip, and thigh, and her abdomen began to enlarge. This gradually progressed up to six or seven months ago, when she was examined by an eminent physician of New Orleans, who diagnosed ovarian cyst. She was subsequently sent to Dr. Bozeman, who also thought the tumour ovarian, and decided on operation. This was done December 2nd. Instead of ovarian cyst, he found the tumour attached to the pancreas at the junction of the outer one-third and inner two-thirds. The patient had been prepared for the operation by administration of fifteen grains of salicin thrice daily, and was thoroughly cinchonised the day of the operation. The patient, after operation, progressed as satisfactorily as any case of ovariectomy. There had been no symptom of interference with the function of the pancreas before operation.

OPERATION DAYS AT THE HOSPITALS.

MONDAY	Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
TUESDAY	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY ..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
THURSDAY ...	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.
FRIDAY	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS .—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.
GUY'S .—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.
KING'S COLLEGE .—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th., 2; Throat, Th., 3; Dental, Tu. F., 10.
LONDON .—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.
MIDDLESEX .—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.
ST. BARTHOLOMEW'S .—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.
ST. GEORGE'S .—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.
ST. MARY'S .—Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Eye, M. Th., 1.30; Ear, M. Th., 2; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, W. S., 9.30.
ST. THOMAS'S .—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.
UNIVERSITY COLLEGE .—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.
WESTMINSTER .—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY .—Royal Medical and Chirurgical Society, 8 P.M., Ballot. 8.30 P.M., Sir Henry Thompson: On a case of Tumour of the Bladder (in the Male) successfully removed through a Perineal Section of the Urethra. Mr. T. Holmes: On Wounds of the Theca Vertebralis, with Discharge of Cerebro-spinal Fluid.
WEDNESDAY .—Royal Microscopical Society, 8 P.M. Ordinary Meeting.
THURSDAY .—Harveian Society of London, 8 P.M. Dr. Mahomed will introduce the subject of Collective Investigation of Disease. Mr. Juler: On the Symptoms, Pathology, and Treatment of Iritis.
FRIDAY .—Clinical Society of London, 8.30 P.M. Report of Committee on Chromidrosis. Dr. Barlow and Mr. Godlee: Case of Extirpation of the Kidney for Calculous Pyelitis. Mr. Howard Marsh: Case of Pyelitis; Exploration of the Kidney; Partial Removal; Death from Suppression of Urine. Mr. Pearce Gould: 1. Case of Spina Bifida cured by Injection of Iodine: 2. Case of Congenital Intestinal Obstruction. Dr. de Havilland Hall: Case of Primary Perichondritis of the Larynx. Dr. C. T. Williams will show a case of Phthisis which has been treated by Residence at High Altitudes.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CHLOROFORM AS AN ANÆSTHETIC, AND ITS PURITY.

SIR,—Since I wrote my last letter in the JOURNAL, March 17th, I have carefully examined several specimens of chloroform, and I have had a communication from Messrs. Duncan and Flockhart, which entirely coincides with what I myself have found out, viz., that absolutely pure chloroform, of specific gravity 1.500, will not keep; and it is no trade secret that, in order to make it keep, from $\frac{1}{2}$ to 1 per cent. of absolute alcohol is added; and exposure to sunlight and contact with air, in bottles partly filled, have then no influence in producing decomposition, or in the generation of phosgene gas, COCl₂.

I may state that the test of M. Yvon is, therefore, utterly useless, as it only tells us that some reducing body, such as alcohol, is present; but chlorinated bodies may be in abundance, and yet an impure chloroform may be proof against the test. I may also state that, if even methylated chloroform be kept in contact with permanganate of potassium and caustic potash for about a week, it will then stand M. Yvon's test, and distillation is not required. I have a specimen which has effectually resisted any reduction of the permanganate test for upwards of twelve hours. During the process of contact, a good deal of care is required, so as to have the bottle closely and tightly stoppered, as the stopper is liable to be forcibly shot out.

With all due respect for M. Yvon, I am obliged to say the medical profession must not be dictated to by a French chemist, who, if he do not know, should have known, that all acknowledged makers of chloroform, be they French, German, American, or English, add absolute alcohol to pure chloroform, so as to make it permanent. M. Yvon might as well say, in regard to our butter, that salt was an element that should not be there. Salt is added, not as an agent of adulteration, but as a preservative.

I have a sample of "Schering's chloral chloroform", and one of Mr. Martindale's, called "anæsthetic"; but chloral chloroform is the greatest sinner of all specimens that I have examined, because in a second or two it is condemned by Yvon's test. Mr. Martindale's is proof for a long time; but it gives way long before the sample I allowed to remain in contact with the permanganate of potassium for a week, and tested on decantation, but without distillation in this instance. I brought this subject before the South Durham and Cleveland Medical Society on March 7th, and demonstrated that the test of M. Yvon was unreliable.

For many years, the subject has been one of special study on my part. I have seen all forms of apparatus for inhalation. They are all bad; every one is objectionable—but a simple cone made out of a small napkin or a cambric handkerchief. All inhalers in any hospital should be discarded. They are only a nuisance, and cause much trouble. If anyone doubts my wholesale condemnation, let him try the effect of the inhalation of ether, or chloroform, or nitrite of amyl, or bi-chloride of methylene, on himself. On this subject I might add much more, but for the present refrain.—I am, etc.,
Northallerton, March 25th, 1882.

HENRY BROWN.

"AN OLD SUBSCRIBER" asks: Do any of the London ophthalmic hospitals take in patients upon the payment of a small sum weekly?

MEDICAL ETIQUETTE AND THE INDIAN MEDICAL SERVICE.

SIR,—I can fully sympathise with your correspondent who signs himself "In Adversis etiam Fides". I am afraid medical practitioners of the present day do not behave to their brother workers as the older members did and do, not only in the Indian Medical Service, but in other branches of the profession. Is it because, in these days, the profession is overstocked, and medical men find they cannot afford to be courteous to their colleagues in the race of life? The case he quotes will be found, unfortunately, by no means isolated.

In a village here are two practitioners. What can the elder think his profession he has all his life tried to uphold is becoming, when the younger informs the friends of a patient of his, whom they have lost by heart-disease, that "had he been called in, he could have saved her"? What remedy is there against this ungentlemanly practice? I am afraid the answer is "None". Many other acts of discourtesy I might mention. As a member of the profession remarked to me a short time ago, "Now-a-days, one must have two pockets: one for fees, and the other for affronts".—Yours faithfully,
M.R.C.S.

CRAMP.

SIR,—In answer to the appeal made by your correspondent "Spasm" in last week's JOURNAL, I beg to say that whenever I have to treat cramp, whether in old or young subjects, I find that a moderate dose of camphor before going to bed, and rubbing the limbs liable to the affection with strong spirits of camphor, gives, almost without fail, satisfactory relief.—I am, yours very truly,
Marlborough College, April 3rd, 1882.

WALTER FERGUS, M.D.

SIR,—In reply to "Spasm" in your number for April 1st, 1882, I beg to say that a gentleman consulted me, about four months since, concerning his health. He was far advanced in diabetes; and his nervous system—on which, in my opinion, diabetes depends—was sadly shattered. He complained of suffering beyond endurance with violent cramps in his legs every night, and nothing he tried seemed to do the least good. I ordered him ten grains of salicylic acid three times a day. In a few days the cramp ceased completely, and never since returned.—Yours truly,
Coleraine, Ireland, April 3rd, 1882.

JAMES C. L. CARSON, M.D.

THE LUMLEIAN LECTURES ON INFLAMMATION.

Delivered before the Royal College of Physicians.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College, London.

LECTURE II. PART II.—ETIOLOGY OF INFLAMMATION.

1. *The exudation of a normal inflammation is not infective.*

The proposition that a normal inflammation has no tendency to extend beyond the limits of the injury of which it is the physiological effect, has already been illustrated; but it is further desirable to state what grounds exist for concluding that the introduction into the circulating blood of a relatively large quantity of exudation (which, so far as the organism as a whole is concerned, is the most important effect of a considerable local inflammation) does not produce secondary inflammations elsewhere. To arrive at this conviction, all that is necessary is to consider what actually happens. In the beginning of every acute inflammation of a vascular tissue, a large quantity of liquid leaks from the blood-vessels, and is discharged into the intervascular spaces. This liquid does not at first accumulate where it is effused, but is at once drained off by the lymphatics, which, in consequence, become distended with lymph. In an admirable series of experiments by Dr. Lassar ("Ueber Ödem und Lymphstrom bei der Entzündung", Virchow's *Archiv*, vol. lxi, p. 516), in which diffuse inflammation of the cellular tissue of the limbs was induced experimentally for the purpose of studying the mechanism of absorption, the amount of this drainage was estimated at different stages of the process. For this purpose, a cannula was inserted in one of the principal lymphatic vessels leading from the inflamed part, and the lymph collected. It flowed at the rate of about an ounce per hour—in such abundance, that, in the twenty-four hours during which the exudation was at its height, the quantity which would have entered the blood could not be estimated at less than a pound—i.e., something like half the weight of the animal's blood. Now, inasmuch as a local inflammation of this kind rapidly subsides, and leaves no trace behind it, and is not attended by any serious constitutional disturbance, it is tolerably clear that the mere admixture of a large proportion of inflammatory exudation with the blood is not in itself a matter of very serious moment, and that whatever impressions may exist in our minds as to the toxic properties of pus-corpuscles must be discarded. So long as these structures retain their integrity, there is no reason to suppose that the mere fact of their having escaped from the blood in consequence of injury of the vascular wall, unfits them for re-entering the circulation.

In the early stage of the inflammatory process, there is every reason to believe that the process of absorption goes on exactly as in health, with the exception that as many ounces have to be drained away in the one case as drachms in the other. Subsequently, as the percentage of solids, and particularly the number of corpuscles contained in the lymph increases, the drainage diminishes, partly owing to partial obstruction of the lymph-paths by coagulation, partly because less is exuded.

2. *No organisms endowed with inflammation-producing phlogogenic particles exist in the atmosphere or in the ordinary aqueous liquids with which our bodies come into contact.* In dealing with this proposition, we have the same sort of evidence as with reference to the first; viz., that these supposed delinquents may be brought into contact with living tissues of all kinds without producing any local disturbance. But, before attempting to show this, I would ask you kindly to bear in mind that we have to do exclusively with the case of inflammation. I presume that no one here doubts that the air contains, or may contain, the seeds of specific diseases; and there are strong reasons for believing that these seeds are organisms. Whether they are or are not, does not at present concern us. My proposition is, not that there are no such things as air-contagia, but simply that its particles are not phlogogenic; and the first point to be settled is, how we are to bring these particles into contact with living tissues so as to test their properties effectually. As regards the air, one method which appears to me to be very conclusive, consists in passing large quantities of air through living tissues. In the rabbit, the subcutaneous tissue may be kept distended for days, by frequently renewed injections of unpurified air, without producing any inflammation; nor is the effect more serious if the same tissue

be ventilated by a continuous current of the same air for a number of hours, even when that air is derived from a *post mortem* theatre; whence it seems clear that, so far as the tissue is concerned, air is tolerably harmless; for, by this mode of ventilating a tissue, floating matter can scarcely fail to be deposited.

The information yielded by similar experiments on unpurified watery liquids is, in one respect, more satisfactory—viz., that we have here to deal with media, in every particle of which we can very readily prove the actual existence of germs, in such a state of viability as to require only a suitable soil to ensure their development. Dr. Wegner, ("Chirurgische Bemerkungen über die Peritonéale Höhle," Langenbeck's *Archiv*, volume xx, page 51), who is the author of the ventilation experiment to which I have just referred, has tested these liquids, both on the cellular tissue and the serous surfaces, with similar results. I will ask your attention specially to those which relate to the peritoneum. When water, charged with septic bacteria (bacteria which had grown for this purpose in a "cultivation liquid", i.e., a solution of nutritive salts) was injected into the peritoneal cavity of a rabbit, in quantity less than two ounces, it produced no effect whatever; and when the animal was killed the next day, it was found that the whole of the liquid was absorbed, and that the peritoneum was in a normal state. Whither had the organisms gone? Had they disappeared from the peritoneum, or were they reposing harmlessly on its surface? The examination of the lymphatic vessels of the diaphragm, which, as is well known, serve as the ordinary drainage-channels for the peritoneum, showed that for the most part they had been absorbed; for these vessels were full of bacteria, which had been arrested on their way from the peritoneum towards the venous system; but neither in the lymphatics nor in the peritoneum, did they occasion any inflammatory change. Similarly he found that, when a large quantity of liquid (warm 0.75 per cent. solution of salt) was led, by means of suitably arranged drainage-tubes through the peritoneal cavity, in a continuous stream for many hours, so that the membrane was exposed for a long time to whatever phlogogenic influences the liquid conveyed, no effect whatever was produced. So long as the liquid was constantly changed, there was no infection, no inflammation. If it were allowed to remain stagnant in the peritoneum in larger quantity than could be absorbed, these results followed inevitably. Hence, while a liquid which is actually charged with septic organisms is harmless if its quantity be such that it can be rapidly absorbed, common water, if it accumulate, will produce a fatal peritonitis.

It may thus be considered to be established that septic bacteria or their germs, in a viable state, are not necessarily phlogogenic; and I may, therefore, pass at once to my third point.

3. *Whenever an inflammation becomes infective, it owes that property to chemical change in the exudation-liquid, of which the presence of microzymes is a necessary condition. Conversely, septic organisms which are infectious owe their infectiveness to the exudative soil in which they have grown.* To illustrate these propositions, I will pursue the study of peritonitis a little further.

In experiments which I made a dozen years ago, I showed that, in rodent animals, peritonitis induced by the injection of irritant liquids is always infective. The exudation products of such inflammations were found to be septic, notwithstanding that the irritant used (e.g., tincture of iodine) was not only free from germs, but destructive of them. This was understood to mean, that the first effect of the iodine was the effusion of liquid into the peritoneal cavity; the second, the infection of this liquid by formed ferments, which found their way into it, not from the atmosphere or from external media of any kind, but from the alimentary canal. A knowledge of the exact conditions which lead to this result, is obtained by simplifying the mode of experiment. We have already seen that water, whether contaminated with septic organisms or not, may be introduced into the peritoneum in limited quantity without effect. But, if water, which has just been boiled and cooled, be injected with antiseptic precautions in larger quantities—i.e., in quantity so large that it cannot be rapidly absorbed—the result is entirely different. The water which is thus injected accumulates in the serous cavity, charges itself by diffusion, first with the salts, subsequently in increasing proportion with the proteids of the blood, and thus becomes a most favourable soil for the development of septic organisms, which, in their turn, act infectively or phlogogenically on the blood-vessels and living tissues with which they come in contact. A septic peritonitis ensues, which kills the animal by septicæmia in twenty-four or thirty-six hours.

This simple experiment serves, I think, to illustrate the fundamental principle that, although the seed is indispensable to the coming into existence of the infective process, the question whether that seed becomes morbid or not, depends, not on the seed itself, but on the soil. But there are other examples equally striking.

CROONIAN LECTURES

ON THE

CLIMATE AND FEVERS OF INDIA.

*Delivered before the Royal College of Physicians of London.*By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE II.

(Continued from page 528.)

Malaria Poisoning.—M. Verneuil has called attention to cases in which glycosuria appeared to be a sequel of malarial influence. In 1859, M. Brudel found sugar in the urine of eighty out of eighty-six cases of intermittent fever, but where the fever became remittent the sugar diminished; especially he observed it in pregnant or suckling women, and in all in cases of pernicious fever. He concluded that malaria frequently engenders glycosuria either with the attack of fever, and transient, or independent of the paroxysm, and permanent. My own experience confirms the occasional occurrence of glycosuria with or after malarial fever, but whether as a consequence I cannot say; though, in the general disturbance that takes place in malarial poisoning, it is probable enough that they may stand as cause and effect.

Pathological Anatomy.—Death in an uncomplicated case of ague is rare. Maclean says: "In Bengal, out of a strength of 344,152, with 111,687 admissions, the percentage of deaths to strength was 0.24; of deaths to admissions, 0.76." Simple attacks of ague, involve no change in structure, and, where death occurs early in the pernicious forms, there may be no evident change. But malarial influences, when protracted, involve changes in the blood and viscera, especially in the spleen and liver. Those in the blood result from imperfect elaboration by damaged blood-making organs, destruction of red corpuscles, transformation of hæmagine into pigment, high temperature, and in some cases loss of albumen owing to renal disease. The relative proportion of red and white corpuscles is altered, some say the latter are increased: there is excess of water, and the red cells are relatively diminished. Hertz says: "It has not yet been possible to demonstrate a multiplication of the colourless corpuscles." There is an accumulation of yellowish brown, or dark pigment, in the blood, which is the result of the destruction of the red corpuscles. The spleen sometimes attains great size, in rare instances the capsule becomes considerably thickened and tough, and the normal weight of five to seven ounces increases to pounds, as much as eighteen or twenty pounds have been recorded—*even specimens forty pounds*; whilst it has been found as low as two ounces (Russell). In the soft and pulpy state, it is easily injured, and is frequently the cause of fatal accidents; sometimes spontaneous rupture among natives. From a contraction of its fibrous elements, a state of cirrhosis may be induced, the structural change becoming chronic or permanent. In this state the blood becomes leucocythæmic. Change of climate and treatment may remove the enlargement, but whilst it remains it is an abiding cause of fever and cachexia. The liver also may become chronically congested and indurated, and enlarged from interstitial deposit; but not to the same extent as the spleen. It is dark in colour, marked with pigment patches, or may be softened as well as enlarged. Acute inflammation of the liver seldom occurs; but occasionally it suppurates insidiously. The rigors are liable to be confounded with those of fever, and it is only pain and bulging that reveal their real character. The muscular system may also degenerate, the heart sharing in the change. I have seen cases of this kind in which, while other signs of malarial poisoning had disappeared, cardiac asthenia remained. In the cerebro-spinal centres and membranes, exudation and thickening may occur, causing partial paralysis, or obscure cerebral symptoms; hyperæmia, punctiform extravasation, pigmented patches, discoloration and effusion of serum into the membranes of the brain or cord; or, it may be, molecular changes in the centres themselves. In some cases there is reason to fear that the structural changes are of permanent character; still, it is encouraging to know that many of these lesions are recovered from, in a temperate climate. I have alluded to the influence of malarial poisoning on the spermatic cords, which become intensely congested and enlarged; the area of distribution of the genito-crural nerve and nerves of the cord suffer. The enlarged cords widely distend the abdominal rings, and cause hernia; whilst the visceral congestion, extending to the kidneys, gives rise to albuminuria. The kidneys, in some fatal cases of malaria

fever, may be found swollen, congested, and undergoing structural changes. In cases complicated with dysentery, structural changes are often found in the colon and rectum; ulceration and thickening in various stages, not always confined to the large gut, but extend beyond the ilio-colic valve into the ileum.

Remittent Fever.—Remittent fever prevails throughout India, and causes much of the mortality ascribed to malaria. It is merely another expression of malarial action, and may commence or end as ague. Intermitents may become irregular, and pass gradually into remittent, which is a more serious matter when it occurs in certain localities and seasons. My first experience of it on the North-east frontier, in natives who had been exposed to the influences of intensely malarious country, in the valley of the Brahmapootra, taught me its severity. The cases were not unfrequently brought in in a semi-unconscious condition, soon to pass into complete stupor, with tongue nearly black, with sordes, and then death. It is to this form that the term jungle fever is applied. Of course, all jungle fever is not so severe, though in certain places and seasons such cases are common. The various local types present certain differences in their features. There may be a more decided icteric tinge, dysentery, diarrhoea, vomiting, choleraic purging, or other indications of gastro-intestinal complication, may be present, and give rise to such terms as bilious-remittent, malarial dysentery, or choleraic fever. The fever of Peshawur, for example, presents some features that distinguish it from that of Bengal or the Deccan, and so on; but these point to varying effects of one, not to essentially different causes.

Remittent fever is liable to many complications, and hence has been described as simple and complicated. The period of incubation seems to vary. Heat, and concentration of malarial poison, may in certain cases act almost immediately; in others, a few days, to a fortnight or more, may elapse. The uncomplicated form, in a previously healthy person, generally terminates favourably in eight or ten days; but when it is the result of exposure to more concentrated miasm at the season of greatest activity, or when complicated, it is of longer duration, may become dangerous and even fatal. Its accession is preceded by languor, malaise, chills, cold feeling in the back and loins, loss of appetite, pain in the epigastrium, head, back, and limbs, vertigo, faintness, nausea, or vomiting; the tongue is coated with yellowish or white fur; the pulse is irregular. This may continue for some days before the cold stage sets in (which is not so well pronounced as that of an intermittent) and is sometimes altogether absent. It gives way to heat, thirst, dryness of skin, severe headache, quick hard pulse, pain in the eyeballs, and insomnia; the temperature rising to 104°, 106°, 107°; wandering or delirium may set in, and the breathing become oppressed. This continues for some hours, six or often much more, until the remission sets in; the skin then becomes moist, the pulse softer, the pain abates, the sufferer is relieved, perhaps sleeps, though want of sleep is generally a distressing symptom. The remission lasts from six to thirty-six hours or more, when the fever returns. The first exacerbation is often the longest, but the second is frequently more severe, and may set in without any premonitory chills or cold stage. If not now checked, succeeding paroxysms become more severe, with scarcely any remission, and a state of great prostration, with delirium, unconsciousness, a brown dry tongue, sordes, and hiccough, may supervene; yellowness of the skin and vomiting of bile and altered blood (black vomit) sometimes preceding death. The exacerbation may recur once or twice daily, but there is no regularity; the remission nearly always takes place in the morning, and is sometimes so slight that it may be overlooked. The character of the remissions, and the early or deferred return of the exacerbations, are indications of the probable severity or lenity of the attack. Well-marked remissions, free diaphoresis, diminished temperature, and headache or cerebral symptoms, are favourable indications; whereas higher fever, ill-defined remissions, accelerated exacerbations, with delirium, coma, and typhoid symptoms, vomiting of blood and bile, or symptoms of collapse appearing as the hot stage is passing away, indicate danger. The first attack sometimes comes on suddenly, with little, if any, premonitory warning, and without almost any cold stage, but it generally happens that there have been previous attacks of intermittent with imperfect and irregular intermissions; or in very malarious localities the first paroxysm of ague has been succeeded by a remission only. In favourable cases, amendment begins in from six to eight days, or sooner; the remissions become more complete; the patient sweats freely, the tongue begins to clean and moisten at the edges, sordes disappear, headache and thirst diminish, and the appetite begins to return. In a simple attack, the prognosis is generally favourable; but the brain, the lungs, or the abdominal viscera may be implicated, causing serious complications; sometimes the symptoms are so sudden and severe as to be mistaken for insolation; the patient passes rapidly into a state of fatal coma.

vascular channels are choked by the growth of cells around them, and by the endothelial proliferation within. But, with the onset of reparative action, the balance of growth is reversed in favour of the blood-vessels. Cell-proliferation continues, it is true, but it is subservient, as in simple granulations, to the production of capillaries. Thus, in connection with the healing of cavities, we are led to inquire into the subject of their blood-supply.

As an introduction to this subject, I would quote a remarkable passage from Louis's *Researches on Phthisis* (Sydenham Society's translation, London, 1844, pp. 28-29).

"It was, no doubt, well known fifteen years past that the ramifications of the pulmonary artery penetrate neither into tubercle, properly so called, nor into grey semi-transparent granulations; but our knowledge on this subject has since then advanced. It is, in truth, now established by the inquiries of M. Schroeder van der Kolk, and more especially those of M. Natalis Guillot, that the branches of the pulmonary artery stop at a distance, one and a half, two, or two and a half lines (three, four, or five millimètres) from tubercles or grey granulations; and the more these adventitious productions increase in size, the further do the divisions of the artery stop from their perimeter. To such a degree is this true that, when tubercles are of large size, or have given place to cavities, they may be surrounded by a sort of involucre, ten lines (two centimètres) broad, into which no ramification of the pulmonary artery makes its way. M. N. Guillot's injections (*L'Expérience*, tome i, p. 545) appear to me to render doubt upon this subject inadmissible. . . . The injections, dissections, and microscopical examinations of this observer likewise show that, during a space of time which is always very limited, the sort of involucre in question exhibits no trace of vascularity. At the end of that period, a few red streaks with tapering extremities are perceived, the longest of them measuring half a line in diameter. These vessels, which are for a time perfectly unconnected with the rest of the vascular system, and consequently not the seat of apparent circulation, soon enter into communication with the bronchial arteries, or with those supplying the thoracic parietes. The connection with these latter vessels is effected by means of the false membranes so common on the pleural surfaces—false membranes themselves the seat of development of vessels, isolated at first, but eventually insinuating with the neighbouring arteries and the vessels of new formation. The seat of these vessels, as has been stated, is the interspace between the ultimate ramifications of the pulmonary artery and the periphery of the tubercle; but in the proportion as these multiply, enlarge, and soften, the vascular rete spreads in every spot where it has appeared, and ere long an entire lobe, oftentimes a large portion even of the lung, is the seat of this adventitious vascular system, replacing the pulmonary artery, the existence of which vessel ceases to be matter of demonstration."

I am not aware that the statements contained in this passage have since been disproved. It cannot be doubted that among the chief uses of pleural adhesions is the establishment of vascular continuity between the lung and the parietes of the chest. The probable existence of a normal vascular connection between the pulmonary artery and the bronchial system is a subject of considerable obscurity, ill suited for discussion in this lecture; but it may be stated that a case is recorded by Virchow, in which the bronchial system was found enlarged as a consequence of an impediment in the pulmonary supply; and I am in a position to adduce similar testimony in favour of a vicarious relation between the two sets of vessels. Whilst Curator of the Museum of St. George's Hospital, I exhibited before the Pathological Society a specimen which I now place before you, in which the right pulmonary artery was completely occluded by means of ancient fibro-atheromatous material. The lung, unfortunately, was not preserved. It was neither in a state of gangrene nor absolutely collapsed; but it was the seat of well-marked interstitial thickening. The blood-supply to this lung was obviously derived from some extraneous source; in a great measure, doubtless, from the bronchial artery. A similar specimen, which I have also placed on the table, had been exhibited before the Pathological Society in 1862 by Dr. Howship Dickinson. Here also the right pulmonary artery was completely occluded, owing to disease of old standing. In this case, the lung was considerably atrophied and fibrous, and the patient had suffered from severe dyspnoea.

Facts of this nature almost prove that the blood in the bronchial artery is capable of doing duty for the pulmonary blood, and that the substitution is facilitated by some pre-existing anastomosis between these two systems. In phthisis, the bronchial artery is not entrusted with any respiratory duties of this kind; its functions concern mainly the repair of the lung. This was admirably shown by Guillot's injections. The injections which I have attempted have not been sufficiently successful to be given as separate evidence; but their partial results were analogous to those of the French observer. The involucre and the

new vessels described by the latter I have also recognised; but I doubt whether the vessels of new formation are ever independent of the bronchial system.

A connection of the vascular network of the cavity with the bronchial artery is nothing more than might have been inferred from etiological considerations. If we bear in mind the purely functional purposes of the pulmonary distribution, we must conclude that the formation of fresh ramifications in a tissue deprived of air would be singularly inappropriate, and out of harmony with the complete obsolescence of the pre-existing set of arteries. Every probability points to their connection with the bronchial system, which has for its special office the nutrition not only of the bronchial tubes, but of the pulmonary tissue. In support of this view, we may adduce the great similarity found to exist between the inflammatory fibro-nuclear growth of the interalveolar tissue and the similar growth in the inflamed peribronchial sheath. The two structures may, indeed, be seen to merge into each other. A microscopical inspection of the tissues in phthisis not only shows that peribronchial irritation is inseparable from the disease, but that the inflammatory products in the alveolar tissues and around the bronchus are indistinguishable, and that the development of blood-vessels is identical in both.

It remains for me to apply these data to the study of the repair of cavities. If we are to trust to the results of Guillot's injections, and to the show of probability in their favour, every formative effort directed towards the limitation or healing of pulmonary lesions would originate with the bronchial vascular system. The development of capsules around cavities I conceive to take place in the following manner. The truncate extremities of the numerous bronchioles, intercepted by the vomica, become centres of inflammation and of fibro-nuclear growth, which soon overlap, and ultimately assume a continuous expansion, owing to vascular anastomosis. This continuity of the cavity-wall, and of the peribronchial tissue, is readily appreciable to the naked eye in many instances. The bright red colour of the bronchial blood-supply can be traced without any break from the air-tube into the capsule of the cavity, and the structural unity of the bronchus with the cavity-wall is equally evident. On careful inspection, this continuity is seen to be more absolute along the outer than along the inner surface. The peribronchial sheath passes entire into the capsule; but the internal surface of the tube is bevelled, and the mucous membrane thinned away at the entrance into the cavity. I have elsewhere insisted upon the danger of mistaking this condition for one of true bronchiectasis. In tubercular deposits, the comparatively limited size of the excavation, and the great regularity with which fibroid thickening and encapsulation occur within them, hand in hand with the process of destruction, render tubercular excavations specially liable to be thus mistaken.

The most characteristic feature of bronchiectasis is the continuous and unbroken mucous surface. Had I ventured, in these lectures, upon a study of bronchiectasis, I should have shown you that the last stage of a cavity of that nature is ulceration. To admit the bronchiectatic nature of the phthisical cavities provided with capsules, would be to admit the anomaly of ulceration occurring at an early date of the supposed dilatation. For with the microscope we seek in vain for any vestige of the existing membrane, or of the columnar cells, excepting within a limited radius of each of the bronchial orifices.

True bronchiectasis, when it occurs, is purely secondary, in my estimation, to the undue strain thrown upon the spongy structures which have escaped disease—its more common seat is within the upper sternal region.

We should equally guard against supposing that the capsule of the cavity is simply a distended bronchial sheath from which the other bronchial constituents have disappeared. It is in reality a new formation, continuous, but not identical, with the thickened peribronchial tissue. The nature of the relation existing between these structures is shown in one of the diagrams, which represents a cavity, invested with a fibroid layer clearly derived from a neighbouring peribronchial tract. The submucous tissue, and a few muscular fibres, in virtue of their more peripheral situation, and of their better vascular supply, are traceable a little beyond the mucous layer; but they also ultimately become merged into the fibro-vascular zone, which must now be termed, not the peribronchial, but the pericavernous sheath.

The practical result of what I have mentioned is of the greatest importance. Under the joint influence of the bronchial and of the pleural blood-supply, the reparative energy of which greatly outstrips that of the pulmonary circuit, the cavity is placed under circumstances of nutrition not far inferior to those of the bronchi themselves. In their power of resisting ulceration, they remain far behind the latter, mainly owing to the absence of a membrana propria, and especially of an epithelial layer. But, having regard to this deficiency, we can justly wonder that the necrosis should remain so limited as we observe it to

failure cannot be used as a conclusive argument against the hæmorrhagic origin which probably belongs to some of them.

I have imperfectly described to you some of the methods by which nature endeavours to heal pulmonary excavation. Although this great object is seldom fulfilled, we possess a clear proof of the energy with which the attempt is made, in the extent and the importance of the collateral results of a contraction of cavities. So much practical interest attaches to some of these results, that I shall venture to devote to their consideration the remainder of this lecture. The contraction of cavities is capable of exerting an influence in four chief directions: 1. upon the outline of the chest; 2. upon the shape of the cavities themselves; 3. upon the shape of the lung; 4. upon the position of the neighbouring viscera. Let us consider first the changes which are commonly induced in the outline of the chest. In estimating these alterations, we must not lose sight of pre-existing peculiarities of chest-formation, among which I need only remind you of the large thorax in chronic fibroid tuberculosis, and of the flattened thorax with drooping ribs, characteristic of catarrhal pneumonia. In accordance with these types, the changes referable to healed excavations may be slightly modified, but they are never completely veiled. Most constant is the occurrence of a local flattening over the site of excavation; in this, we possess one of the safest as well as one of the most obvious guides to a diagnosis of the latter. I have elsewhere sufficiently described the mechanism of this collapse. The local falling in of the ribs inevitably leads to a corresponding increase in the convexity of the costal arch. This secondary bulging of the outline of the chest is usually seen in the axilla: it supplies an important confirmation of the occurrence of excavation. A similar falling in may affect the whole side on which excavation has taken place; this is usually the combined result of excavating disease and of pleurisy. In these cases, the opposite lung is often of considerable size, and encroaches beyond the sternum. The clavicle is usually rendered more prominent, owing to the depression of the supra-clavicular space, to the recession of the ribs, and to the atrophy of the upper part of the pectoral muscle. Extreme instances of this unilateral contraction closely resemble the deformity produced by pleurisy with lung-collapse, of which Laennec has depicted so striking an illustration. Curvature of the spine, often of considerable extent, has repeatedly been observed by me; in youth, it is undoubtedly one of the active means of adaptation to altered thoracic conditions. In a striking case, this curvature was accompanied by a tilting of the pelvis.

As an instance of the varieties, too numerous for description, of the alterations in the thoracic outline, I have selected the remarkable case of a man aged 42, of whom I submit a photograph and cyrtometric tracing. You will not fail to notice that the left side of the chest,

through the centre of the xiphoid cartilage. The cavity which had induced these changes was of larger size, audible close to the spine from the upper scapular region to beneath the angle of the scapula; and the remainder of the left side was the seat of complete fibrosis. No history of antecedent pleurisy could be obtained from the patient, and the origin of the deformity appeared clearly traceable to excavation.

(To be continued.)

ABSTRACT OF LECTURES

ON THE

MORPHOLOGY OF THE MAMMALIAN SKULL.

Delivered at the Royal College of Surgeons of England.

By W. K. PARKER, F.R.S.,

Hunterian Professor of Anatomy in the College.

LECTURE VII.—THE VISCERAL ARCHES AND CRANIAL NERVES OF THE BRANCHIATA.

THE visceral arches are the ventral parts of the cranial skeleton, and form the framework of the mouth and branchial apparatus. This region extends backwards further than the upper or cerebral part of the head. The lamprey, although not the lowest of the suctorial fishes, is most easily understood; and therefore may serve as a starting-point, especially as there is a close relationship between this type and the tadpole.

The proper cranial cavity in the lamprey lies entirely in front of the functional branchial pouches, which are seven in number. There are no intrabranchial cartilages, but the pouches are protected by a complex basketwork of extrabranchials, which also enclose the pericardium behind, and send a bar outside the hyoid region. There is no developed hyomandibular cleft. In this type, there are prolongations downwards from the basis cranii, which correspond to the suspensorium of the mandible and to the hyoid arch. There is no free mandible, and these first and second postoral arches are not differentiated from the basis cranii. There is a large lingual cartilage, which apparently corresponds to a basi-hyo-branchial in a very generalised condition. These rudimentary arches are supplied by the fifth and seventh nerves, which arise in front of the ear; but the nerve-supply of the seven branchial pouches emerges from behind the auditory capsule; the foremost branch of this forks over the first (hyo-branchial) cleft, and corresponds to the glosso-pharyngeal; the other six branches fork over the clefts behind, and all belong to the vagus. But the vagus is a cranial nerve, arising by several roots; and, in such forms as *Notidanus* amongst the Selachians, it passes out of the skull by several foramina. Hence it would appear that the cranium of the early extinct forms of vertebrates must have been of great length: for, leaving out the two first pairs of cranial nerves, as not corresponding in origin to the rest, we have to account for five pairs of pre-auditory and seven pairs of postauditory nerves, counting the vagus as six.

In the proper myxinoids (*Myxine* and *Bdellostoma*), the branchial pouches have retreated so far back, that the forepart of the heart and the hinder part of the last pouch lie under the twenty-fifth pair of spinal nerves, which is as far back relatively as the heart of the swan. In *Myxine*, the branchial pouches of one side all open by a common aperture; *Bdellostoma* more nearly resembling the lamprey, in that it has a separate opening for each. These pouches have no superficial basketwork protecting them, but in the head there is a considerable outgrowth of non-segmented visceral arches—the archaic ends of the proper intrabranchials of the higher fishes; but these are in a very generalised condition. There is no free mandible, but the hyoid region is well developed, and is continuous below with an enormous and complex lingual cartilage, behind which there is another basi-branchial piece.

The next higher form of visceral arches is seen in the tadpole. Here, again, the suspensorial part of the lower jaw is a large arched outgrowth from the skull, with which it is continuous both before and behind. In the larval state of the mouth, each ramus of the rudimentary lower jaw, now free as a Meckel's cartilage, is in the front of the face, the suctorial disc being placed between the two. At some time, the only part of the hyoid arch which is developed is its lower region—the cerato-hyal; and each of these is continuous with its fellow below

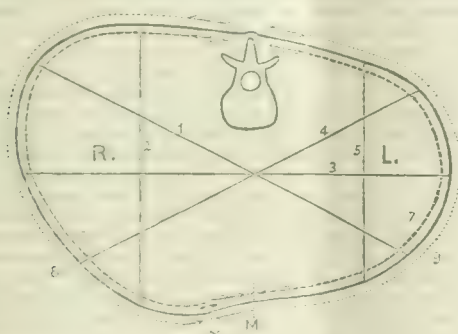


Fig. 3. Cyrtometric Tracing of Chest.

Cyrtometric measurements: (5) = $17\frac{1}{2}$ inches; (7) = $14\frac{5}{8}$ inches; (6) = $16\frac{5}{16}$ inches; (9) = $15\frac{1}{4}$ inches.

Lines: (1) = $11\frac{1}{2}$ inches; (2) = $7\frac{1}{2}$ inches; (4) = $10\frac{5}{16}$ inches; (5) = $5\frac{3}{8}$ inches.

M = middle line of body, passing through sternal notch. X = line drawn through xiphoid cartilage, parallel to M. Distance between M and X = $1\frac{1}{2}$ inches.

Right half of line (3) = $6\frac{1}{2}$ inches; left half = $5\frac{1}{4}$ inches.

viewed from the front, appears broader than the right, whilst posteriorly it is decidedly narrower. It appears probable that the dropping of the ribs, usually coupled with a recession of the sternum, was hindered in this case by the rigidity of the costo-sternal joints and the flattening of the costal arch, instead of leading to the usual bulging in the axilla, occasioned a displacement of the lower part of the sternum towards the right. The measure of this lateral displacement is indicated in the photograph by two lines, one being the middle line of the body bisecting the sternal notch, the other line, parallel to the first, passing

CASE 11.—On May 18th of last year, I was consulted by a lady of about seventy years. She came panting into my room, with livid lips, dilated nostrils, and a bumping heart. There was evidence of an obstruction of the liver, with some stomach-derangement, and scanty urine, containing urates, but non-albuminous. There had been for a month oedema of the right leg. There was mitral disease (said to be hereditary), rapid cardiac action, pulse 90, palpitation, intermission, and a short dry cough. Undoubtedly the heart was primarily at fault; but its condition was aggravated by the obstructed state of the hepatic system, the consequence of its own incompetency. By the third day, these obstacles were removed; the colour and odour of the evacuations became natural; and the urine increased in quantity under small doses of mercury.

Attention was now entirely given to the heart, and tincture of spigelia (Savory and Moore's) was administered. This is a powerful remedy in suitable cases; to this I can testify. (See Phillips; also Sharpe in *Practitioner*, May 1878, p. 331.) It was given because of its special action on the heart. The kidneys, acting well, did not require the subordinate action of digitalis. Likewise, the rapid irritable state of the cardiac muscle seemed to imply nervous excitement; therefore the exclusion of digitalis. However, spigelia failed to relieve, in five-drop doses thrice daily, the cardiac oppression and its concomitants. Why did it fail? Therapeutically, it was a wrong remedy. The small dose kept up the force and frequency of the heart's action. It probably acted as a stimulant to the accelerator nerves, and tended to increase the venous congestion. If I had given large doses, I might have considerably lowered the pulse; but then spigelia at the same time physiologically produces palpitation, with strong beating.

On the 25th, the cardiac agitation, dyspnoea, and hot dry skin pointed, with no uncertain indication, to aconite. One minim of Fleming's tincture was given in half an ounce of simple water thrice a day. Its efficiency was quickly apparent. In the course of a week, there was amelioration of all the symptoms; and, when I saw the old lady on July 4th, she was well and jocose.

"The method by which the aconite influences the heart is not certainly settled" (Wood). Therapeutically, in small doses, its beneficial influence is exercised through the cardiac ganglia. The hot dry skin was an important indication of treatment. Aconite, being known to dilate the arterioles, and to "increase the capacity of the vascular system" (Ringer), promotes perspiration and relieves congestion. Thus we obtain, in addition to the direct action on the cardiac ganglia, a powerful drain to the surface.

In weighing the probabilities between veratrum and aconite in a case of cardiac disease, we should deliberately consider the totality of symptoms present in the particular case. In the former case, veratrum was chosen, because of its direct effect on the heart *only*. The kidneys were acting normally; the skin also was normal; and temperature was normal; therefore, to have given aconite in such a case would have been a needless waste of aconite influence, and might possibly have produced a feeling of increased lassitude. In the latter case, veratrum would not have touched either the kidneys or the skin. As aconite embraced these within its beneficial range, it was emphatically *the* remedy, and did not require the clumsy expedient of combining with it spirits of nitre, or potash acetate, to effect that which it was quite capable of doing alone.

The advantage of the single medicine is its simplicity, and its accuracy in operating *only* upon the diseased organ in proper therapeutic dose, which must be far removed from the physiological one.

If a medicine have a special action upon a special organ or part in health, so it would seem very desirable and judicious to administer that particular remedy in disease of that same part which appropriates the remedy in health. But we must bear in mind, as a clinical fact, that the tissues in disease are much more sensitive and responsive to the action of a drug, so that the dose to be then therapeutic must be small.

ANDOVER.—Mr. Farr has little to report for the past year. He states that of the total deaths (144) 64 occurred amongst persons over 60 years, and children under five years of age—a result which is attributed to the unusually severe weather which prevailed in the early part of the year. Of the zymotic causes, scarlatina was the most fatal, causing seven deaths, typhoid fever being credited with three, diarrhoea with two, and measles with two. Diseases of the chest were fatal to 13 persons, and heart disease to eleven, phthisis causing two deaths only. Alluding to the prevalence of typhoid fever Mr. Farr states, an inspection of the surroundings of the 43 cases which happened showed that they were due, directly or indirectly, to imperfect drainage. In this connection it is satisfactory to note that the Town Council have before them a scheme for the construction of a complete system for the disposal of sewage, and in other ways seem alive to the importance of their duties.

A NEW PROCESS FOR THE ESTIMATION OF URIC ACID.

By EDMUND ALLEYNE COOK, F.C.S., L.R.C.P. & S.Ed., etc.

THE published methods for the estimation of uric acid are numerous; but, from the now classical mode of adding hydrochloric acid and crystallising, to the last of Pavy, they are either unpractical or otherwise unsatisfactory in their application to the estimation of the uric acid in urine; nevertheless, the number of efforts made in this direction are sufficient proof of the desirability of a good process.

The process of precipitation by hydrochloric acid is unsatisfactory, on account of the whole of the acid not being thrown down, even after prolonged standing, and the proportion left in the solution, if urine be the substance operated on, is very different from that which remains after the decomposition of a simple urate solution, and varies with the varying constituents and the gravity of the original liquid. In 1871, Salkowski proposed to precipitate the urine by hydrochloric acid, and then, after removing the precipitate, to render the solution ammoniacal and filter, and then precipitate by a solution of nitrate of silver; but this process never found favour: for, although to a certain extent more accurate, it was much more troublesome.

From a table of twenty-eight experiments, the following are extracted.

No. of Experiment.	Urine in c.c.	Specific Gravity.	Uric Acid in 200 cubic centimetres.			Uric Acid Absolute Amount.
			By HCl.	By Ag NO ₃ .	Total.	
15	1040	1019	0.0275	0.031	0.0585	0.304
16	880*	1018	0.087	0.025	0.113	0.477
17	1230	1018	0.033	0.070	0.103	0.633
19	1500	1014	0.0 (?)	0.031	0.031	0.232
23	—	1018	0.037	0.044	0.081	—
26	900*	1017	0.0085(!)	0.059	0.0675	—

This process was commented upon by various observers, and it will be seen that, if it is to be considered accurate, we must modify greatly our ideas of the quantity of uric acid passed by an adult, as the results given are manifestly low.

Later, Bunsen proposed a method by heating the uric acid containing fluid with baryta, in a closed tube, with certain precautions; but the process is not readily executed, and not accurate.

In 1875, Fokker proposed a new method, which he considered not free from error, but still, more accurate than those then existing. It consisted in rendering the urine alkaline, and adding sufficient ammonium chloride to precipitate the uric acid as acid urate of ammonia: this was collected, treated with acid, washed, dried, and weighed. This process is certainly more accurate and practical than any previous, but it still seemed unsatisfactory: for, only a short time back, we find a proposal to revert to the old hydrochloric acid process, with the modification of violent agitation.

Pavy lately proposed a method by which the reducing action of uric acid on an alkaline copper solution was taken advantage of; and he showed that, in normal urine, his process was accurate enough, provided no other substance capable of reducing copper solution was present. I have tried this process, among others, and think it still leaves much to be desired. The colour of the urine is very apt to mask the terminal point of the reaction; and, it appears to me, urine is too varying a fluid to hope to apply any volumetrical method to any constituent which exists in it in so small a percentage as does uric acid.

In contemplating some physiological experiments, all these processes, and some others, were passed in review, and found unsuitable; and, therefore, efforts were made to devise a better mode.

The amount of uric acid daily excreted by a healthy adult is variously stated by different authors, and is generally thought to be below ten grains per day, while the amount of urine passed averages fifty ounces. Taking these figures as accurate, it will be seen that the uric acid solution voided is equal to 1 in 2400, which is certainly a very dilute solution. The urates are all slightly soluble in water, and a very insoluble compound would be necessary in order to precipitate a proportion of uric acid so small as exists in ordinary urine.

After many trials, it was found that urate of zinc was probably the most suitable insoluble compound to form a basis for a process to estimate the acid. If to a solution of urate of soda, slightly alkaline, a solution of zinc sulphate be added, a white gelatinous precipitate will be thrown down; and if 100 c.c. of a very dilute solution of zinc sul-

that dirty-red, slimy, bad smelling, never abundant expectoration which hysterical women with phthisis often exhibit at the bottoms of their sputa; this may be left to itself. The other exception is a serious one; it comprises those forms of hæmoptysis, usually copious and angry, occurring in advanced and very chronic cases where there is a considerable amount of fibroid induration. In such patients, notable dyspnoea on exertion has for a long time past been a prominent symptom, and respiration has been maintained by a very small extent of lung-substance. These cases are open to a special danger—that of fatal embolism in the right chambers of the heart or the pulmonary artery. Not uncommonly, the course followed is for the bleeding gradually to abate in quantity, remaining, nevertheless, of the same angry red; then urgent dyspnoea suddenly sets in, and death takes place within forty-eight hours. These are cases calling for extremely careful treatment. Can it be right, where only a small surface is available for respiratory function, to contract those few vessels with ergot? Or can it be good practice to pass styptic medicines into a patient's circulation when his cachectic state, his low vitality, and perhaps some febrile movement, render him especially liable to the formation of thrombi? It is wisest to limit ourselves to external applications, chloroform-pads, dry cupping, sinapisms at a distance or other derivative treatment, with appropriate general management.

Perhaps I may be allowed to conclude with two cautions, commonplace they may seem, but both of them the outcome of bedside experience. One is, to have no responsible person in attendance night and day, on all cases of severe bleeding, till the attack has completely passed away. Death in hæmoptysis is generally sudden, and it is very appalling to discover too late the consequences of omitting this precaution. The other is, to decline positively to examine a patient's chest while there is any hæmoptysis. Irrespectively of the danger of the process, an opinion arrived at by auscultating a chest during or immediately after a bleeding is not a reliable one.

NOTE ON A CASE OF PSEUDO-HYPERTROPHIC PARALYSIS (?): RECOVERY.

By H. DONKIN, M.B., F.R.C.P.,

Senior Assistant-Physician, Westminster Hospital; Physician to the East London Hospital for Children.

ON the 19th of November last (1881), I saw a boy six years old among my out-patients at Westminster Hospital, whose mother brought him on account of his having been unaccountably "falling about" for a week, and being quite unable to run or walk fast. She stated that he had been "slow and inactive" for about five or six weeks previously, and that she had noticed that his calves and buttocks seemed larger than before. These facts were given spontaneously, not elicited by questions.

The child's previous medical history included the occurrence of some inflammation of the eyes at birth, measles, and whooping-cough. At three years old, he was observed to be excitable and passionate, this state lasting some months; but he had no "fits" of any kind. The only other child in the family died at the age of six months with diarrhoea. There was no evidence of parental syphilis. The mother had had two miscarriages; and the history of the father, who is dead, was obscure. Subsequent inquiry failed to find the trace of any affection like pseudo-hypertrophic paralysis in the mother's family.

The boy stood with his legs wide apart, straddled and swung from side to side as he slowly walked, fell down on attempting to walk quickly, and was unable to raise himself from the sitting posture without pressing on one of his knees, and previously turning round and sitting on all-fours. There was protrusion of the abdomen, and a noteworthy degree of lordosis. On stripping him, it was obvious to me and the students who were present that his calves and buttocks were remarkably large for a boy of his size. The skin, especially over the lower part of the body, was markedly mottled; and, after repeated trials, I failed to elicit the knee-jerk, except perhaps very slightly in the left leg. Knowing, however, how erroneous it often is to attach any value to the absence of this latter phenomenon in children, and the general want of knowledge about the importance of this symptom at all, I mention it only because, on the recovery of the boy, which is the excuse for this record, the knee-jerk was elicited in both legs with as much ease as could be expected in the case of a rather excitable child. There was not any obvious enlargement of the muscles of the upper extremity. But I was able on that day to make but an imperfect examination, and unfortunately postponed both the measurement of the girth of his calves and all further methods of inquiry. Owing to an unavoidable absence, I did not see the case again till January 7th, more than six weeks after the first visit. Then, to my surprise, beyond

some waddling in walking, I noticed no symptoms of loss of power. The boy could run with ease, and raise himself from the ground in the ordinary manner, even without placing his hands on the floor. The calves still appeared to me to be somewhat large; but the mother, again spontaneously, observed that both the calves and buttocks had "got quite small again". There was no mottling of skin. On the 14th, I saw him again. He still waddled slightly in walking; and I again failed, as I had also on the 7th, to produce any knee-jerk after careful trial. The mother believed the child to be now quite well. On the 21st, I could detect nothing abnormal about the child or his movements, with the exception of the knee-jerk symptom. I saw him again on February 10th, when I did not examine him; and for the last time on March 11th, when I found the appearance of the body normal; the gait in no way altered; running performed with perfect ease; and the knee-jerk produced with tolerable readiness.

The treatment I ordered from the first was complete rest; the boy having previously been exercised by the mother, believing, as she did, that he was careless. For medicine, as he looked somewhat weakly and pale, although quite cheerful, I gave him our mixture of iron and nuxvomica. This he discontinued taking on February 10th.

I am well aware that this is but an imperfect report of the case, and that the diagnosis may be open to question. Still there is enough to show that we may have to look out at least for a set of symptoms *simulating* the disease about which so much has been written and so little is known. And there would seem to be no reason in nature why there should not be some temporary affection of the nerve-centres (even if this disease be regarded as connected with changes in the cord) giving rise to transient symptoms, just as we have the same possibility hinted to us in the occurrence of other forms of recovering paralysis.

I would disclaim any very probable connection between the drug-treatment and the result, believing that, to whatever the symptoms were due, *rest* must be far more reasonably credited with their disappearance.

STRANGULATED UMBILICAL HERNIA AFTER PARTURITION: OPERATION: RECOVERY.*

By HERBERT BRACEY, M.R.C.S.Eng., Birmingham.

MRS. L., aged 41, who had had twelve children, and one miscarriage, had suffered from bronchitis for some years. She was confined on January 30th, 1881, at nearly full time. Labour was natural. The child was alive, and fully developed. The patient was suffering from a severe attack of bronchitis at the time of parturition. Great care was taken in applying the binder securely, as the abdomen was very flabby, and when she coughed the abdominal muscles seemed to give way, as if they had no power of resistance. There was no appearance of any tendency to umbilical hernia, nor had she ever suffered from one. I left her at 9 P.M., and was called to her again at 4 A.M. the following day, when I found her suffering intense pain, and discovered an umbilical hernia, about the size of an orange, very tense, and nearly black. With difficulty this was reduced, a pad was placed over the ring, and a plate and several napkins over that, and the binder firmly applied.

The next day, February 1st, I applied a pad made on purpose, and secured it by strapping, and all seemed to be going on well; but on the next day, February 2nd, the third day from the confinement, the cough being still very violent, the hernia was again protruded. The symptoms were very urgent, intense pain and great distress; vomiting, which nothing checked; anxious expression of countenance; with small feeble pulse and cold clammy skin. Reduction was again tried, but failed; and after consultation with Mr. Bartleet, it was decided that operative measures were imperative. The patient was put under chloroform by my assistant Mr. Holdsworth; and, with Mr. Bartleet's kind assistance, I made an incision in the median line, over what appeared to be the neck of the sac, and divided the very thin layers of fascia on a director. On reaching the sac, the ring was found to be very tight. An incision was made, without opening the sac, in a direction immediately upwards, but still reduction was difficult; when suddenly the sac burst, and its contents, which appeared to be partly omentum and partly bowel, were readily returned. The rent in the sac was carefully not examined; but the whole thing was quickly pinched up, and the skin brought together by silk sutures; and a pad, plaster, and bandage were applied. The patient was at once relieved, and no vomiting recurred.

It is unnecessary to record the daily notes of temperature and pulse. It is sufficient to say that the progress of the case was one of uninter-

* Read before the Midland Medical Society.

144, and thready; the respirations were 40. A small patch of deficient resonance was detected below the right scapula; expiration there was high pitched, and fine crepitation was detected at the same spot. The abdomen was very hollow and tender at many points; the features were sunken; and there was profuse sweating. Death occurred during the night of December 12th.

NECROPSY.—Hypostatic pneumonia of the posterior margin of each lower lobe was present, together with many patches of broncho-pneumonia; and the bronchi were full of pus. Near the apex of the left lower lobe was an abscess as large as a cobnut, over which the pleura was purple from hæmorrhage, and fixed to the chest-wall by recent lymph. The stomach was firmly attached to the abdominal wall all round the wound; and there was but one other adhesion, a little to the right of the wound. The organ had been opened about four inches from the pylorus; it was little, if at all, contracted—a fair-sized cardiac end being packed away in the splenic region. The mucous membrane was slightly congested round the opening. The transverse colon bent down so as to cross the abdomen close above the pubes; but in the splenic region it lay over the cardiac end of the stomach. The œsophagus was strictured about one inch below the cricoid by a mass of new growth about one inch long, ulcerated into a fusiform cavity in the centre, and having a prominent margin at either end; this was wanting on the left side above, whereas on the right side there was a *cul-de-sac* one-third of an inch deep. This probably explained the comparative ease with which the stricture was entered from the left side; and the fusiform cavity, with a constriction at either end, gave rise to a sensation so similar to that which would have been expected from the existence of two strictures, as to cause some to believe that two were really present. The glands nearest to the growth were small and pigmented, and, on microscopic examination, were free from new growth. The piece of the œsophageal growth, which was put aside for examination, was unfortunately lost; and the growth itself was preserved in such weak spirit, that sections of it are somewhat hard to understand. There seems to have been a stroma of well-formed fibrous tissue, in which lay collections of closely packed cells of small size, staining uniformly, so that the nucleus is not evident. It is probably a form of epithelioma; but it is impossible to speak certainly as to its nature.

REMARKS BY MR. MARSHALL.—The patient seemed to have died from asthenia; but the unexpected and unusual occurrence of the one small abscess in the lung might have had some share in depressing his vital force. He was doubtless weakened by previous deprivation of food. The operation would have had a better chance of success had it been performed a few weeks earlier.

CASE 2. Epithelioma of Œsophagus: Death: Necropsy. (Under the care of Dr. SYDNEY RINGER; from the Notes of Mr. G. H. COLLINS, House-Physician.)—James A., aged 64, a carpenter, was admitted on October 12th, 1881. His family history presented no points of importance, and gave no suggestion of phthisis or of malignant disease. Within the previous two and a half years he had suffered three times from acute gout. About eleven weeks before admission he swallowed his breakfast of toast, bacon, etc., about 9 a.m., but at noon found himself unable to swallow even a single mouthful; the attempt, moreover, caused great pain. For a week after this he managed to swallow solids minced very fine; but later he lived entirely on liquids; under this regimen he lost two stones in eleven weeks. When admitted, he presented an emaciated anæmic appearance. There was a slight arcus senilis, and the arteries were tortuous and locomotive; nearly all the joints were surrounded by large chalk stones. Soon after swallowing any liquids, vomiting came on, and deglutition was very painful, and for solids quite impossible; a No. 14 bougie, however, was passed into the stomach with ease, and without encountering any constriction; bougie No. 23 was stopped when ten inches had been introduced. No tumour could be detected externally. On October 17th, a No. 16 bougie was passed, but a slight grating sensation was encountered when about twelve inches had been introduced; on the following day, egg and milk was injected into the stomach through a hollow bougie, but this caused so much annoyance to the patient that it was not repeated. The prostration rapidly increased, and the patient died on October 19th.

At the necropsy (twenty-three hours after death), the arteries were found to be atheromatous, and every joint examined contained gouty deposits. The œsophagus was swollen opposite the episternal notch by a firm growth in its wall, and the tissues round about it were slightly matted together. No glands were enlarged. There was no dilatation of the gullet. No. 16 bougie passed through the stricture with very little force. The new growth surrounded the tube, and was about an inch and a half long, with prominent margins above and below; it was three-quarters of an inch thick in parts. It was an ordinary squamous epithelioma, with but little tendency to the formation of cysts.

These two cases seem worth reporting for several reasons, apart from the interest at present attaching to the operation of gastrostomy. In neither case was the new growth seated at a point of narrowing of the gullet. In both cases, the onset of the symptoms was sudden; and they may, therefore, well be added to some similar cases recorded last year by Mr. Pugin Thornton. The habit of bolting large pieces of food is so common, that no one would be surprised to hear that a moderate narrowing of the gullet had been revealed by the impaction of such a mass; but the truly strange part of these cases is the absence at first of interference with deglutition by infiltration of the œsophageal walls with new growth, and the continuance of marked dysphagia from the moment at which the first sign of stricture appeared. The second case has a further interest from the onset of gout late in life, with most extensive and rapid involvement of the joints.

ST. THOMAS'S HOSPITAL.

EXTIRPATION OF UTERUS, JUST ABOVE OS, FOR LARGE FIBROID: RECOVERY.

(Under the care of Mr. SYDNEY JONES.)

S. H., aged 51, was admitted on September 27th, 1880. She first noticed a lump about eight years earlier; it gradually increased; menorrhagia was very profuse, and she had for some time suffered extreme pain; she was very pale and anæmic, and was losing flesh. The tumour rose out of the pelvis to about two inches above the umbilicus, and extended more to the right side than left; it projected forward considerably, especially near the umbilicus. It was inelastic and nodulated; the uterus admitted the sound for five inches and a half; the direction of the axis was towards the left. There was slight systolic cardiac murmur. The urine was of specific gravity 1028, and contained a trace of albumen.

October 26th.—Ether was administered, and the operation was performed by Mr. Sydney Jones, under the carbolic spray. The incision extended above the umbilicus, and was large enough to enable the tumour to be lifted out of the abdomen. After separation of the attachments, the neck of the uterus, an inch above the os, was transfixed by a needle with double thread. These threads being secured, the neck above was cut through, and the uterus and ovaries removed. Silk and catgut sutures were inserted, and antiseptic dressings were applied.

October 27th. The patient slept for six hours during the night; she vomited four or five times.

October 28th. She had passed a comfortable night, but had vomited at 5 A.M.

The wound was dressed on November 2nd for the first time; it was all healed except at the lower part for about an inch. The deep silk sutures were removed. The temperature was 98°, and the pulse 92.

November 4th. A slight cough interfered with her comfort, and there was wheezing over the chest; some moist crepitation was heard at the right base on deep inspiration. The temperature was 99.2°, and the pulse 100.

November 8th. She had cough and occasional difficulty of breathing since last note. She stated that she had been subject to such bronchial attacks. Her cough gradually improved; she took food well and readily, and soon began to pick up flesh. She left the hospital well, and has since improved in health and strength, and remained perfectly free from pain.

LABOURERS' DWELLINGS.—Canon Gilbert, of Moorfields, in giving evidence before the Select Committee on artisans' and labourers' dwellings, now sitting, has stated that the Peabody dwellings were not used by the poorest classes of the metropolis, the rents charged being too high. In his opinion, tenements ought to be erected giving accommodation to the very poor at cheaper prices than they could obtain in the present industrial dwellings. The Peabody Trust was not carried out so as to benefit the poorest classes, and it would be well if some of the money the Trust were putting by were spent in the reduction of rents. He was well acquainted with the very poor classes of London. Mr. Samuel Walker, surveyor, stated that in cases where compensation for disturbance had been claimed from the Metropolitan Board of Works, he had given evidence before juries both for and against the Board. When the site of the New Law Courts was cleared he had superintended the distribution of compensation. He had removed 834 families and distributed £3,249 in compensation, in sums varying from £1 to £10. In August, 1866, alone, he had removed 304 families. These people did not find any difficulty in obtaining suitable tenements in other parts of London. There was a great deal of room for such people in Peckham, Clapham, and Wandsworth.

priety of making an incision through the perinæum in proper cases. Incision was a very simple matter, and often gave much relief; and it was indicated in other conditions besides tumour of the bladder. He believed that there was no difficulty in exploring the whole interior of the bladder by the finger through either the median or the lateral incision, unless in very stout persons. The patient should have an anæsthetic, and an assistant should make pressure above the pubes. In a case of obstinate vesical hæmorrhage, he made, two months ago, an incision, and removed a small flake of phosphate from the bladder; since that time there had been no return of the hæmorrhage. He had also operated three weeks ago on a medical man, who, for the last year or more, had passed all his urine through a catheter. The patient believed that there was a calculus impacted at the neck of the bladder; but nothing of the kind could be found. An incision was made in the median line, and the mucous membrane of the bladder was found to be healthy. The patient was greatly relieved, and required to pass urine only seven or eight times, instead of fourteen or fifteen, in twenty-four hours. The operation was not cystotomy, but perineal section; and it was mostly all that was wanted. In lithotomy, it was not the incision that was dangerous, but the removal of the stone. He preferred median incision; but the mode of operating to which the surgeon had been accustomed was the best. He did not advocate opening the bladder in all cases of difficulty; he had only desired to point out where this might be done with advantage.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 4TH, 1882.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

Report of Morbid Growths Committee on the Specimens of Myosarcoma of Kidney shown by Mr. Frederick Eve and Dr. Dawson Williams.—The report, drawn up by Messrs. MARCUS BECK and R. J. GODLEE, confirmed the general accuracy of the description of the tumours given by the exhibitors, and referred at some length to two other cases which had been reported in Germany. One case was that of a child, aged 19½ months, reported by Marchand (*Archiv für Path. Anat. und Phys.*), the second that of a boy, aged 3½ years, reported by Huber (*Archiv für Klin. Med.*). In both cases, the growth involved the tissue of the kidney, and in both contained cysts which appeared to be derived from the renal tubules. The reporters inclined to the theory that these tumours were derived from the Wolffian body, that view being supported by the situation in which they were found, by their congenital origin, and by the occurrence of similar growths in the testicle. On the other hand, the cysts invariably found were obviously of two kinds; in one, epithelium was present, while in the other it was not; while, therefore, a growth merely of the Wolffian bodies might involve the renal tissue, yet in the specimens submitted the cystic spaces did actually represent renal tubules.

Intestinal Obstruction caused by Diverticulum of the Ileum.—In the absence of Mr. Sydney Jones, Mr. BERNARD PITTS related the history of the case. The patient was a man, aged 26, who for nine days before admission suffered from severe vomiting. At the time of admission, it had become fecal. In infancy, there was a long continued discharge from the umbilicus. The abdomen was opened by Mr. Sydney Jones, and a tube immediately beneath the umbilicus which contained a quantity of pus was opened; this tube was ligatured and removed. The patient died next day, and at the necropsy it was found that there was a diverticulum from the ileum, and that this was also attached to the cæcum. The canal of the diverticulum was constricted where the ligature had been applied. Mr. Pitts also referred to two other similar cases which had recently occurred in St. Thomas's Hospital. In one of these cases, a child was admitted with a strangulated hernia at the umbilicus; the hernia was liberated by operation, but the child died; there appeared to be a persistent vitelline duct with adhesion to the umbilicus, and giving way of the abdominal wall at the umbilicus.—Dr. HADDEN said that he had made the *post mortem* examination in the first case. The divided diverticulum had already contracted adhesions, and a loop of intestine had slipped under this. He thought that this observation showed that, to divide and return these diverticula, was not unattended with danger. He believed that the case pointed to the advisability of dividing these diverticula close to their origin.—Sir JOSEPH FAYRER said that, in the case of a patient of his who had died of abscess of the liver, at the *post mortem* examination he found a very long diverticulum, of a calibre as large as that of the gut. The specimen was shown.—Mr. GAY said that he believed these cases were not so rare as had been supposed. He believed that many of the so-called bands of adhesion were really hollow tubes, and that it might therefore be somewhat dangerous to divide them in the manner suggested by Dr. Hadden.—The PRESIDENT remarked that probably

the cases were not rare; at the last meeting of the Society, a large number were shown.

A New Tract of Spinal Degeneration.—Dr. W. B. HADDEN said that the microscopical specimens he showed were made from the upper cervical region of the spinal cord of a patient, who was said to have suffered from locomotor ataxy; but the clinical history was otherwise unknown. In front of each crossed pyramidal tract, *i.e.*, in the anterior root-zone ("the fundamental region of the lateral columns" of Flechsig), was a symmetrical area of degeneration; no other change was anywhere visible; the posterior columns, as well as the grey matter, were quite intact. The degeneration appeared to be granular, and at the boundaries of the degenerative area swollen axis-cylinders and amyloid bodies were seen; in the area itself, only granular debris was seen; the blood-vessels in some parts were thickened. Sections made at a higher level in the cord showed no degeneration, and Dr. Hadden therefore thought it probable that the lesion was ascending, and this was confirmed by its bilateral distribution. Dr. Gowers had recorded a case in which an area of degeneration in this region was secondary to a crush of the lower part of the cord. The specimen from which the sections were made had been for two years in spirit before it was given to Dr. Hadden by Professor Greenfield.—Dr. GOWERS showed sections of the cord from his case, but observed that he was not quite certain whether the degeneration was the same as in Dr. Hadden's specimens. The tract, he said, had not exactly the same form in both the cases, and it was impossible to say whether they occupied precisely the same region. If they were the same, then Dr. Hadden's case was of great interest, as tracing up the degeneration a little higher than he had himself been able to do. Degeneration of the medulla in this region had not often been observed, but he believed that it was an ascending degeneration, and involved a tract of fibres concerned with the conveyance of sensory impressions. This view was confirmed by some recent observations of Flechsig.

Congenital Cardiac Disease.—Dr. W. B. HADDEN related a case of congenital cardiac disease. The patient was a female child, four months old, and was under the care of Dr. Bristowe at St. Thomas's Hospital. On admission, the face was pale, the hands and lips livid, the chest expanded badly; the respiration was 66. Lung-resonance in front was impaired, but breathing was vesicular. At the bases, there was impaired resonance, with crepitation and rhonchi. No cardiac murmur was heard; no mention was made of heart's dullness in the notes. Improvement followed the next day. On the third day, there was dullness over the left lung anteriorly, and scattered dullness at both bases, with crepitation and rhonchi. Before death, the respiration was 96, and the temperature 101°. *Post mortem*, the heart weighed four ounces, the average weight at patient's age being rather less than one ounce. The septum between the ventricles was imperfect above, admitting the middle finger easily. The right ventricle was much hypertrophied, a quarter of an inch thick in some parts; the cavity was dilated at the right apex-wall half an inch transversely. The muscular papillæ were much hypertrophied; the left ventricle was much hypertrophied; the foramen ovale and ductus arteriosus, although allowing the entry of a small probe, were practically closed. The pulmonary artery was large, the aorta inversely small. Both arose from the ventricle in the usual way. Both the lower lobes of the lungs were collapsed; the upper lobes were relaxed and crepitant; the bronchi were dilated. The nature of the case was not suspected during life, perhaps because the pulmonary trouble obscured physical signs referable to the heart. It is worthy of note that the heart weighed nearly five times the usual amount.

Microscopic Specimens from a case of Farcy.—Some microscopic specimens were exhibited by Mr. STANLEY BOYD, showing the cutaneous changes in farcy. The patient had been a stableman, aged 18, and some of the horses he served were glandered. On August 1st he experienced rigors, joint pains, and great *malaise*; a week later, an abscess formed below the head of the left fibula; on August 18th, the left eye began to swell, and became closed. When admitted into University College Hospital, on August 23rd, there was a large sloughy ulcer on the left leg where the abscess had been; there were a few pustules on the right cheek, an abscess over the wrist, and several circumscribed red patches on the limbs; the left eye was much projected, the whole left temporal fossa was swollen, but no pus could be obtained in the orbit or fossa by the aspirator. The temperature ranged from 101° to 103°, and he was delirious. The pustular rash spread rapidly, and the contents of the pustules became bloody; there was no discharge from the anterior nares, but there was frequent expectoration of a sanio-purulent fluid. Before death, which occurred on the twenty-sixth day of the disease, the right eyelids began to swell, the left cornea lost its polish, the respirations rose to 44, and he became semicomatose; the temperature rose to 105° Fahr. two and a half hours before

he died. At the *post mortem* examination there was purulent inflammation of both ankles and knees, and among the deep fibres of the temporal muscle on the left side, and among the muscles of the orbit; in the lungs were numerous abscesses, varying in size from a millet-seed to a filbert; on the upper surface of the liver was an abscess the size of an orange; the kidneys were in a condition of cloudy swelling; a few pustules were found about the pharynx, near the orifice of the larynx. Mr. Boyd remarked that the accounts given in the text-books of the microscopical anatomy of farcy buds were unsatisfactory; he believed the pustules were really small abscesses in the superficial layer of the skin, and differed from the small-pox pustules, in which the effusion occurred into the rete Malpighii, destruction of the papillae, if it occurred, being secondary. Referring to Mr. Bendall's recent communication to the Society, he had not found—by the use of osmic acid—any abnormal fat about the pustules; he had also prepared specimens with "Bismarck brown," and with methyl violet, but had failed to find any organisms in the mature pustules.—Mr. BENDALL observed that there seemed to be a considerable degree of variation in the character of the contents of the farcy buds; some were true pustules, and when opened were found to contain pus, but in other cases there seemed to be a localised slough; he attributed this difference to the varying intensity of the inflammatory action.—Mr. GODLEE said that, in a case he had seen, the buds had different characters at different periods of the disease. It was interesting to learn that organisms were found in the early, but not in the mature, stage of the pustules: this coincided with the observations of Ogston. These cases of acute farcy resembled cases usually classed as "Pyæmia with pustular eruption;" might not the latter be really instances of farcy?

Colloid Degeneration of Prostate.—Mr. S. BOYD, who also showed this specimen, said that the patient was a groom, aged 55, who, about two years before his death, was suddenly seized with retention of urine. The urine, when drawn off, was found to be thick and turbid; frequency of micturition ensued with foul, turbid urine, and on several occasions small calculi were passed. When admitted into St. Peter's Hospital, the urine was alkaline, and tinged with blood; the blood came at the end of micturition, and was often followed by pus and sloughy tissue; the patient had some hæmaturia. No complete *post mortem* examination could be made, but the bladder and prostate were removed. The prostate was infiltrated with a new growth, which extended back and implicated the bladder, leaving only the posterior part of that viscus uninvolved; both vesiculae seminales were filled with colloid new growth, and the opening of the ureters was, in each case, at the summit of a nodule of growth. The microscopical examination showed a fibrous stroma, with numerous alveoli; the stroma was never so dense as in scirrhus of the breast; there was extensive colloid degeneration, which was a rare and interesting phenomenon.—Mr. ROGER WILLIAMS said he had seen the patient during life. Scirrhus of the prostate was very rare; colloid degeneration of it had, he believed, never before been recorded. In preparation of the growth he had examined, he had found more colloid change than Mr. Boyd had described. Mr. Boyd said that he had chosen the least degenerated part for examination.

Colloid Degeneration of Mammary Gland.—Dr. LEITCH (of Manchester), who showed this specimen, stated that the patient was a woman, aged 44, who had suffered from rheumatic fever when first the tumour was noticed, and afterwards from acute rheumatism; in 1870, there were abscesses in the breasts, and abscesses of the lungs. The tumour was first noticed in 1871, and the patient died in 1872. The tumour was a large, hard, nodular mass, situated in the upper part of the breast, and extending to the axilla. It was composed of a number of nodules, each of which was surrounded by a capsule. The nodules were of various sizes, and were composed of a soft, gelatinous material, which was easily cut through. The tumour was removed, and the specimen was shown. The tumour was a large, hard, nodular mass, situated in the upper part of the breast, and extending to the axilla. It was composed of a number of nodules, each of which was surrounded by a capsule. The nodules were of various sizes, and were composed of a soft, gelatinous material, which was easily cut through. The tumour was removed, and the specimen was shown.

Dr. LEITCH said that the patient had been suffering from rheumatism for several years, and that the tumour had been noticed during one of her attacks. He had seen the patient during life, and had seen the specimen after her death. The tumour was a large, hard, nodular mass, situated in the upper part of the breast, and extending to the axilla. It was composed of a number of nodules, each of which was surrounded by a capsule. The nodules were of various sizes, and were composed of a soft, gelatinous material, which was easily cut through. The tumour was removed, and the specimen was shown. The tumour was a large, hard, nodular mass, situated in the upper part of the breast, and extending to the axilla. It was composed of a number of nodules, each of which was surrounded by a capsule. The nodules were of various sizes, and were composed of a soft, gelatinous material, which was easily cut through. The tumour was removed, and the specimen was shown.

stellate cells were encountered. Recurrence occurred in the scar, and the tumour was again removed. It was again circumscribed to some extent, but involved the skin and the subjacent muscle; the growth had the same character, but the cells were more numerous. The axillary glands were not affected. The second case was that of a man who, when first seen in 1880, presented a tumour in connection with a scar about the scapula. He stated that a tumour had been removed from the neighbourhood about two years earlier. It was again removed, but recurred in two months in two places; on this second occasion, it was adherent to the skin and muscles. At the first removal the specimen was a pure myxoma, but at the second the cells were rounded, or oval, or signet shaped. He believed the tumours were really of a sarcomatous nature, for they spread in the way in which sarcoma spread; the cells varied much in form, and the clinical history was that of sarcoma. He suggested that it might be possible in time to abolish the separate class "myxoma," believing that it would be found that all tumours to which that name was now applied would fall under the head either of sarcoma or of fibroma.—Mr. ROGER WILLIAMS referred to a case of a large tumour in the loin, which at first was a true myxoma, but, on recurrence, took on more of the character of sarcoma.—The PRESIDENT said that he believed the tumours were the same as those which, in his earlier days, went by the name of "gelatinous sarcoma."

Isolated Paralysis of Glottis, Larynx, and Constriction of the Trachea, in a Case of Malignant (Cancerous) Disease of the Thyroid Gland.—Dr. FELIX SEMON showed a larynx and thyroid gland, which had been sent to him by Dr. Byers of Belfast. The specimen was removed from the body of an old gentleman, who had consulted Dr. Semon in July 1881. The patient showed the remarkable combination of very noisy inspiration, free respiration, and unimpaired voice, which is almost pathognomonic (according to Riegel) of bilateral paralysis of the glottis-openers (posterior crico-arytenoid muscles). Laryngoscopic examination completely corroborated this preliminary diagnosis, the vocal cords coming completely together on phonation, but not even separating up to the cadaveric position on deep inspiration. Careful examination of the organs of the thorax, of the neck, and of the centres, failed to give any clue as to the cause of the paralysis; and the diagnosis, in this respect, was left in suspense—the possibility of a gravely myopathic disorder being kept in view in this case for special reasons. A serious prognosis was given, and early tracheotomy advocated, in the event of other measures (electricity, hypodermic injections of strychnia, etc.) failing, as was rather anticipated. This operation was ultimately performed, but gave only partial relief. Attacks of dyspnoea occurred repeatedly; the patient became unconscious on the evening of the fourth day after the operation, and died on the morning of the fifth, the heart finally failing. Only a partial examination of the body could be obtained. The thoracic organs were found to be quite healthy, and the larynx and thyroid gland were sent to Dr. Semon, who examined the specimen, in conjunction with Mr. Stewart and Dr. Seymour Taylor of St. Thomas's Hospital. The thyroid gland was found to be rather large for an old man, but, looked at from without, did not present any abnormality. On looking into the larynx (which had not been opened), it was plainly visible that the vocal cords did not occupy the usual cadaveric position, but were lying close together, so that their inner borders almost touched. This, Dr. Semon believed, was due to the membrana elastica of the larynx having lost its natural tension, in consequence of the long duration of the paralysis. The posterior crico-arytenoid muscles were found to have undergone extensive fatty degeneration and atrophy; whilst the anterior crico-arytenoid muscle was found to have remained normal. There was isolated atrophy of the abductor muscles. The paralysis was due to the left recurrent laryngeal nerve being compressed by the hindermost part of the left wing of the thyroid gland, which, in the right recurrent laryngeal, was compressed in a hard mass, which was situated on the posterior wall of the trachea, and which was the hindermost part of the right wing of the thyroid gland. The mass, however, pressed from behind, and to a small extent laterally, on the recurrent laryngeal nerve, and pushed them much inwards, so that the posterior crico-arytenoid muscles were compressed beneath the larynx, and the anterior crico-arytenoid muscles were compressed beneath the larynx. The mass was situated on the posterior wall of the trachea, and was the hindermost part of the right wing of the thyroid gland. The mass was situated on the posterior wall of the trachea, and was the hindermost part of the right wing of the thyroid gland. The mass was situated on the posterior wall of the trachea, and was the hindermost part of the right wing of the thyroid gland.

the vocal cords not only explaining fully the dyspnoea, but at the same time preventing an inspection of the lower parts. The case taught the important lesson that, in such cases, one always ought to have the possibility of a second stenosis lower down in view. The softening and atrophy of the tracheal cartilages was a good illustration of Rose's view—viz., that the comparatively frequent occurrence of sudden death, in cases of goitre, is often due to the fact that the trachea, after having been changed by the pressure of the goitre into a soft yielding tube, was tilted during sleep, after extirpation of the goitre, etc., round its own axis, and that suffocation was thus produced. The paralysis of the left cord had been possibly due to pressure upon the right pneumogastric nerve, in accordance with Dr. George Johnson's theory; more probably, however, to the direct pressure upon the left recurrent nerve. The existence of an isolated paralysis of the abductors, the whole nerve trunks being evidently affected, was a new good corroboration of the doctrine he had himself advanced—viz., that the abductor-fibres of the motor nerves of the larynx were more prone to suffer, in cases of organic disease, than the adductor fibres.

Bronchocele, with Secondary Growths.—Mr. WARRINGTON HAWARD said that the specimen showed consisted of a tumour of the thyroid, and a number of tumours in other organs of the body. The patient, when admitted into St. George's Hospital, complained of dyspnoea, consequent on the sudden enlargement of a goitre, which had long existed. Attached to the vertex of the skull was a small tumour, which had existed for about seven months; another tumour, of a similar character but pulsating, was found over the scapula; and another over the ilium. Paraplegia subsequently developed, and she died during a sudden attack of dyspnoea. The thyroid growth resembled to the naked eye an ordinary bronchocele, and all the other tumours had the same naked eye appearance. A growth projected from the cervical vertebra into the canal, and compressed the cord. Deposits of this growth were found in the lung, liver, and spleen. Microscopical examination was made by Mr. Crompton. The tumour of the thyroid was found to be, for the most part, a mere hyperplasia of the structure of the gland; but in some places there was an ingrowth of a small-celled growth. The other tumours presented precisely similar microscopical appearances, with the exception of the tumour of the lung, which was an undoubted sarcoma. Mr. Haward said that his case resembled very closely one that Mr. Henry Morris had shown about a year earlier. The generalisation which had occurred in these cases raised questions of great interest, which it was useless to attempt to discuss at so late a stage of the proceedings.

Specimens shown by Card:

Mr. SYDNEY JONES: Tumour of the Shoulder-joint. Fibroid of Uterus successfully removed.

Dr. MORRISON: Kidney from a Case of Calculous Hydro-nephrosis.

Mr. J. HUTCHINSON, junior: Pyæmia in a Lamb.

Mr. ROGER WILLIAMS: Hyperostosis of Lower Jaw. Sequestrum from Stump of Amputated Femur. Sequestrum from Popliteal Surface of Femur.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, FEBRUARY 24TH, 1882.

J. K. BARTON, F.R.C.S.I., Vice-President, in the Chair.

Rupture of Jejunum.—Mr. HEPBURN showed a recent specimen, taken from the body of a man, J. N., aged 46, who was admitted into the Meath Hospital, in a state of partial collapse, following intense pain, caused by a fall on the stomach. There were no external signs whatever of injury to be discovered. Death soon followed. The *post mortem* examination showed signs of peritonitis, and a laceration about the size of a halfpenny was discovered in the jejunum, which Dr. Hepburn considered an unusual seat for such injuries.

Large Sequestrum from Temporal Bone.—Mr. ARTHUR BENSON showed a piece of bone which had come away through an opening behind the ear of a child, M. C., three years and a-half old. The specimen measured one and a-half inches, by one inch, by seven-eighths of an inch; and comprised the greater part of the right temporal bone. The squamous, mastoid, and petrous portions were each well represented. The child had had otorrhœa for eighteen months previously, during the latter twelve of which she had been under Mr. Benson's observation, at St. Mark's Ophthalmic Hospital. It was remarkable that, notwithstanding the extent of the necrosis, the child remained in excellent health throughout, showing no sign of cerebral abscess or pyæmia; nor was there at any time a trace of facial paralysis. The hearing power in the ear, after the removal of the sequestrum, was "conversation voice" at one metre. A probe could be passed

directly inwards to the extent of two inches along the sinus without meeting the slight obstruction.

Encysted Tubal Abscess.—Mr. LAWSON TAIT showed the ovaries and Fallopian tubes of a woman on whom he had performed abdominal section, for the purpose of finding the cause of continuous pains, which no treatment seemed to influence. The right ovary was adherent and disorganised, and the corresponding tube contained one drachm of pus. The left ovary and tube were in a similar condition. The tube was dilated to the size of a hen's egg, and, on Mr. Tait laying it open before the Society, it was shown to contain an accumulation of pus. Such cases Mr. Tait regarded as of far more common occurrence than was usually supposed. Their removal by operation was the only treatment, but that procedure was not always easy owing to adhesions, and considerable hæmorrhage was liable to occur.

An Experimental Research on the Value of the Details of Listerism in Abdominal Surgery.—Mr. LAWSON TAIT read a paper on this subject. There were three general principles, or axioms, with a statement of which he would begin his paper. 1. In discussing the question, all empirical statements should, as far as possible, be avoided. 2. The smaller the range and the fewer the disturbing elements the better; i.e., for the deciding of such questions, it was better to compare the results obtained in one series of operations, for example, ovariectomies, than to compare those of several series of major and minor surgical operations. In other words, a series of repetitions was more likely to give accurate results than mixed cases. 3. In the peritoneum was a cavity peculiarly susceptible to septic influences; the abdominal viscera were, therefore, a peculiarly good field for such an investigation. The basis of Lister's theory of putrefaction by means of bacteria, etc., had long ago been proved beyond dispute as regards dead matter. But Mr. Lister assumed for living matter the same sequence of events as in the case of dead. This had never been proved. If a wound were full of blood-clot, and this was kept antiseptic, it would become organised, and form part of the tissue it lay near, just as a blood-clot would do in the interior of the body, being, in both cases, protected from the attacks of the bacteria in the air. Blood-clots in the body were not truly dead, but only in a low state of vitality, insufficient, however, to preserve them from the attacks of bacteria. Dr. J. Hamilton, of Edinburgh, in his experiments on sponge-grafting, had shown that a thoroughly dead sponge would do without Listerism what the blood-clot would do with it—viz., become organised. It would even do this in a putrescent wound, because it was sufficiently tough to resist the attacks of the bacteria, while the blood-vessels of the neighbourhood were working their way into, and forming a network through, its substance. In the same way, the blood-clots, being finely porous, offered support to the fine blood-vessels developed; but being too frail to resist the attacks of bacteria, became putrescent before time had occurred for the vessels to be formed, unless protected by antiseptics. Mr. Tait enunciated his opinions to the effect that, whilst accepting the germ theory, he repudiated Mr. Lister's application of it in surgery. However, putting theory and inclination aside, he determined to give Listerism a fair trial in one hundred abdominal sections, nearly sixty of which were for ovarian tumours; and the conclusions arrived at were all against Mr. Lister's views. The most valuable information was to be obtained, not by noting the ratio of deaths, but by observing under what mode of treatment the recoveries were most easy, even, rapid, and uncomplicated. For this purpose he exhibited comprehensive charts of a large number of cases treated by various methods, showing temperature, pulse, duration, etc., of the cases in each group. Those treated by complete Listerism gave the worst results. He, therefore, wished to try if this result was due to the method or to the carbolic acid used. He divided the investigation into three groups: (1) the use of the spray; (2) the preparation of the sponges; and (3) the details during the operation. In group 1, the spray was used regularly, beginning with the carbolic acid solution, 1 in 20; then reduced to 1 in 30, then to 1 in 50, 1 in 100, 1 in 1,000, and finally a spray of pure water was used. The recoveries improved in ease as the carbolic acid was reduced in strength. In group 2, the sponges were treated with solutions of the acid gradually reduced in strength, as in group 1, with similar results; so also group 3. The investigation lasted over two years. He, therefore, gave up the use of carbolic acid altogether; but still keeps his instruments, ligatures, sponges, etc., in a bath of pure water—not to avoid bacteria, but to keep them wet. Bacteria, which produced putrefaction in dead matter, he considered harmless in the living peritoneum. Lister's plan had done an infinity of good, but his theories of its action had been proved to be untenable.—Dr. ATHILL objected to the use of the spray, not so much because of the carbolic acid as because of the coldness which it necessarily produced. He hailed, therefore, with satisfaction the statement that it was not useful.—Mr. FITZGIBBON remembered when ovariectomy was regarded

as almost certain death, if performed in a general hospital; but now under spray it was a very safe one.—Mr. WHEELER got better results without than with the spray in general surgical operations; the temperatures did not run so high. Listerism did not do what it was supposed to do—viz., destroy the micrococci, for these had been found in wounds dressed most strictly.—Mr. CROLY asked Mr. Tait, as he had admitted the germ theory, whether he considered the pus in an abscess as living or dead?—Dr. MASON asked how it happened that, immediately after the introduction of Listerism, the statistics improved rapidly.—Mr. THOMSON thought that the opponents of Listerism were not always logical, for while granting the premisses, they refused the conclusion. The great question was not so much what number die or recover, but how many can be saved out of the margin who have a tendency to die? In a crowded Western General Hospital in Glasgow, eight ovariectomies had been done under spray without a single death. Dr. Matthews Duncan had improved his results by adopting the use of the spray, and Mr. Thomson thought that it was not justifiable to set aside the methods of Mr. Lister in favour of those recommended by Mr. Tait. According to the early statistics published by Mr. Tait, his successes had been largely improved by the adoption of Listerism.—Mr. FRANKS regarded Listerism as a crutch which would materially help inexperience. In one case of knee-joint suppuration, which had come under his care, and which was dressed antiseptically, erysipelas appeared in the foot, and spread up to the dressings, and also appeared above the knee-dressings; but left the portion covered with carbolic gauze entirely free from the disease.—The PRESIDENT, Mr. ORMSBY, and Dr. KENNEDY, also took part in the debate.—Mr. TAIT, in reply, said that he had thirty-eight deaths out of his first fifty ovariectomies; but that the result was due to bad hospital arrangements, his own inexperience, and the use of the clamp; and that the subsequent improvement in his statistics was not due to the use of Listerism, but to the improvement of these particulars, and the use of intraperitoneal ligatures. Even Mr. Spencer Wells never had less than 20 per cent. of deaths while using the clamp, but rapidly improved when that was given up.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 25TH, 1882.

WILLIAM STOKES, M.D., President, in the Chair.

Melanotic Sarcoma of Eyeball.—Mr. J. B. STORY showed the left eyeball of a maiden lady, aged 33, who had suffered from erysipelas over the left temple at the age of three years, and had been struck with a twig in the eye six years ago. Her sight had been failing for the past twelve months, and she saw balls of fire in the eye. After enucleation of the eyeball, a tumour 13 millimetres in its antero-posterior diameter, and about the same equatorially, was found occupying the ciliary body and anterior portion of the choroid at the upper outer quadrant of the globe. It projected 4 millimetres inwards into the retina, and 4 millimetres outwards under the conjunctiva, having partly pierced the sclerotic, and partly pushed it in front of it. Examined microscopically, the tumour was seen to consist of both round and spindle cells; in places it was melanotic, in others it was non-pigmented. The latter portion of the sarcoma contained many large polygonal cells, with bright starry nuclei, and spaces like vacuoles in their interstices.

Large Gallstones.—Dr. J. W. MOORE read an account of the passage of several large gallstones by a lady, aged 41 years, which had been forwarded by Surgeon-Major G. Hare, Army Medical Department, now stationed at Mooltan, Punjab, India. The patient had suffered, more or less, from biliary colic for the past five years. Latterly, the attacks were followed by jaundice. Three unusually large gallstones were recently passed, *per os*, by the patient: the first on November 11th, 1881, cuboid in shape, with seven well-defined facets; the second on November 25th, nearly a perfect octagon, with eight triangular facets; and the third on January 24th, 1882, also of a cuboidal form. The attacks of biliary colic were increasing; the passage of these calculi through the common bile duct, had occurred three or four days previously in each instance, and were of terrific intensity. Nor was this to be wondered at, seeing the stones were all from 1½ to 2 inches in circumference.

Gallstones from the Bladder and Uterus.—Dr. F. H. LISTER read a paper relating a series of cases which he had received from Surgeon-Major F. H. H. M. Hargrave, Army. The first stone was removed from the bladder of a soldier, who was shot in the right gluteal region early in 1879. The stone passed through the right duct, finally lodging in the bladder, where it became the nucleus of a phlegmonous abscess weighing (with the bladder) 420 grains. The patient suffered no ill-effects until the beginning of 1881, when all the symptoms of stone appeared. The other specimens were three small calculi, which Surgeon-Major Robin-

son had removed from the very capacious urethra of a young man to whom they had caused little or no inconvenience. The largest of these rare calculi was 12 millimetres in circumference.

SATURDAY, MARCH 4th, 1882.

WILLIAM STOKES, M.D., President, in the Chair.

Excessive Granulation-Tissue.—Mr. H. G. CROLY submitted the middle finger of the right hand of a woman, aged 30, who had been severely bitten, the teeth entering the joint between the second and third phalanges. The injury necessitated amputation through the metacarpo-phalangeal articulation. A large mass of granulation-tissue had formed over the injured joint.

Sequestrum from the Os Calcis.—Mr. H. G. CROLY presented a sequestrum from the os calcis of a boy, aged 8, the result of an injury received whilst jumping.

Epididymoma of the Tongue.—Mr. H. G. CROLY also presented a large portion of the tongue of a man, aged 50, whose proclivity to smoking had led to the formation of an epithelioma.

Primary Cancer of Oesophagus.—Dr. J. M. FINNY showed a remarkable example of primary cancer of the oesophagus, with secondary deposit in the left lobe of the liver and gastric glands. The patient, a ship-carpenter, 52 years of age, had been ill from October last, complaining chiefly of pain in the epigastrium, and of difficulty of swallowing food and drink would stop for some time, and then pass suddenly into the stomach. Death was brought about by hæmatemesis supervening on cancerous cachexia. The oesophagus was dilated and extensively ulcerated from the place where it is crossed by the aorta to within a quarter of an inch of the cardiac orifice. A small abscess was found in the posterior mediastinum, causing pleural adhesions, and involving the posterior portions of the lungs, which were hepatized. The diaphragm was not affected, but a cluster of glands near the lesser curvature of the stomach was much enlarged, and a typical nodule of recent cancer existed in the left lobe of the liver. The stomach was free from disease, but its surface was in places hyperæmic, and of a puce colour.

The Etiology of the Dissemination of Tubercle.—Dr. PRINCE exhibited a microscopical specimen illustrating the etiology of the dissemination of tubercle. Tubercular foci were visible in the inner coat of the pulmonary veins—a mode of infection which had been described by Weigert in Virchow's *Archiv* for 1879. Dr. PRINCE alluded to Ponfick's earlier researches on tuberculosis of the inner coat of the thoracic duct as a cause of dissemination of the tubercular virus.

Large Fibro-lipoma Simulating Umbilical Hernia.—Dr. BENNETT, for Dr. Travers Barton, Surgeon to the County Donegal Infirmary, showed a large fibro-lipoma, which Dr. Barton had removed from the abdominal wall of a strong, middle-sized man, 30 years of age. The tumour, which had appeared seven years ago as a small lump beside the navel, grew rapidly during the past six months. It was oval in shape, extended from the umbilicus to the left anterior superior spine of the ilium, and measured 23 inches round the base. It was composed chiefly of fat and fibrous tissue, portions of which were degenerating into a round-celled sarcoma.

REVIEWS AND NOTICES.

THE RELATION OF BRAIN TO MIND. By J. CLELAND, M.D.
Glasgow: J. Maclehoie and Son, 1882.

Professor CLELAND is rapidly making for himself a reputation in Scotland, not only as an excellent professor of anatomy, but also as a man peculiarly qualified to deal with that delicate range of problems that lie on the borderland of physiology and psychology. It is with great pleasure, then, that we receive the pamphlet, which, although it was delivered merely as a lecture to a University Society, contains, nevertheless, an excellent summary, all the better for being short, of the writer's views upon a range of topics, perhaps the most difficult, and at the same time the most urgent of all those that have been raised by modern discovery.

Beginning with a careful definition of life, Dr. Cleland passes over the central ground of the old theory, and takes up particularly the function of irritability, which he defines "as the susceptibility of a living organism to undergo physical change in consequence of a stimulus applied." We agree with this, because it is one of the few points at which we are inclined to censure the writer. The definition is really inadequate, for everything depends on the meaning given to "stimulus." Dr. Cleland would not surely call the destructive action of varicel upon living tissue a case of irritability; yet it is included in the terms of his formula. He passes rapidly, however, to deal particularly with the

special function of the nervous system, which he calls "an apparatus by means of which irritations at the surface of the body are transmitted to a centre, and thence distributed so as to lead to combined action of muscular, glandular, or other arrangements." He regards it accordingly as capable of entire physical completeness, apart from anything in the nature of consciousness altogether. But he explains of course that, at least in mammals, there can be none of the higher operations of consciousness apart from the cerebral hemispheres, which must be, therefore, in some sense "the organ of the mind." To define the sense in which he uses this much-abused phrase, he asserts, on the one hand, as beyond doubt, that "with every mental action, whether intellectual, emotional, or volitional, a corresponding amount of oxidation of material takes place in the brain"—quoting particularly the authority of Mosso's plethysmograph—and repudiates, on the other hand, as simply "unthinkable" the frequent rash suggestions that "the thought and the cerebral change coincident with it are one and the same thing." Any physical change, as he argues, is a movement in "space modified" according to circumstances, but conceived by us as in any case a *movement* simply; but this idea is to us incompatible with the notion of "thought." Certainly, no one would say, apart from theoretical explanations, that he took "thought" to be anything in space. Surely, thought, looking at it simply as a fact of our experience, is defined by nothing more naturally than by this, that it is in time but is not in space. To call thought, then, or consciousness, the same thing as the material and spatial nerve-change is really to talk nonsense.

Dr. Cleland next discusses, very shortly but very lucidly, the new elements imported into any merely physical series of nerve-changes when consciousness intervenes. Having noticed sensation and attention, and formulated the important law that "the degree of sensation varies according to the amount of the stimulus, and the irritability of the nerves and brain, provided always that the attention is the same," he contrasts the fact that "the amount of subsequent mental action set up by a sensation has no quantitative relation to the sensation, and, therefore, none to the amount of energy liberated by the stimulus." His inference from the comparison of these two facts, which in themselves will hardly be disputed, we give in his own words:—

"I find myself forced to a conclusion which I have not hitherto held, namely, that the mind, non-material though it be, is affected by physical change in brain-substance; and that, in the initial mental process (to wit, the sensation), the cerebral is the antecedent of the mental change; while, in the whole train of mental phenomena succeeding the sensation, the mental changes are the antecedents of the cerebral changes which accompany them."

There are, therefore, two transition points—one, in sensation, at which a merely physical change is the antecedent to a double change, partly physical and partly mental; and the other, in voluntary or emotional action, where conversely a double change, partly physical and partly mental, is the antecedent to a merely physical change. He is led, therefore, to put forward, "with the diffidence which so startling a result suggests," the theory that the conservation of energy is a law which crosses the bounds of physiology into psychology; or, in other words, that in the production of sensation, for example, a "certain minute amount" of physical energy passes into the psychical world, and becomes a moment of thought. This, as he holds, would, however, "instantaneously return to the excitation effected by the sentient mind on the substance of the brain." Although thought, therefore, is not motion, it is yet so far a function of motion that the two are convertible, and that, in some sense and way as yet unknown, the one can become the other. "Nor will this statement long continue after all, perhaps, to wear a startling aspect to those who grasp, that spirit is the one substratum of everything."

We have said enough of this little book to show our readers that it is a remarkable contribution to the literature of a supremely difficult subject, on which, above all things, clear views and accurate definition of terms are needful. It may not be amiss to express a hope that the writer will work out, upon a larger scale, the views, new and old, which he has here sketched out too briefly. There is a strong tendency to leave all these questions to purely materialistic theories, under which we run a risk of forgetting that there are enormous objections to all such explanations. It is time that some competent physiologist out of the opposite camp should state his reading of the facts. No one seriously supposes that the question, whether we have a self or soul distinct from, and other than our body, is settled in the negative; and yet current scientific literature often reads as if it were so. It lies with men like Dr. Cleland to take away the reproach of the idealists.

THE population in Devonshire has, it is said, only increased 0.5 per cent. during the last ten years; the pauper lunatics having increased 20 per cent. in the same period.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 15TH, 1882.

ACTINOMYCOSIS IN MAN.

A TUMOUR-LIKE disease of the jaws of cattle, which had long been known in many parts of Germany under the name of "Wurm" or "Knochenwurm", and is also seen in Italy, was shown by Professor Bollinger of Munich in 1877 to be invariably associated with the presence of one of the larger kinds of filamentous fungus; and that author described the disease, under the name of actinomycosis, as "a new fungus-disease in the ox". Up to that time, the tumour-like formations which usually grow from the alveoli of the lower molars, and protrude externally near the angle of the jaw, had been known to veterinary pathologists sometimes as scrofulosis, at other times, as osteo-sarcoma of the jaw, or as maxillary sarcoma; and it is still admitted that the whitish tumour-substance, in the cavities of which the fungus-bodies were found, possesses the granulation-like structure that is common to some sarcomata, as well as to the group of infective new growths which are not tumours in the restricted sense of the term. What Professor Bollinger precisely did was to show that the tumour-substance of the jaws contained, in abscess-like cavities in its interior, a number of small yellow bodies of the size of a hemp-seed and of fatty consistence. The same sulphur-yellow bodies were found within similar cavities on the tongue, and in the midst of similar tumour-formations of the fauces, larynx, the mucous membrane of the stomach, and in the respective lymphatic glands of those regions. On closer examination, the yellow bodies proved to be felted masses of mycelium-threads with a radiate arrangement, forking towards their circumferential end, and ending in flask-like swellings. These parasites he named the "radiate fungus" (*Actinomyces*, *Strahlenpilz*), and the disease in which they occurred he re-named Actinomycosis.

About two years afterwards (April 1879), Professor Ponfick of Breslau chanced to make the *post mortem* examination of a man aged 45, who had been admitted with chronic lung-disease of the left side, and who had several fistulous openings in the skin of the infrascapular region and other parts of the back. In the seropurulent contents of those sinuses, Professor Ponfick found the peculiar sulphur-yellow bodies first described by Bollinger (and familiar to himself from the examination of maxillary tumours of the ox made both at Göttingen and Breslau), and he proceeded to Berlin the same evening in order to communicate his discovery to the Surgical Congress then in session. Having had his attention thus directed to the occurrence of actinomycosis in man, Dr. Ponfick has collected four other cases in the course of the two years following, and has now published a comprehensive monograph on the subject, of which we purpose to give a brief account (*Die Actinomycose des Menschen, eine neue Infectious-krankheit*, with six plates. Berlin, 1882.) He identifies his own cases in man with three cases recorded, a year before his first case, by Dr. James Israel of Berlin as "a new form of fungus-disease in man", and with a case observed by Professor von Langenbeck in 1845, and published from his original notes by that author as a pendant to Israel's cases. There are, at the present time, sixteen cases on record, including a fourth case by Israel, three cases by Rosenbach (Göttingen, 1880), and two cases by Partsch (Breslau, 1881). Dr. Israel's precise share in the discovery has, unfortunately, become the subject of controversy; and readers who are

curious in the matter will find that author's statement of his claims in one of the latest numbers of Virchow's *Archiv*.

Professor Ponfick's original case was that of a powerfully built man, aged 45, who had suffered from the sequelæ of pleurisy on the left side for a year and eight months. After death, there was found an extensive prævertebral phlegmonous inflammation in the posterior mediastinum, with a parapleuritic abscess-cavity extending both to the right and left, at the level of the seventh, eighth, and ninth intercostal spaces; with this cavity there communicated a complex system of sinuses, extending through the substance of the longissimus dorsi, the scapular muscles, and the subcutaneous tissues of the whole back. The sulphur-yellow fungus-bodies were found upon or between the granulations of these sinuses and in their substance, as well as in the sero-purulent discharge; they were also found in a cavity, of the size of a cherry, which occupied the centre of a hepatised area of the left lung (lower lobe), as well as in the exudation that filled some of the neighbouring alveoli. The second case was that of a woman aged 61, admitted with an abscess of the lower part of the abdominal wall; she subsequently developed another abscess of the left iliac fossa, without recurring symptoms of peritonitis, and died from exhaustion. After death, caries (with prævertebral collection of pus) of the three lower lumbar and first sacral vertebrae, abscesses in both iliac fossæ, and perityphlitic adhesions, were found. The yellow fungus-bodies were found in the pus of the prævertebral abscess. The third case was that of a woman, aged 45, who had suffered an injury of the right thumb three years before, with swelling of the arm, which did not subside, but extended to the neck and back, and was accompanied by progressive weakness. The necropsy revealed extensive sinuses on the left side of the neck and in the prævertebral tissue, a knob-like excrescence of new growth extending into the lumen of the internal jugular vein, a tumour, of the size of an apple, growing into the right auricle and ventricle, with corresponding whitish centres in the ventricular substance, and gelatinous nodules in the spleen and in the occipital lobe of the right cerebral hemisphere. In this remarkable case, the fungus-bodies were found in the sinuses of the neck, in the substance of the sarcoma-like growth of the jugular vein, in the tumour of the right auricle and ventricle, and elsewhere. In the fourth case, the illness began fourteen months before death, following the extraction of an upper molar; it consisted of swelling in the region of the right maxillary joint, swelling of the face, and subsequently of the neck; successive outbreaks of abscesses and sinuses in these regions; death occurred from extreme exhaustion. The yellow fungus-bodies were frequently obtained in this case from the sinuses during life. The record of the case is too elaborate to be given, even in outline; but it may be mentioned that there was, besides the extensive sinuses and granulation-centres of the face and neck, a prævertebral abscess extending from the basilar process of the occiput to the fourth dorsal vertebra, with osteomyelitic growths from all the bones, together with caries of both occipital condyles and of the right atlanto-axial. In the fifth case, a boy, the duration of illness was a year before death, when he had symptoms of hæmaturia; some months later, there were a new and much more severe affection of the same side, general dropsy, progressive swelling in the lower part of the back, and evacuation of pus from a cavity between the eleventh left rib. *Post mortem*, a large prævertebral cavity was found on the left side, partly retropleural at the level of the eighth, ninth, and tenth ribs, and partly retroperitoneal at the level of the last thoracic and the left kidney; also several perforations of the sacrum. There were numerous centres of actinomycosis in the muscles of the back, in the intercostal spaces, and in the left psoas; also in the muscular substance of the left ventricle, and in the upper end of the spleen.

We have little space to give an account of the able monograph which Professor Ponfick has drawn up on the basis of those five cases. It contains a chapter on the actinomycosis of the ox and of the pig, and a chapter on the general history of the fungus itself. A series of experiments were undertaken to test the communicability of the disease to the two portions of the dog and rabbit, and afterwards to the calf. Neither the tumour-tissue as a whole (with the fungus involved in it)

nor the pure fungus, appeared to be capable of growth in dogs or in rabbits, although various means of communication were tried. But, with calves, the introduction into the abdominal cavity of a number of tumour-fragments from the maxillary growths of the ox had the effect of establishing the same kind of new growth on the serous membrane at various places; and in one case, in which the tumour-particles were also inserted under the skin of the neck, there were centres of new growth in the neck, and miliary nodules in the lungs as well. One of the most interesting experiments yet remains to be done; viz., to try the effect of introducing the pure fungus into the calf. There is no doubt that the fungus is always present in the midst of the granulation-like tumour-structure; but its exact place in the pathology and causation of the disease yet remains to be determined. In the last section of the work, Dr. Ponfick reviews, with the skill and knowledge which distinguish the trained man of science, the occurrences of the disease in man, with a view to the establishment of its general characters and its affinities to diseases already known.

MEDICAL METEOROLOGISTS.

THAT there is an intimate connection between meteorology and disease has been long known; but, until accurate records both of meteorological events and of deaths, if not of disease, were kept, no valid comparison could be instituted between them. Since, however, the returns of deaths have been accurately classified and summarised at the General Register Office, and the use of photography has been invoked for recording the constant variations in the thermometrical and barometrical readings at Greenwich and elsewhere, the data for obtaining trustworthy results can be had. One of the chief difficulties in studying this question is the fact that we never meet with variations for a lengthened period, in one or two only of the elements of the weather, without changes in the others also. Thus, rapid changes in the height of the barometer are chiefly due to alterations in the direction or force of the wind; so that not only the influence of increased or diminished pressure has to be considered, but the more important element of change in the direction or velocity of the wind. Almost everyone's sensations will tell him, without looking at the vane, whether the wind blows from the east or the west; as, putting aside the difference of temperature, in this country easterly winds are usually much drier than those coming from the west. Again, as regards temperature, the effects on health vary to a great extent with the hygrometrical condition of the air, as great heat and moisture are very relaxing and depressing, whilst great heat with comparatively dry air is by no means so exhausting. In India, the regions of excessive heat are said not to be so unbearable or injurious as in the vicinity of the sea, where the air is almost saturated with moisture. Variations in the electrical state of the atmosphere also ought to be considered. As the effect of variations in all these conditions of the atmosphere cannot be worked out by one operation, it is necessary that a comparison should be made between the deaths of a given locality, and each of these conditions, that is to say, between deaths and variations in barometric pressure; the temperature, moisture, and electrical state of the air; the direction and velocity of the wind; the amount and average duration of rain; and the hours of cloud or sunshine. Now it is evident, when this has been done, that we only obtain results which are not absolutely reliable, as the modifying power of the atmospheric states not then under consideration have not been allowed for. Besides these, the greatest care must be employed in comparing a uniform population, at any rate as regards numbers, with the meteorological conditions under discussion. Some attention has been drawn to this aspect of the subject by a recent correspondence in our columns. No doubt some papers have been published, on which an immense amount of labour has been expended, which are worse than useless, because misleading, in consequence of the number of persons forming the basis of the inquiry having varied from time to time, whilst no allowance was made for these variations. Again, if the diseases or deaths amongst two populations be compared with the meteorological variations of the localities, and one should contain a much larger pro-

portion of persons in affluent circumstances and their servants than the other, the deductions will be to a certain extent erroneous. That this must be so, is well shown by the mean death-rates amongst the residents of the different wards in Glasgow. If deaths be compared with meteorological observations, a sufficient time must be allowed for the duration of the diseases set up, for instance, by cold weather, and the resulting death and registration.

It must not, however, be supposed that these remarks are made to discourage the tendency at present existing to make comparisons between atmospheric changes and disease, because the researches already made show that the effects of extreme heat or cold, or of fog, in a given population, can not only be calculated with considerable accuracy, but the diseases from which the excess of deaths will occur can also be predicted. Under these circumstances, it is satisfactory to know that there are about 150 meteorological stations in England and Wales, besides a large number in Scotland, where observations are regularly made with compared instruments and at corresponding hours. At very many of these, not only are ordinary observations made, but the estimated duration of rain daily in hours, the comparative humidity, the amount of sunshine, and the temperature of the earth are recorded, so that a very extensive field for work is now open to those who will give the necessary labour. This is the great difficulty, as very few amateurs are prepared to take up so laborious an inquiry, and the societies and others who receive the returns are not in a sufficiently good pecuniary position to discuss and elaborate them in such a manner as to bring out the causes of atmospheric variations. It is true that, owing to deaths and removals, many of the stations have been discontinued, when they had existed sufficiently long to be useful for this purpose; but even now there is a plethora of observations as compared with the discussing power. This must be altered, if meteorology is to become practically useful.

SYPHILITIC DISEASE OF THE HEART.

IN most of the cases of syphilitic heart-disease on record, death has occurred suddenly, and the nature of the disease has only been revealed at the necropsy. The following case, therefore, lately reported by Dr. Mannino in the *Giornale Italiano delle Malattie Veneree e della Pelle*, is of interest, from the fact that the diagnosis was made during life and verified after death. The chief points of the case are briefly as follows.

A man, aged 36, was admitted into the hospital at Palermo, under the care of Dr. Federici, and stated that he had always had good health until eight years before, when he contracted some venereal disease, which was followed by pains all over the body. These pains were relieved by iodide of potassium. Since that time, however, he had suffered every winter from an eruption on the lower limbs, and for a few months previous to admission he had had occasional attacks of dyspnoea. These attacks had become worse during the last few weeks; a troublesome cough also added to his distress; and he gradually became too ill to continue his occupation. On admission, the patient was very weak, and complained of difficulty of breathing. Cough was frequent, sometimes dry, and sometimes attended by expectoration. The belly was swollen; both lower extremities were oedematous, and covered with coppery stains, pustules and scaly patches, some being ulcerated. There was also enlargement of several groups of lymphatic glands. The cheeks, lips, and tip of the nose were blue; the great veins of the neck were prominent and turgid, while arterial pulsation was very weak. The skin of the trunk and neck was mottled, and the radial pulse imperceptible. The hands were cold. The heart's impulse was diffused, and the exact situation of the apex-beat could not be defined. The pulsation was visible also in the epigastrium to the left of the sternal line. The area of cardiac dulness was not increased, the lowest limit being the fifth intercostal space. At the apex, the first sound was obscure, and accompanied by a very weak blowing murmur. At the base and at the second right intercostal space, the *bruit* was somewhat louder, and the second sound weak, but clear; but the *bruit*

was much more distinct at the epigastrium than in any other situation. The percussion-sound was normal over the anterior part of the chest; but the posterior thoracic parietes were oedematous. Slight mucous *râles* were audible in places; elsewhere, the respiratory murmur was normal. The area of hepatic and splenic dulness was somewhat increased. The urine was scanty, acid, specific gravity 1025, and contained traces of albumen.

From these various symptoms, Dr. Federici diagnosed—first, that the right side of the heart was chiefly at fault, because the *bruit* was more distinct at the base and towards the right than at the apex, and still more distinct in the epigastrium; secondly, that the disease was not in the valves, but in the muscular structure of the heart, because of the rarity of primary disease of the right side of the heart, the normal area of dulness, and the peculiar and very feeble way in which the heart contracted, together with the great increase of tension in the venous system and the emptiness of the arteries. Lastly, he diagnosed syphilitic disease, from the presence of the syphilitic rash, etc. Hypodermic injections of mercury and large doses of iodide of potassium were prescribed. Soon after admission, the attacks of dyspnoea became gradually more and more severe, especially during the night; but the patient slept pretty well in a semi-erect position. The pulse was regular, but never perceptible at the wrist, and even in the larger arteries—the femoral, for example—was very weak indeed. The temperature was usually below normal. The *bruit* became fainter, but was always heard best at the epigastrium. The sputa became bloody, the dyspnoea more and more urgent; and finally death occurred somewhat suddenly, after a meal, nine days after the patient's admission into hospital.

Post mortem, the pericardium contained about 3 ounces of clear serum. The heart was globular in form, and weighed 393 grammes (nearly 14 ounces); the enlargement being due more to the left than to the right ventricle. On the anterior surface of the right ventricle was a large whitish patch of fibrous induration, eight centimètres long and three centimètres wide. On the left ventricle was a similar patch, of the size of a five-franc piece; and other smaller patches were scattered on the surface. A hard fibrous cord, studded with nodules, followed the direction of the interventricular septum. These parts resisted the knife, were pale in colour, and creaked on section. The tricuspid valve was healthy, except a slight swelling on one of the cusps. The endocardium was opaque in patches. The left ventricle was considerably dilated. The mitral valve was healthy. The endocardium of the conus arteriosus was white, indurated, and shining, like cartilage. The muscoli papillares of both ventricles were pale and shrunken. Under the microscope, the affected portions of the muscular substance showed the usual appearances of syphilitic myositis. The lungs were adherent in places, partly emphysematous, and contained numerous infarcts. The liver showed a patch of syphilitic interstitial hepatitis in an early stage. The spleen was rather hard and large, and its capsule opaque, and adherent in parts to the thoracic wall. The kidneys were highly congested. The other organs of the body, as well as the large blood-vessels, were normal.

SIR ERASMUS WILSON, the President of the Royal College of Surgeons, has been suffering from a severe attack of gastro-enteritis, but is, we are glad to be able to state, improving somewhat. The attack has been acute, and has much reduced the strength of the veteran and accomplished dermatologist.

THERE are evident signs of the advent of strong public feeling which will move the Government to abolish the present pernicious system of levying stamp-duty on patent medicines in such a manner as to give an immunity for any sort of misstatement as to their poisonous or non-poisonous character, and which allows their vendors to sell freely narcotic poisons without any of the precautions required under the Poisons Act. This week, again, a coroner's jury at Devonport returned a verdict of death from narcotic poison in a case in which a child three years old had expired suddenly, after taking successive

experimenters from vexatious prosecutions, and prevented unskilful persons from inflicting needless suffering on animals under the pretext of making scientific observations. There was no opposition to Dr. Pollard's position from the so-called humanitarian point of view, and several of the Liverpool papers, in commenting on the discussion, supported the conclusions which Dr. Pollard had formulated. From this we may infer that, in Liverpool at least, the majority of intelligent people are not deceived by the exaggerations and perversions which have been assiduously disseminated by the antivivisectionists during the last few years.

THE MCINTYRE MEMORIAL GIFT.

WE are able to record a generous and filial act of honour to the memory of the late Dr. McIntyre, who practised for forty years at Muthill, in Perthshire. His son, Dr. McIntyre, of Odiham, a well-known member of our Association, who still retains the old home, wishing to keep the memory of his father still alive, has, last month, sent £1,000 to the minister of the parish, to be invested in good securities, and the interest of it paid half yearly to twenty poor people in the parish, to be called "The McIntyre Memorial Gift." The deed, and the thought which prompted it, are alike honourable and pleasant to record. The useful, gentle, and laborious lives of rural practitioners more often deserve than receive such generous commemoration.

SMALL-POX IN SHEFFIELD.

A GOOD deal of alarm is felt in Sheffield in consequence of the occurrence of some cases of small-pox in the town. For some years no death has been caused in Sheffield by small-pox; but for several years prior to 1872 the town suffered very severely. In the ten years 1861-70, there were 1,206 deaths; and in the following two years, 1871-2, no fewer than 1,006 deaths were due to small-pox; so that it is but natural that there should be some anxiety lest the disease should again become epidemic. Since 1872 there have not been a dozen deaths from small-pox altogether. Until the end of last year, there was no accommodation for any infectious cases in Sheffield, except a few beds at the work-houses. This disgraceful state of affairs has since been partially relieved by the erection of a hospital with sixty-four beds for infectious cases by the corporation. This hospital was opened at the end of last year. Up to the present, there have not been many cases of small-pox since the first occurred; and, with one exception, so far as we can learn, they were all "modified" and mild in character. This exception was a young man who had never been vaccinated, and who died of confluent hæmorrhagic small-pox, contracted in a neighbouring town from a girl who had the disease in a "modified" and very mild form. For some time the domestics and others resident in the administrative block of the hospital have suffered from sore hands and other slight ailments, which point to some defect in the drainage of that department. Fortunately, nothing of the kind has been observed in the wards. Later on, one of the nurses was attacked with varioloid; and on Sunday week, Dr. Whitelegge, the resident medical officer, was taken ill. Next day, the cook was attacked; she had not only been vaccinated in infancy, but she had suffered from small-pox in childhood. As there is no visiting staff, the committee of management requested Dr. Hime, the Medical Officer of Health, to undertake the charge of the hospital until Dr. Whitelegge's recovery. Dr. Hime's valuable services during the emergency have been acknowledged by the thanks of the committee, and at the town council meeting it was stated by the chairman that Dr. Hime had exhibited "a noble example of self-sacrifice and humanity, and deserved the highest consideration from the council." As Dr. Hime would not undertake sole charge for an indefinite time, Dr. Sparrow has been appointed *locum tenens*. We learn that scarlet fever has broken out in the barracks at Sheffield, and that there is not proper means of isolation. The question has arisen as to whether patients from the barracks should be admitted to the Borough Hospital, and, if so, whether they are to be paid for, like other patients, and by whom. It would, indeed, be short-sighted policy were the

War Office to hesitate to pay for proper means of isolating infectious soldiers and their families. The Sheffield Borough Hospital is built in five detached blocks, and contains eight wards, with eight beds in each. The plans are those of Mr. S. L. Swan, architect, selected by Captain Douglas Galton, F.R.S., from among the competitors' plans. Dr. Thorne Thorne, of the Local Government Board, also inspected and approved of the site, and the plans were passed by the Board itself before lending money for its erection. It is simply astounding if, within a few months of the opening of such a hospital, it should be found that, on inspection, the drainage is defective.

PROTECTION OF INFANT LIFE.

THE Infant Life Protection Act is one of the legislative measures which will always stand largely to the credit of the BRITISH MEDICAL JOURNAL, which took a prime part in laying the foundations for that measure, and in bringing it into the sphere of practical politics. It is satisfactory to learn from the police that there is reason to believe that the operations of the Act have been most influential in stopping the pernicious practice of baby-farming; and it is satisfactory from time to time to see that appointed agents for carrying out this law do not altogether sleep, but keep a more or less vigilant eye upon those who attempt to break it. Mary Ann Walker, a married woman, has been sentenced, at Worship Street, under the Infant Life Protection Act, to six weeks' hard labour, for having had more than one infant under the age of one year for the purpose of nursing apart from their parents. This woman was a hardened offender, and just one of those which the law is intended to restrain and punish. For the evidence showed that she had in her possession three infants who were badly kept and dirty; and that she, her husband, girl, and two children all lived in one room together, and she did so because she desired to evade the Act, and was afraid of being found out. The rooms in neither house were registered, and the prisoner well knew the requirements of the Act, as she had before been summoned and punished with six months' imprisonment with hard labour for baby-farming.

OUTBREAK OF TYPHOID IN AN INFIRMARY.

WITHIN the past few days Leicester Infirmary has been the scene of an outbreak of typhoid fever, by which no fewer than ten of the dressers, nurses, and servants have been prostrated, and two others have died. Dr. Buck, the Medical Officer of Health, has instituted an investigation, from which it appears that all the victims had drunk raw milk. As the house-drains appeared to be in good condition, an inquiry was instituted. It was then found that the person who supplied the milk had been affected by similar symptoms, and that the owner of the farm from which it came had also suffered. The farm-premises were next inspected. It was ascertained that the well was situated near an overflowing and leaky cesspool, and that it stood near the end of the house-drain. An analysis of three samples was made, and it was shown that the water used for domestic purposes, and with which the milk-cans were washed, was quite unfit for use, being polluted with sewage. It was therefore inferred that the outbreak had arisen from the use of contaminated milk. The patients were, at the last report, progressing favourably.

EXCISION OF THE PYLORUS.

ON April 5th, at the Manchester Royal Infirmary, Mr. F. A. Southam removed the pylorus, along with nearly a third of the stomach, from a man aged 43, suffering from carcinoma of the parts which were taken away by operation. The patient had been under the care of Dr. James Ross for the relief of symptoms of pyloric obstruction. A hard and freely movable mass could be felt through the abdominal walls; and operative measures were determined upon at Dr. Ross's suggestion. The operation was performed by Mr. Southam, with the assistance of Mr. Whitehead, antiseptically, after the method adopted by Professor Billroth. Thirty-nine silk ligatures were found necessary for uniting the duodenum to the stomach. The shock succeeding the operation, which lasted one hour and a half, appeared to be very slight, and for twelve

examining the plaintiff, and in making inquiries before he signed the certificate as to his lunacy. For the plaintiff, it was urged that, even if he were under a delusion, he was not insane in the sense that he should be sent to an asylum, and that the defendant had not made reasonable inquiries about him. The jury gave a verdict for plaintiff, damages £520. We understand that the plaintiff intends proceeding against the medical men who jointly signed the certificate in question.—Abraham John Van Heekeren has been charged at the Sydney Central Criminal Court with attempting to procure a miscarriage on the person of a single woman, by means of a male catheter. It was urged in defence that the premature birth of the child was due to some pennyroyal taken with that intent by the advice of the girl's master, and that the charge against the accused had been trumped up to screen the real offender. The jury not being able to agree, after being locked up a whole night, the prisoner was liberated in his own recognisances and two sureties to appear when called upon.—Dr. J. R. Joseph of South Brisbane, we learn, from the *Australian Medical Gazette*, has been indicted for causing the death of a woman by carrying the contagion of puerperal peritonitis from another patient of his, both of whom he is said to have attended on the same day. The evidence, however, was found insufficient to justify a conviction. The fact of this prosecution, however, gives point to our leading comment on this subject in a former number of the BRITISH MEDICAL JOURNAL.

HYPNOTIC EXPERIMENTS.

M. CHARCOT objects to the statements made by M. Milne Edwards, concerning the danger of making hypnotic experiments on the human subject, adverted to in the BRITISH MEDICAL JOURNAL of February 25th (page 282). M. Charcot read the following statement, at the Académie des Sciences, in which he classifies the different conditions resulting from hypnotism practised on hysterical patients. 1. In the cataleptic state, the eyes of the patient are wide open; she looks fixedly, and is perfectly still; the limbs remain for a long time in the position in which they are placed. Reflex action of the tendons is absent, or very feeble; the intervals of breathing are prolonged. The patient is sometimes impressed by different suggestions made, and instigated to automatic movements. 2. In the lethargic state, the eyes are closed; the limbs are flaccid; the respiration hurried; there is considerable excitability—that is to say, the muscles have a tendency to contract when under the influence of a mechanical stimulus acting on the tendon, muscle or nerve. 3. In the somnambulistic state, the eyes are closed or half closed; the patient seems to be numbed. If the surface of a limb be slightly irritated, it becomes rigid; this rigidity does not cease when the opposed muscles are stimulated, which is the case in the lethargic state. The most varied and complicated automatic acts can be induced by admonishing the patient. On pressing the eyeball, the somnambulistic state is succeeded by the lethargic state.

VACCINATION IN NEW YORK.

Dr. SAYRE, of New York, has recently published in the *Herald*, of that city, some statistics about vaccination furnished to him by Dr. Whittlesey, who was in charge of the Nursery Hospital on Randall's Island for some years. The nursery hospital had from 2000 to 3000 inmates each year from 1851 to 1861. Prior to 1854 there were several cases of small-pox. In the three years, 1854-55-56, Dr. Whittlesey attended personally to the vaccination of every child on its admission, and no case of small-pox occurred during those years, although four children were brought there suffering from the disease. During the succeeding five years, the vaccination of new inmates was left to subordinates, who sometimes neglected the duty, with the result that there were forty-four cases of small-pox during that time, twenty of which originated in the institution. During this time, Dr. Whittlesey retained under his personal supervision the Refuge Hospital, and persisted in his plan of vaccinating every inmate on admission. There were 2440 inmates of the Refuge Hospital during that time, and not a single case of small-pox or varioloid occurred, notwithstanding the ad-

mission of some children suffering from the disease, thus exposing the inmates to contagion. Dr. Sayre, it may be remarked, was, thirty years or more ago, the resident physician or health-officer of New York, and collected a great deal of statistical information about vaccination and small-pox at that time, on which he bases his strongly expressed opinion that "vaccination is a positive preventive of small-pox."

SCOTLAND.

ALARMING OCCURRENCE AT INVERNESS.

A SERIOUS occurrence took place, on the 7th instant, at Inverness, where over a hundred persons were suddenly seized with violent sickness and vomiting, and showed all the symptoms of having been poisoned. It was soon discovered that all had been eating hot cross buns, bought at a particular shop. The baker himself, his family, and his assistants, had all suffered more or less. Steps were taken to stop the sale of the buns, as all the circumstances pointed to their being the cause of the mischief. This was done, and the remainder of the stock was seized by the authorities for the purpose of analysis. It is suspected that the poison had found its way into the spices used in flavouring the buns. Altogether, one hundred and forty persons suffered; but no fatal results followed. Portions of the buns and spice have been forwarded to Dr. Littlejohn of Edinburgh, for analysis; and, until his report is received, the cause of the occurrence must be merely conjectural, although all the symptoms of the sufferers point to some irritant poison.

GLASGOW UNIVERSITY COURT.

At the meeting of the Glasgow University Court held last week, the resignation of Dr. Hector C. Cameron of his examinership in surgery and clinical surgery was accepted. There were several applications for the vacant appointment, to which Mr. Walter Pye of London was unanimously elected.

EDINBURGH VETERINARY COLLEGE.

THE appointment of Professor of Physiology in the Dick Veterinary College having become vacant through the translation of Dr. Cunningham to Dublin, the Town Council of Edinburgh on Tuesday elected Dr. James (recently appointed Assistant-Physician to the Royal Infirmary) to the Chair of Physiology in the College. The other candidate, Mr. Johnson Symington, M.B., had previously withdrawn his application, so that there was no contest.

UNIVERSITY OF EDINBURGH.

At a recent meeting of the University Court, a resolution was adopted which is of some importance to students who propose studying and graduating in the University of Edinburgh. It was resolved "to apply to Her Majesty in Council for approval of an alteration of Ordinance No. 5, Edinburgh No. 2, under which attendance on the classes of practical physiology, practical pathology, and practical materia medica would be made imperative. The instruction accepted as equivalent to a course of practical materia medica would in future be apprenticeship for not less than two years in compounding and dispensing drugs, under a registered medical practitioner or a member of the Pharmaceutical Society of Great Britain; the position of practical midwifery instructor in the regulations would be altered, and the number of subjects, in which extra-academic teaching might be taken, would be increased from four to five; these alterations to apply to students who commenced their medical studies after session 1881-82." The alteration proposed (and especially that referring to materia medica and midwifery), have, within twenty-four hours of their publication, become the subject of hostile criticism in one of the public prints, in a letter signed by a member of the General Council. At the same meeting, it was resolved, on the recommendation of the Senatus, to agree to the discontinuance of the fee of £1 is. which the Professors of Clinical Medicine were authorised in 1876 to charge for their tutorial class.

The appointment of Mr. Arthur Thomson, M.B., as principal demonstrator of anatomy, by Professor Turner, was approved. He succeeds Dr. D. J. Cunningham, now Professor of Anatomy in the Royal College of Surgeons, Dublin. For the preliminary examination, held lately, over 400 candidates appeared; for the first professional examination about 200; and for the second professional examination about 280 appeared, this large number being doubtless owing to new regulations that allow a candidate to appear for two subjects at one time in the second professional examination.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General, for the week ending April 1st, it appears that the death-rate in the eight principal towns was 22.0 per 1000 of estimated population. This rate is 1.3 above that for the corresponding week of last year, but 0.5 below that for the previous week of the present year. The lowest mortality was recorded in Leith—viz., 15.6 per 1000; and the highest in Paisley—viz., 30.3 per 1000. The mortality from the seven most familiar zymotic diseases was at the rate of 3.1 per 1000, or 0.7 below the rate for last week. Whooping-cough was the most fatal epidemic, and was most prevalent in Glasgow. Acute diseases of the chest caused 115 deaths, or 1.1 above the number registered last week. The mean temperature was 44.4°, being 1.7° above that of the week immediately preceding, but 8.8° above that of the corresponding week of last year.

IRELAND.

AN outbreak of scarlet fever recently took place in Athy union; but, fortunately, the epidemic was of a mild character, as in every instance the parents refused to send their children to hospital.

THERE will be an election of a professor of ophthalmic and aural surgery in the Royal College of Surgeons in Ireland, in room of Mr. H. R. Swanzy, who resigned the chair prior to his appointment as an examiner in the same subject for the licence of the College, on the 8th of May last.

ROYAL UNIVERSITY OF IRELAND.

Two of the members of the Senate of this University—the Rev. Gerald M. H. D. L., President of the Catholic University of Ireland, and Dr. Redfern, Professor of Anatomy and Physiology in the Queen's College, Belfast—have, it is stated, resigned their seats on the Senate, in order to qualify themselves as candidates for fellowships in the new university. In their stead, the branches of science two persons of considerable Fellowships of an university could hardly be selected. The election of Fellows will take place next week.

THE MEDICAL SOCIETY OF LONDON ON THE 15TH OF APRIL 1882.

THE President and Fellows of this College have agreed that Dr. P. H. Sinclair, who has been the principal officer of the Royal College of Midwifery in the Royal Free Hospital, be elected a member of the Society. The election of Dr. Sinclair will not be a permanent one, but will be for a term of years, being three years, and will be subject to the election of the Society.

A notice of the death of Dr. P. H. Sinclair, who has been the principal officer of the Royal College of Midwifery in the Royal Free Hospital, is given in the *British Medical Journal* of the 15th of April 1882.

At the meeting of the Society on the 15th of April 1882, the following resolutions were passed:—That the Society do not accept of the proposal of the Council of the Royal College of Physicians to elect Dr. P. H. Sinclair a member of the Society; and that the Society do not accept of the proposal of the Council of the Royal College of Physicians to elect Dr. P. H. Sinclair a member of the Society.

SELECT COMMITTEE ON THE CONTAGIOUS DISEASES ACTS.

At the meeting of the Committee on Tuesday, the 28th March, Mr. Wheeler was recalled and further examined by Mr. Fowler, Mr. Osborne Morgan, General Burnaby, and others. He was particularly questioned as to a certain "leaflet" signed by him, and very extensively circulated under the auspices of the Association for the repeal of the Acts. In it the following passage occurs with reference to the form of voluntary submission signed by many women before they attend the examination:—"Hundreds of terrified girls have signed this crafty form under the threat and terror of imprisonment." At the previous sitting of the Committee Mr. Wheeler's attention was called to this statement, and he was invited to authenticate it by naming one single instance in which such injustice had been committed; excluding, of course, the case then under consideration, viz., that of Caroline Wybrow. His reply was, that at that moment he was unable to give any such instances, but would be ready at the next meeting of the Committee to mention certain definite cases.

Accordingly, the very serious nature of his allegation was again pointed out to him, and he was requested to explain it by reference to some actual facts. After some time, he said he could only refer to the statements on which his opinions were based, and he specially mentioned the evidence of Mr. R. B. Williams before the Royal Commission in 1871; he was, however, not prepared with details, being further pressed to either justify or withdraw this vague charge, he refused; but said that before the next meeting of the Committee he would endeavour to collect evidence in support of his statement, and if he found he had made a mistake he would modify the objectionable paragraph.

The facts of the case of Caroline Wybrow, already alluded to, are very briefly these. For a considerable time she had been known to the police as the habitual night-visitant of the houses of prostitutes and soldiers, in brothels and on the lines at Chatham. In February 1875 she was ordered by the police to attend for examination, and signed the form of voluntary submission. She refused to be examined, and was thereupon committed to the Lock Hospital, under form L, by the examining surgeon, who concluded from her manner that she was conscious of having disease, but was unwilling, from shame, to disclose her condition. She was then subjected to a superficial examination, without a speculum, she was found to be suffering from a copious thick discharge, having all the appearance of a gonorrhoeal one. She was then committed to the Lock Hospital, and was there detained in the ward for some time. It is to be feared that an undoubted error of judgment was committed in detaining the girl in hospital, instead of summoning her to the police station, where she might have been examined. But in so doing the surgeon acted with the best intentions, preferring to spare the girl the shame and pain of an appearance in a police court on such a matter. The error has since been admitted, and the police concerned have received a letter from the War Office, stating that the girl was not to be detained in hospital, but was to be sent to the police station, where she could be examined. The whole of the facts bearing on the case will be published without delay, so that the public may form its own judgment in the matter.

Mr. Wheeler admits that it took ten months from the time of the occurrence to get up the case, and it was a whole year before the statutory provisions of the girl and her mother were forwarded to the House of Commons. The case had occurred ten years ago, and it was practically the only case in any way made out by the operation of the Acts, it may be presumed they have no chance of being made out in the future.

The Rev. H. J. Davies, Editor, *Vindicator*, St. Michael's, W. was next called and examined by Mr. Fowler. The Rev. H. J. Davies was a member of the Association for the repeal of the Acts, and he was particularly questioned as to public immorality in the streets of Woolwich, he stated that there were now very many women in the streets of Woolwich.

In the course of the examination of Mr. Davies, it was found that he was a member of the Association for the repeal of the Acts, and he was particularly questioned as to public immorality in the streets of Woolwich, he stated that there were now very many women in the streets of Woolwich.

It is to be feared that an undoubted error of judgment was committed in detaining the girl in hospital, instead of summoning her to the police station, where she might have been examined. But in so doing the surgeon acted with the best intentions, preferring to spare the girl the shame and pain of an appearance in a police court on such a matter.

which enabled sin to be committed with impunity. Being reminded that this was most powerful testimony to the hygienic success of the Acts, he said that he would not say that the statement by saying that sin could be committed with impunity "to a certain extent"—but to what extent the reverend witness did not define.

He handed in a report obtained from the secretary of the London Lock Hospital, from which it appeared that out of 537 patients under the Acts admitted in 1881, only 24 were reclaimed, *i.e.*, a little over 5 per cent.; while, out of 642 voluntary patients, 272 were rescued, or rather more than 40 per cent. From this he argued as to the "hardening" effect of the Acts, and the great difficulty in obtaining any good moral results with the women sent in under its provisions.

But it is not denied that there is much greater difficulty in dealing with women sent in under the Acts, for these reasons. In the first place, the great majority of them belong to the lowest and most ignorant class of the population. On the other hand, the voluntary patients, who from the very fact of their being such, show a desire for their physical welfare, belong to a totally different category. Many, no doubt, are prostitutes, but they mostly belong to a superior class, while very many are dressmakers, shop-girls, servants, and such like, and numbers of respectable married women are admitted to the "voluntary" wards in the course of the year. Naturally, with such as these any efforts at reclamation are much more successful. Moreover, the figures 537 do not represent that number of distinct patients, as many of the women sent in under the Acts are admitted several times in the course of the year, and on each occasion such a one would be entered as a separate case. However, it was decided to call as the next witness the Rev. Flavel Cook, Chaplain to the London Lock Hospital, who will, no doubt, explain these points more fully.

Mr. Baker referred to a petition from Woolwich for the repeal of the Acts, signed by the large number of 8,000 persons,—the total population of the district subject to the Acts being about 40,000. Signatures to this petition were collected by his mission women and others. He himself signed it, and he was the only Church clergyman who did so. Nor was it signed by one single magistrate, or member of the Local Board. He was not acquainted with the views of the present Members of Parliament for Greenwich on the subject of the Acts.

The reverend gentleman stated positively that he had never heard of any case in which the police had acted harshly in carrying out the Acts, and from his position he could hardly fail to know if there had been such. Not only had no respectable women been molested, but he was not aware of a single instance even of undue interference with a prostitute on their part.

COLLECTIVE INVESTIGATION COMMITTEE.

ON THE COLLECTIVE INVESTIGATION COMMITTEE'S MEMORANDUM ON CHOREA.

SIR,—The criticism which Dr. Donkin has offered on the memorandum on chorea calls for some reply. The paper in question was written by Dr. Stephen Mackenzie, on behalf of the committee, and was presented to the committee for revision and criticism before it was published. Dr. Sturges, who is a member of our committee, was present when the paper was under discussion; he had previously pointed out the necessity of distinguishing between well-pronounced articular and equivocal rheumatism in this inquiry, and I was under the impression that his requirements had been met; I find, however, that he also objects to the passage to which Dr. Donkin takes exception. The acceptance by the committee of incomplete evidence of rheumatism in these cases exists only in appearance, but not in fact.

If a general inquiry were made whether the patient had ever suffered from rheumatism, it is certain that, as Dr. Sturges pointed out, both cases of well-recognised rheumatism and also those with "vague pains and feverishness," would alike be returned. The committee have taken the precaution, therefore, of asking for returns to be made under the head of "Rheumatism" in three classes, *viz.* :—

Rheumatism—With distinct joint affection. Date.

" With fever. Date.

" With vague pains. Date.

When we are in possession of our returns, it will, therefore, be possible to separate all those cases with only "vague pains," and exclude them from the distinctly rheumatic group. Dr. Donkin may rest assured that the committee will not regard every case of "vague pains" occurring in children as rheumatic; but it will be necessary to judge

each case on its own merits. Thus, I suppose Dr. Donkin would scarcely refuse to admit "vague pains with feverishness" to be rheumatic when repeatedly occurring in the case of a child who, previously to an attack of chorea, had developed well-marked heart-disease, and who had a strong family history of rheumatism. Such a case as this is no imaginary one; I have seen many like it. Indeed, the very common opinion that "vague pains with feverishness" in children are often rheumatic, has been arrived at quite apart from the question of chorea, from the frequent occurrence of these symptoms in those children who develop heart-disease, and have a strong family history of rheumatism.—Yours faithfully,

F. A. MAHOMED,
12, St. Thomas's Street, Southwark, S.E., Hon. Secretary.
April 8th, 1882.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION: FIFTIETH ANNUAL MEETING.

THE Fiftieth Annual Meeting of the British Medical Association will be held at Worcester, on Tuesday, Wednesday, Thursday, and Friday, August 8th, 9th, 10th, and 11th, 1882.

President: BENJAMIN BARROW, F.R.C.S., Consulting-Surgeon to the Royal Isle of Wight Infirmary.

President-elect: WILLIAM STRANGE, M.D., Senior Physician to the General Infirmary, Worcester.

An Address in Medicine will be delivered by W. F. WADE, F.R.C.P., Physician to the Birmingham General Hospital.

An Address in Surgery will be delivered by WILLIAM STOKES, M.D., F.R.C.S.I., Professor of Surgery in the Royal College of Surgeons, Ireland.

The business of the Association will be transacted in Eight Sections, *viz.* :—

SECTION A. MEDICINE.—*President:* Thos. Clifford Allbutt, M.D., F.R.S. *Vice-Presidents:* George W. Balfour, M.D.; William Henry Broadbent, M.D.; G. H. Philipson, M.D. *Secretaries:* Edwin Rickards, M.B., 14, Newhall Street, Birmingham; H. Ashby, M.D., 13, St. John Street, Manchester.

SECTION B. SURGERY.—*President:* Augustin Prichard, F.R.C.S. *Vice-Presidents:* T. W. Walsh, F.R.C.S.; Reginald Harrison, F.R.C.S.; T. H. Bartleet, M.B., F.R.C.S. *Secretaries:* F. E. Manby, F.R.C.S., 10, King Street, Wolverhampton; Richard Clement Lucas, M.B., F.R.C.S., 18, Finsbury Square, E.C.

SECTION C. OBSTETRIC MEDICINE.—*President:* William Leishman, M.D. *Vice-Presidents:* Henry Vevers, M.R.C.S.; J. G. Sinclair Coghill, M.D.; Arthur W. Edis, M.D. *Secretaries:* C. J. Cullingworth, M.D., 25, St. John Street, Manchester; Tom Bates, L.R.C.P., Worcester.

SECTION D. PUBLIC MEDICINE.—*President:* Alfred Carpenter, M.D. *Vice-Presidents:* Alfred Hill, M.D.; Horace Swete, M.D.; E. T. Wilson, M.B. *Secretaries:* Geo. Haynes Fosbroke, jun., M.R.C.S., Bidford, Redditch; Francis Edward Atkinson, L.R.C.P., Settle, Yorkshire.

SECTION E. ANATOMY AND PHYSIOLOGY.—*President:* George M. Humphry, M.D., F.R.S. *Vice-Presidents:* S. S. Roden, M.D.; Frank Payne, M.D.; Gerald Yeo, M.D. *Secretaries:* J. B. Haycraft, M.D., Mason's College, Birmingham; James Shuter, M.B., F.R.C.S., 58, New Broad Street, London.

SECTION F. PATHOLOGY.—*President:* J. Hughlings Jackson, M.D., F.R.S. *Vice-Presidents:* W. R. Gowers, M.D.; H. T. Butlin, F.R.C.S.; Wm. Smith Greenfield, M.D. *Secretaries:* Sidney Coupland, M.D., 14, Weymouth Street, London; F. Treves, F.R.C.S., 18, Gordon Square, London.

SECTION G. OPHTHALMOLOGY.—*President:* James Vose Solomon, F.R.C.S. *Vice-Presidents:* David Everett, F.R.C.S.; F. Mason, M.R.C.S.; Edwyn Andrew, M.D. *Secretaries:* Geo. Edwin Hyde, L.R.C.P., Worcester; J. A. Nunneley, M.B., 22, Park Place, Leeds.

SECTION H. OTOTOLOGY.—*President:* W. Laidlaw Purves, M.D. *Vice-Presidents:* Geo. P. Field, M.R.C.S.; A. H. Jacob, M.D.; E. Cresswell Baber, M.B. *Secretaries:* J. J. Kirk Duncanson, M.D., 22, Drumshugh Gardens, Edinburgh; Peter McBride, M.D., 20, Alva Street, Edinburgh.

Honorary Local Secretaries: George W. Crowe, M.D., Shaw Street,

injurious effects produced by electro-galvanism were pointed out; and the proper management of this class of cases, so as to do what was best for the patients, and discourage the tendency of parents to resort to quackery were dwelt upon.

2. Dr. Treutler read notes of a case of Spinal Meningitis from Injury.

3. Mr. Mouloughby Furness showed an adult man presenting the symptoms of Pseudo-hypertrophic Paralysis.

4. Dr. Mackey read a paper on the Treatment of Whooping-Cough, instancing one case in particular which yielded to morphia pushed to the stage of advanced narcotism.

5. Mr. Bernard Roth read a paper on the Treatment of Lateral Curvature of the Spine, chiefly by means of movements according to prescribed exercises.

6. Mr. Noble Smith showed some cases of Caries of the Vertebrae under treatment by means of Steel Supports.

Investigation of Diseases.—In the course of the meeting, Dr. Moore drew attention to the work of the London Committee for Investigating Disease, and recommended the appointment of a local committee to assist in the work: which committee was subsequently elected.

The Next Meeting of the East Sussex District will be held at Hastings in May. Dr. Trollope will preside.

CORRESPONDENCE.

ACONITE AND ACONITIA.

SIR,—I am surprised that in recent discussions on aconite little stress has been laid on the fact that the term aconitia, if unqualified, is meaningless. What is aconitia? Of course we are told in works on materia medica that it is an alkaloid obtained from *Aconitum napellus*; but is this the case? Commercial aconitia is certainly not a simple substance, and is probably a mixture of several alkaloids. Professor Binz of Bonn, at the last International Medical Congress, stated that there was no definite chemical compound met with in commerce under the name of aconitia, the various preparations obtained in England, France, Switzerland, and Germany differing so much in character that any results arrived at by experimenting with them were applicable only to the particular sample employed, and not to aconitia in general. Flückiger and Hanbury, in the last edition of the *Pharmacographia*, state that commercial aconitia is a mixture of aconine, pseudaconine, picroaconine, and other bodies. Wright apparently recognises three alkaloids obtained from different species of aconite—aconine, from *Aconitum napellus*; pseudaconine, from *Aconitum ferox*; and japaconine, from one or more Japanese species. What is the source of our aconitia? Is it obtained from *A. napellus*, from *A. paniculatum* (which both Fleming and Christison found to be inert), from *A. ferox* (the Bish poison), or from the Japanese species? Is our "aconitia" aconine proper, or is it pseudaconine, or japaconine, or a mixture of all three? Messrs. Cleaver and Williams recently stated, at the Pharmaceutical Society, that extract of aconite is frequently made from *Aconitum paniculatum*. Mr. Holmes finds that a large proportion of the aconite-root now sold as *Aconitum napellus* is in reality Japanese aconite, and he has every reason to believe that *Aconitum ferox* has been used in this country, even during the last three or four years, in the preparation of the alkaloid.

It is generally stated that English aconitia is at least seventeen times as active as the German, the French being intermediate in power; but this classification into English, French, and German is clearly unreliable and unscientific. Professor Plügge of Gröningen, in a recent paper, stated that he had investigated the physiological action of seven different kinds of commercial aconitia, and considered that they might be arranged in the following order of decreasing activity: 1. Petit; 2. Merson; 3. Hottot; 4. Hopkin and Williams; 5. Merck; 6. Schuchart; 7. Friedländer (Trommsdorf of Erfurt). This list is obviously incomplete, no mention being made of Duquesnel's crystallised aconitia, which is said—see his paper—to be more active than any of the amorphous varieties. Plügge finds that Merck's aconitia is from twenty to thirty times as active as Friedländer's, whilst Petit's is eight times as active as Merck's.

This is not a mere matter of curiosity, but is of considerable practical importance, several cases of poisoning having occurred from the substitution of one kind of aconitia for another. M. Desnos, in a recent number of the *Bulletin de Thérapeutique*, records the case of a gentleman, the subject of aortic disease, who suffered from severe anginal attacks. With the view of affording him relief, his medical advisers prescribed Hottot's granules of aconitia. The chemist, to whom the prescription was taken, substituted for the special aconitia which

had been ordered an aconitia which he happened to have in stock, the source of which is not known, but which was probably of German origin. Gradually, by the advice of the physicians, the dose was increased to four granules a day. This quantity was taken daily for several days, with marked relief to the anginal attacks, and without the production of disagreeable symptoms. At last the chemist, having exhausted his original stock of aconitia, went to Hottot's for a further supply. On the following day the patient, after taking the usual number of granules—which, unknown to him, had been prepared with the new aconitia—suddenly presented alarming symptoms of aconitia-poisoning: pains in the head, vertigo, loss of voice, great muscular weakness, pallor of the face, anxiety, weakness of the pulse, failure of the heart's action, tendency to fainting, coldness of the extremities, and profuse perspiration. The respiration became feeble, irregular, short, and sighing. The patient was, in fact, in a most critical condition, and it was many hours before he was out of danger. In another case, which was investigated by Professors Plügge and Huisinga, and published in the *Berliner Klinische Wochenschrift*, the patient was killed by the substitution by the chemist of Petit's nitrate of aconitia for Friedländer's, which the physician had intended to prescribe, but had neglected specifically to indicate. In Germany, three cases of poisoning by French aconitia were reported by Busscher. The doses which occasioned the toxic symptoms were, respectively, four-tenths of a milligramme (about 1-160th of a grain), one and a half milligrammes (about 1-45th of a grain), and four milligrammes (about 1-15th of a grain). In the last case death occurred. The dose had been ordered by a physician who was under the impression that the French and German aconitias were the same.

There is evidently a general impression that aconitia is rarely prescribed for internal administration, and it may be as well to consider what grounds there are for this opinion. Not very long ago the New York Therapeutical Society was engaged in considering the best mode of administering this remedy, and suggested the following formula: Aconitia (Duquesnel's) gr. 1-10; h; glycerine, alcohol, aa 5j; peppermint water to 5ii. Dose, a teaspoonful. In the late Professor Gubler's *Leçons de Thérapeutique*, published only two years ago, he says of aconitia, "C'est un médicament d'une très grande puissance, et certainement appelé à beaucoup d'avenir." He speaks of its effects on trigeminal neuralgia as being truly marvellous. In the second edition of the *Commentaires Thérapeutiques du Codex*, the case is recorded of a man on whom Nélaton had performed resection of all the branches of the trigeminal nerve for neuralgia without benefit. The patient was in despair, and attempted suicide. It was then proposed to remove the Gasserian ganglion; but, as aconitia had not been tried, it was determined to see first what it would do. The patient began with fourteen of Hottot's granules a day, equivalent to seven milligrammes, or about a fifth of a grain. He obtained almost immediate relief, and the good effect was kept up by taking from eight to ten granules daily. The patient was so free from pain that he said he felt as if he was in paradise, and declared that nothing that had ever been done for him had given him such thorough and lasting relief. Gubler considers that it is equally beneficial in other painful affections, and says that it has been employed with success in irritating and painful affections of the circulatory system and respiratory tract. He especially commends it for asthma, paroxysmal cough, palpitation, angina pectoris, and for the relief of the pain of acute rheumatism and gout. In all these cases it is evidently intended that the drug should be given internally, for, he says, it is not wise to begin with more than half a milligramme—about a thirty-second of a grain—of amorphous aconitia, twice a day; but it may be gradually increased to two, four, or even five milligrammes. Dumas considered that aconitia is useful, not only in neuralgia, but in many catarrhal affections. He finds that it is readily tolerated if methodically administered, and that it may be given for a long time without fear of the effects of accumulation. Dr. Oulmont, in a paper in *Le Progrès Médical*, in December 1879, advocates the use of aconitia, not only in neuralgia, but in dental caries, otitis, and paraplegia. He gives details of four cases of acute rheumatism in which aconitia was given with marked benefit. Acute rheumatoid arthritis, he finds, may also be treated successfully by the same remedy. In four individuals, to whom it was administered in doses of half a milligramme *per diem*, increased gradually to one and a half milligramme, a cure was effected—in one instance in eight days, and in another ten days. He says it is sometimes convenient to give aconitia hypodermically, in doses of half a milligramme of the crystallised alkaloid once or twice a day. As an external application for the relief of neuralgia and old rheumatic pains it has been recommended by Turnbull, Headland, Fuller, and others, and also by Tilt as a sedative application in uterine affections.

Much more evidence of a similar nature might be adduced as to the

anæsthetic in this part of the country was during the administration of ether, and then, as with all such misadventures, it was impossible to determine what part fright, prior to, or shock during the operation, played in producing the fatal result. We know that many deaths took place in minor operations prior to the introduction of chloroform—conspicuously the two fatal cases to whom “Simpson of Edinburgh,” was to have given for the first time for the purpose of anæsthesia in these isles the present despised chloroform, but, happily for its introduction, “Simpson” was prevented from attending, and the deaths were not credited to chloroform.

And this leads me to remark what uniformly good results the Edinburgh school obtain with chloroform; and brings to my mind the conclusion that its danger lies not in its administration, but rather in the manner of its administration. I have seen practitioners take an hour to get a patient under its influence, and the same with methylene. For short operations I usually throw about one ounce of methylene into a leathern mask, lined with flannel, containing a sponge or absorbent wool; and for long operations, such as ovariectomy, use Junker's apparatus, and have had better results, as regards vomiting and head symptoms, with methylene, than with any other anæsthetic, not excepting dichloride of ethylene; indeed, ovariectomies take methylene well. The worst fright I have had with methylene was in a private case, when a scion of a noble house, contrary to orders, indulged in a full meal prior to operation. The mask had been taken off the mouth for at least a minute, when he suddenly became syncope. We suspended him by his heels at once, and after a time (it seemed so long) he came to; the operation was completed. A month afterwards, I had to give him methylene again, when it was taken without a bad symptom. It leads me to think, in connection with other cases, that a loaded stomach not only embarrasses the thoracic viscera, but that then the nerve-centres and ganglia of the tripod of life are particularly susceptible to the paralyzing influence of an anæsthetic and their resisting nerve force is at a low ebb.

One would expect that the greater number of deaths would occur in connection with that anæsthetic that is most frequently administered. Chloroform is almost universally used by country practitioners; and methylene for dentists, at any rate, in this town.

In conclusion, I believe any or every anæsthetic to be very dangerous in the hands of an unskilled or timid operator. As regards statistics, it is evident that the relation of deaths to the number of administrations require modifying, as the *Lancet*, in a recently published leader, gives it as one in 2,500 for chloroform. Now, conjointly, at the South Devon Hospital and Royal Eye Infirmary, I find, with Mr. H. Square's help, that chloroform has been given 11,000 times, and methylene 6,000 times, or, in a succession of years, chloroform or methylene have been given 17,000 times without a death. As regards the case reported in this week's JOURNAL from Carlisle, the death was from apnoea, caused by the pressure of the bronchocele, and not from chloroform, as will probably be quoted, “Another Death, etc.” Mr. Wilson, who reports the case, states that chloroform was not to blame.

It must be remembered that, in many of the early cases of deaths from chloroform, the patients were in the sitting posture; notably, the first case of a woman at Newcastle, quoted by a contemporary this week, and then narcosis was produced in half a minute, conditions quite contrary to our notions of safety and not at all a fair test.

Two deaths are reported this week from syncope during tooth extraction without any anæsthetic having been administered!—Yours faithfully,

AUGUSTUS H. BAMPTON, M.D., M.CH., late
Chloroformist, etc., South Devon and East
Cornwall Hospital, Plymouth.

2, North Devon Place, Plymouth, March 18th, 1882.

SIR,—Dr. Ormsby denies having objected to the use of chloroform in any case. His first letter is on record. He concedes what I claimed for chloroform—its superiority in obstetric surgery. It does not always kill by its direct action on the heart, and numerous recorded cases show respiration to have ceased whilst the pulse continued at the wrist. That it oftener affects the heart primarily, I admit; but I deny that it always does so. It diminishes blood-pressure, and herein lies its safety. Supposing we give ether to a person nearly seventy, with granular contracted kidney, and senile atrophy of the brain; and we use Esmarch's bandage on the lower extremity—what should we expect? The very method of giving ether shuts out oxygen, and causes effete products to accumulate in the blood, which alone increase blood-pressure. Esmarch's bandage determines additional blood to the viscera, and ether excites to increased pressure. I maintain that, under the above conditions, the combined effect would be a *commotio cerebri*, that must be fatal in many cases. Mr. Hutchinson records a death from coma after giving ether to an old man who four months previously took

ether without a bad symptom for a more protracted operation (BRITISH MEDICAL JOURNAL, 1873). Another case is recorded (BRITISH MEDICAL JOURNAL, 1880, page 537), where ether produced such alarming symptoms that chloroform was substituted with the happiest results. I firmly believe that death is constantly happening after the use of ether; and when we hear of cases never recovering after the effects of the operation, it is legitimate, on physiological and pathological grounds, to attribute it, in many instances, to the ether. Meningeal hemorrhage will produce coma, and necropsy only can reveal it. Mr. Lister has shown, and Mr. Holmes concurs, that only 4.5 per cent. of chloroform evaporates from the usual quantity thrown on to a cloth, and that the quantity poured on is a matter of secondary importance. Special inhalers, then, are contrivances for economising chloroform, and not for regulating dilution. Dr. Ormsby's assertion about the haphazard use of chloroform falls to the ground in argument. To argue from existing statistics is a patent logical fallacy. Many country surgeons operate oftener than ordinary hospital surgeons; and experience in most parts of England and Wales has convinced me that chloroform is almost always used, but we have no records of country practice. Syme, Fleming, Holmes, and Hutchinson, had not a death in their practices up to 1873. A man may be fortunate with ether as with chloroform, and conversely; but we must have the experience of the whole, and not of a part, of the profession in England if we are to argue effectually from statistics. If we knew how many thousand times chloroform is used every week, we should not be so ready to alarm ourselves about a fatal accident. Could Lister claim for carbolic acid the same immunity from danger, it would, indeed, be well for his deserved fame.

To confine ourselves to the use of one anæsthetic in every case would, in the present state of science, not only be unscientific, but unpardonable. I give chloroform under the following conditions:—To children under six months and to persons over sixty years of age; to persons in whom I suspect granular contracted kidney, or degeneration of arterial walls or nervous centres; in operations about the face where a cautery is used or a candle necessary, as in cottages; and, above all, in every obstetric difficulty. At present I would use ether in other cases—i.e., when healthy tissues counteract evil effects of ether, but I am not sure yet if ether does not interfere with early union, consequent on the deposition of effete products in the blood and tissues. —I am, yours, etc. JOHN LOWE.

Lichfield, March 25th, 1882.

SIR,—Exact statistics in this controversy seem to be impossible at present; but, as an approximation to such knowledge, I may quote our experience at the Liverpool Northern Hospital. During the last six years ether has been almost exclusively used, given by means of Ormsby's inhaler; chloroform very occasionally. Allowing, as a low average, ten cases requiring an anæsthetic per fortnight, in one of which chloroform is the agent used, that will give us—ether, 1,404 cases; chloroform, 156. For the sake of argument, I am very much understating the number of times ether is used, and very much overstating the chloroform numbers, as the house-surgeon counts his chloroform cases by units at long intervals. And with what result? We have had one death from ether (1 in 1,404), and one death from chloroform (1 in 156), besides several cases of alarming syncope during its administration. The mode of the death from ether was as follows. The subject was an out-patient, who came up for a minor operation, was told to return at a certain hour, and to be sure not to take his dinner. He was anæsthetised, vomited, and, before his head could be turned to one side, had made an effort at inspiration, and filled his bronchi with the vomit. On *post mortem* examination, the entire bronchial system of tubes was found blocked with food in a state of small division. Death was from suffocation, and might have occurred equally in a drunken man, or from any anæsthetic. This case did not in the slightest degree shake the confidence of any of us in ether.

One objection to its use I have, viz., that it is so powerful a stimulant to the heart's action that, after an amputation, for example, we have to tie a much larger number of small vessels than I remember seeing done when I was a student in Edinburgh. This is a disadvantage which may be considered an argument in its favour.

There are some cases in which ether is contraindicated, such as operations on very young children, operations on the jaw, or vessels of the neck, and in which chloroform or ethylene must be used. There is, therefore, no intention of abolishing chloroform, which will always remain also the more convenient to carry. But where this is no object, an agent which allows the operator to forget that his patient is anæsthetised, and devote his whole attention to the operation, is surely worth any little extra trouble in administration. It is better to have chloroform and ether to use than chloroform alone, as the latter's

inquest held on the body of Hannah McCarthy by the coroner for East Middlesex, who died from the effects of lead poisoning after only ten months' employment at the lead works, and to the recommendation of the jury that "Legislature should at once take steps to compel the proprietors of lead works to provide proper protection to those in their employ;" whether the present Factory and Workshops Acts were sufficient to give the necessary protection to the lives of the people engaged in these deadly works, and, if not, whether he was prepared to ask Parliament for increased power in respect of lead works; and whether he would consider if it would not be advisable to prohibit the employment of women and young persons in lead works.—Sir C. DILKE, replying to these questions in the absence of the Home Secretary, said,—This case has already engaged the attention of the Home Secretary; who has called for a special report thereon from the Chief Inspector of Factories. The recommendations of the jury and the suggestions of the hon. members will receive due consideration.

MILITARY AND NAVAL MEDICAL SERVICES,

THE NEW DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT.

SURGEON-GENERAL THOMAS CRAWFORD, M.D., whose appointment as director-general of the Army Medical Department, vice Sir W. M. Muir, K.C.B., M.D., has been notified in the *London Gazette* of the 7th instant, entered the Army Medical Service as assistant-surgeon in February 1848. He was promoted to be full surgeon in February 1855, surgeon-major in February 1868, and was raised to the rank of deputy-inspector-general for special service in February 1870. He became surgeon-general in December 1876. While an assistant-surgeon with the 51st Light Infantry regiment, Dr. Crawford served in Burmah throughout the Burmese war of 1852-53, including the storming and capture of Rangoon. For this service he received the Burmah medal with the clasp for Pegu. Dr. Crawford was subsequently gazetted to the 18th Royal Irish regiment, and while surgeon of this corps served in the Crimea during the Eastern campaign from February 1855 to the fall of Sebastopol. He received the Crimean medal and clasp of Sebastopol, together with the Turkish medal, for this service. He was subsequently selected for the position of head of the medical branch in the director-general's office in London, and held this appointment for several years during Sir Galbraith Logan's rule of the department. At the conclusion of this service Dr. Crawford proceeded to India and fulfilled the duties of superintending-surgeon of the Sirhind circle in Bengal. Having completed this tour of foreign service, Dr. Crawford returned to England and held the appointment of head of the Army Medical Department in Ireland, but not long afterwards left again for India, this time with the elevated position of chief of the whole British Army Medical Department in that empire. It is from this responsible position that Dr. Crawford is now returning to assume the duties of the director-generalship of the Army Medical Service. Throughout the whole of his distinguished career, Dr. Crawford has always enjoyed the reputation of being a prudent and earnest medical officer; while from the considerate and friendly manner he has always evinced towards the officers who have been brought into contact with him in his various administrative positions, he has earned for himself universal popularity in the service. Sir William Muir, whom Dr. Crawford is shortly to succeed, has held the office of director-general of the medical department since April 1874, a period of eight years. The disruption of the old arrangement of the department into staff and regimental medical officers, and the unification of the medical body into a single corps, which was commenced during Sir Galbraith Logan's tenure of office, and while Dr. Crawford was head of the medical branch, has been consolidated and placed on a fixed basis by Sir William Muir; and with the greatly increased advantages in respect to the pay, relative rank, and retirement rates, conferred by the last Royal Warrant, he will hand over the department to his successor in a far more settled and contented condition than it has been in for many previous years. The new director-general is expected to arrive in England towards the close of the present month.

It has been remarked as an unusual circumstance that Dr. Crawford has been gazetted to be director-general before the vacancy has actually occurred. We are not aware of the particular cause to which this departure from the ordinary custom in such matters is due.

THE NURSING STAFF OF HER MAJESTY'S FLEET.

—I have the pleasure to appeal, through your columns, for the interest of the public in the nursing staff in Her Majesty's Fleet. As an exception, they constitute a hard-worked, and devoted class of public servants, miserably

underpaid, and compared with other classes of men, in my opinion unfairly so. For example, the ship's steward, who assists the paymaster in serving out provisions and stores, gets pay ranging from 2s. to 3s. *per diem*, and allowances which often double this. The naval schoolmaster, whose duties often amount to a sinecure, receives from 4s. to 6s. *per diem*. The sick man, however, is not so valuable. To attend on him, there are three rates of sick baymen, with pay 1s. 4d., 1s. 9d., and 2s. 5d. Now, these men often have to nurse cases of fever, and may have yellow fever, small-pox, or any disease to encounter; they have to cook for the sick, and to give general assistance to the surgeon. In most ships with from two hundred to three hundred men on board, there is only one medical officer, with a one-and-ninepenny man to assist him, who, though willing, has often had no training, and yet, when the doctor is away for an hour or two, may have to manage the numerous minor injuries met with amongst seamen, and is left in sole charge in fact. I would suggest that these men all pass through a course of training in nursing, dressing, and dispensing, at our naval hospitals, and that they enter the seagoing ship, commencing with 2s. a day, and rising by triennial increments to 5s., with corresponding increase of pension. Thus, I consider, a good class of men might be procured, which would usefully compensate to a certain extent for the present attenuated condition of the medical branch of the Navy. I hope I may be allowed to add to this by-and-by, and for the present remain, yours obediently,
A MEDICAL OFFICER.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE DELANCY FEVER HOSPITAL.

THE report of this institution for the year 1881 is of unusual interest, and shows how completely epidemic disease may be held in check, if only adequate care and vigilance are used. In the past year two outbreaks of small-pox have been arrested by prompt removal to the hospital, and the trustees are now able to state that, on fifteen occasions during the eight years that have elapsed since the institution was opened, small-pox has been effectually stamped out upon its introduction into the town, without, in a single instance, extending beyond the family first attacked. These striking results are due no less to the vigilance of the medical practitioners of Cheltenham than to the hearty co-operation of the health-officers of the town, and of the neighbouring local boards. The scarlet fever wards, both public and private, have been used to considerable extent, there having been thirty-one cases treated in the latter, and twenty-three in the former during the year; all these cases have done well, with one exception, in which death took place the day after admission. The administrative block has also proved of much service to several convalescents, as a half-way house between the hospital and their homes.

Owing to the forcible and repeated representations of the trustees, the Town Council and the Cheltenham Board of Guardians have recognised the importance of the Delancy Hospital, and its position in the sanitary machinery for the suppression of epidemic disease, and a yearly subscription of £100 and £50 will in future be paid by these sanitary bodies respectively.

By the munificent donation of £2,000, from the Rev. J. H. L. Gabell, a permanent endowment fund has been secured to the Hospital, and the trustees have lost no time in carrying out a reduction in the charges, which they have long and anxiously wished to effect.

From the 1st December last, the terms for admission to the private wards for subscribers of one guinea or donors of ten guineas, and members of their households, have been reduced one half; and patients are received into the public wards at a uniform charge of two shillings a day, instead of three as formerly.

One of the larger schools has already, by a yearly subscription, secured exceptional advantages for its pupils, and it is believed that in time more of these establishments will be induced to take a similar course, but the space at present available would certainly be inadequate, if all cases of scarlet fever were sent to the hospital; and the trustees are forced to consider the necessity which may arise in the immediate future for erecting the two wings or public wards, which were contemplated in the original plan of the building.

ANDERSON'S COLLEGE DISPENSARY, GLASGOW.

FROM the report just made public, at the fourth annual meeting of this institution, the amount of work done during the past year has been of an extensive nature, and at a comparatively small outlay. During the period embraced in the report, 7,878 patients have received the benefits of the dispensary, while no less than 907 were visited at their own homes, this being one of the distinctive features of the charity, that it not only gives gratuitous advice to the sick poor, but visits them at their own homes if necessary. This latter work is partly carried on by senior students, under the supervision of the medical staff, and has been found of great service in giving the students a practical acquaintance with a large variety of diseases. So much, however, has this part of the work increased, that it has been found necessary to limit the area of home visitation, as it was found impossible to overtake all

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY Meeting of the Council of the College was held on Thursday, April 13th. The minutes of the Ordinary Council, held on the 9th March, were read and confirmed. Reports were received from the several Annual Committees and from the Committee on the conditions of admission to the Pass examination for the diploma of member. [We are obliged to defer the publication of the report until next week. The substance of it is, that candidates are not to be admitted to the Pass Examination for the membership within two years after passing the primary examination, except in certain circumstances which are specified.]

Mr. J. COOPER FORSTER moved:—"That in future all candidates for the primary or anatomical and physiological examination, whether for the Diploma of Member or of Fellow of the College, be only required to attend one winter course of lectures on anatomy instead of two courses of such lectures. And that candidates for the final examination, whether for the membership or fellowship, be required to produce the following additional certificate, viz.: Of having attended during three months a course of surgical or regional anatomy, with demonstrations."

The first and last part of the motion was referred to the Nomination Committee for consideration; the second to the Court of Examiners, to which also was referred Mr. SPENCER SMITH's motion:—"That it be referred to the Court of Examiners to consider and report to the council whether or not it is desirable that all students rejected in the pass examination for the Diploma of Member should be placed in the same category as regards the time required to elapse before they can present themselves for re-examination."

Professor HUMPHRY was re-elected a member of the Court of Examiners.

A letter was read from the Secretary of State for the Home Department in reference to the sale of poisons, which was referred to the President and Vice-Presidents to consider and report to the Council; and another letter was read regarding the appointment of two public analysts to undertake *post mortem* examinations in criminal cases, one to be nominated by the President of the College of Surgeons, and the other by the President of the Royal College of Physicians. The Council accepted the duty of nomination on behalf of their President.

The Report of the Visitors on the college and other examinations was referred to the President and Vice-Presidents to consider and report upon to the Council after conference with the Board and Court of Examiners.

The Jacksonian prize was awarded to Dr. William Alexander, of Liverpool.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology, at a meeting of the Board of Examiners, on the 5th instant, and when eligible will be admitted to the pass examination.

Messrs. John Gay, Charles H. Upham, Charles B. Innes, Charles Gayford, and Archibald E. Garrod, students of St. Bartholomew's Hospital; George Morgan and Henry A. Sheppard, of the Charing Cross Hospital; James Milner and George H. Scott, of the Leeds School; Thomas M. Smith and Priestley Leech, of the Manchester School; George A. Bolton, of St. George's Hospital; George S. Wild, of the Liverpool School; Harold G. Dixon, of the Cambridge School; Thomas Young, of the Birmingham School; Charles Andrews, of University College; John F. Bateson, of the Edinburgh School; Alexander V. Reilly, of the Middlesex Hospital; and Harry Tuck, of the Westminster Hospital.

Five candidates were rejected.

The following gentlemen passed on the 6th instant.

Messrs. J. H. Hunter, Frederic P. Maynard, Alfred G. Francis, Samuel H. Haberman, Andrew A. Orr, and Charles E. Tanner, of St. Bartholomew's Hospital; George O. White-Cooper, Herbert W. G. Doynce, Francis H. Mead, and John T. Williams, of St. George's Hospital; George A. Carpenter, Herbert Bidwell, Edward S. Whelpton, and John R. Staddon, of St. Thomas's Hospital; William T. Rees and George H. Alden, of the London Hospital; Edward R. F. Mason, of the Leeds School; Albert E. Nelham and Albert Bowhay, of the Charing Cross Hospital; Charles H. East, of King's College; and Thomas Pennington, of the Manchester School.

Four candidates were rejected.

The following gentlemen passed on the 10th instant.

Messrs. Francis H. Napier, Charles P. Mathew, Alfred C. Francis, Frank A. Spreat, Arthur M. Jackson, George A. E. Murray, and Harry C. Chapman, of St. Bartholomew's Hospital; Edwin J. Norris, Alfred J. R. Tyler, and George F. Hentsch, of the Charing Cross Hospital; Henry C. Bowman, Herbert D. Harthan, and Edward Somers, of the Manchester School; George A. Shackel, Charles C. Reilly and George F. Welsford, of St. Thomas's Hospital; Philip H. Nutting and John M. Evans, of the London Hospital; Tudor G. Lavie and H. Marmaduke Page, of St. George's Hospital; Francis Penny,

of King's College; Edward B. Parfitt, of University College; and George B. Harnett, of Guy's Hospital.

Four candidates were rejected.

The following gentlemen passed on the 11th instant.

Messrs. Frederick G. Failes, Herbert V. Chambers, Philip R. W. Santi, William T. Gardner, Charles Kebell, John P. Roughton, and Edward C. Smith, of St. Bartholomew's Hospital; Robert Lawson, Arthur B. Druiit, Charles J. West, and Seth Gregory, of St. Thomas's Hospital; Reginald J. C. Cottell, Charles E. Liesching, Henry E. South, and Henry Potter, of St. George's Hospital; James E. Jefferis and John W. Carr, of University College; Frank Hichens, Edwin Volkman, and John J. Langston, of the London Hospital; Edward J. Smith, of the Charing Cross Hospital; and Walter H. Brazil, of the Manchester School.

Four candidates were rejected.

The following gentlemen passed on the 12th instant.

Messrs. Frederic H. Wigmore, H. Winstanley Shadwell, Alfred T. Price, and Herbert Fox, of St. Bartholomew's Hospital; Francis A. Saw, Herbert M. Morris, Charles W. Ward, and George R. J. W. Fletcher, of the Charing Cross Hospital; Francis G. C. Danican, Barnes Nowell, and George C. Bell, of St. George's Hospital; William E. P. Phillips, James Chadwick, and Charles Caldecott, of Guy's Hospital; A. Beaumont Woakes and Frederick A. Floyer, of St. Thomas's Hospital; J. Harley Gough and Robert S. Robertson, of the Manchester School; Sydney D. Ashley and Henry W. Godfrey, of the London Hospital; Henry S. Walker and Alfred Lawrence, of University College; Alfred R. Hall, of St. Mary's Hospital; and Ernest G. Foot, of the Middlesex Hospital.

Four candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 6th, 1882.

Banerjee, Nahendra Nath, Calcutta.
Bostock, John, 29, Rutland Road, Victoria Park.
Brooks, Walter Tyrrell, Penge Park Lane, Stoke Newington.
Hart, Marmaduke James, South Hill Park, Hampstead.
Hoyland, Stanley Streeton, Clifton Road, Rotherham.
Maitland, Alfred Derwent, 10, Chester Place, W.
Willcocks, Arthur Durant, Scarsdale Villas, Kensington.

The following gentlemen also on the same day passed their Primary Professional Examination.

Cox, Joseph Bethell, St. Bartholomew's Hospital.
Greet, Charles Harvey, London Hospital.
Smith, W. A. Winwood, St. George's Hospital.
Todd, Henry, London Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:—

BRISTOL GENERAL HOSPITAL.—Assistant House-Surgeon. Salary, £50 per annum. Applications by May 4th.

BRITISH HOSPITAL, Buenos Ayres, South America.—Resident Medical Officer. Salary, £200 per annum. Applications by May 1st.

CALLAN UNION.—Medical Officer for Ballingary Dispensary District. Salary, £100 per annum, with £20 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 19th instant.

CAMBRIDGE COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum. Applications by the 15th April.

CHELTEMHAM BRANCH DISPENSARY.—Resident Medical Officer. Salary, £180 per annum. Applications by April 17th.

CHESTER GENERAL INFIRMARY.—Visiting Surgeon. Salary, £80 per annum. Applications by 22nd instant.

CLINICAL HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Park Place, Manchester.—House-Surgeon. Salary, £80 per annum. Applications to Mr. Edwin Marshall, Secretary, 38, Barton Arcade, Manchester, by 29th instant.

COTTAGE HOSPITAL, Scotland.—House-Surgeon. Salary, £30 per annum. Applications to No. 161A, BRITISH MEDICAL JOURNAL Office, 161A, Strand.

ENNIS UNION.—Second Medical Officer and Apothecary to the Workhouse, at a salary of £75 per annum.

GUEST HOSPITAL, Dudley.—Member for the Honorary Medical Staff. Applications by the 24th instant.

HARTLEPOOL UNION.—Medical Officer for the District. Salary, £50 per annum. Applications to the Clerk by May 17th.

HARTLEPOOL UNION.—Medical Officer for the Workhouse. Salary, £65 per annum. Applications to the Clerk by May 17th.

LONDON HOSPITAL, Whitechapel, E.—Aural Surgeon. Applications by the 18th April.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—House-Surgeon. Salary, £50 per annum. Applications by April 26th.

SCARBOROUGH FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £200 per annum. Applications by April 15th.

SCHOOL OF DENTAL SURGERY.—Teacher of Dental Metallurgy. Applications to the Dean of the Medical School, Dover Street, Liverpool, by April 25th.

SUNDERLAND INFIRMARY.—Junior House-Surgeon. Salary, £60 per annum. Applications to Chairman of the Medical Board by the 27th instant.

TOWNSHIP OF MANCHESTER.—Resident Assistant Medical Officer. Salary, £140 per annum. Applications, endorsed "Medical Appointment", by the 15th April.

WEST RIDING LUNATIC ASYLUM, Wakefield.—Resident Clinical Assistant. Applications to Dr. Herbert Major, Medical Superintendent.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Physician. Honorarium of £100 a year. Applications by April 24th.

MEDICAL APPOINTMENTS.

FRASER, F., M.B., appointed District Medical Officer to the Sevenoaks Union.
 HOPKINS, H. C., M.R.C.S., appointed Assistant-Surgeon to the Royal United Hospital, Bath.
 HOUGH, C. H., M.R.C.S., appointed Surgeon to the Derby Provident Dispensary, Derby.
 JAMES, J., M.D., elected Medical Officer of the Maryborough Dispensary Dispensary.
 MANNING, E. D., M.R.C.S., appointed Medical Officer of Health to the Westbury Union.
 PARTRIDGE, Thomas, M.K.Q.C.P., re-elected Medical Officer of Health for the Rural Sanitary District of the same town.
 PEARSON, J., M.D., appointed Examiner in Surgery and Clinical Surgery at the University of London.
 SALTER, J. R., M.B., appointed Second Assistant Medical Officer to the Kent County Lunatic Asylum, Chatham.
 SIMON, H., M.R.C.S. Eng., appointed Assistant-Surgeon to the Royal Hospital, Bath.
 THOMAS, M. L., M.D., appointed Assistant Medical Officer to the Rochester and District Friendly Societies' Medical Aid Association.
 WILKINSON, R. J., M.D., appointed Physician's Assistant to the Bristol General Hospital.
 WILKINSON, R. J., M.D., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 5s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

FORRESTER.—At Sandgate, Kent, on the 6th inst., the wife of James S. Forrester, Esq., M.D., of a daughter.

DR. LOMBARD TANNER has resigned the post of Assistant Medical Officer of the Cork District Lunatic Asylum.

DR. KENRICK H. B. WILLIAMS, of Movannedd, has been placed on the Commission of the Peace for Denbighshire.

VACCINATION.—Mr. John Hannay has been awarded by the Local Government Board a gratuity of £8 12s. for efficient vaccination in the Weobley district of the Weobley Union.

SOUTH KENTINGTON MUSEUM.—Mr. Edward Bellamy, Surgeon to the Charing Cross Hospital, will commence his course of lectures on the anatomy of the human form on Friday, the 12th proximo, at four o'clock, in the Science and Art Department of the above museum.

DISCOVERY OF HUMAN REMAINS.—The recent discovery of human remains, by some workmen engaged in Percy Mews, Newman Street, and their examination by Mr. Lloyd, and some other medical men who assisted him, has led to the conclusion that the remains are those of persons whose bodies had been used for anatomical purposes. The examination, which was a cursory one, made in a shed in the police-station, by the light of a lamp, revealed a mummified trunk and two mummified bodies, one male and one female. Both were mummified in a manner similar to those used for enveloping mummies. There was further found an exact cast of the lower part of the aorta in red waxy material, such as that used for injecting arteries prior to dissection. Also one or two human skulls, bones, etc., cleaned and prepared. The remains, which are supposed to have been in a cellar of the mews for many years, were removed to the mortuary of St. James's Workhouse, where only a few nights previously had been deposited a woman's foot, which had been found by a constable at a house in London Street, Fitzroy Square.

HEALTH OF LONDON.—The following facts and figures, furnished by the Registrar-General, for the weekly return, show the results of the recent health and sanitary condition of London and its suburbs. According to the most recently received weekly returns, the annual death-rate in the Metropolitan Sanitary District, for 1881, was 24.6 per 1,000, and was equal to 2,211 deaths in 100,000 persons; and 41.7 in 100,000 persons in the Metropolitan Sanitary District, 42 in Madras, an English town in Madras; 43 in Bombay, an English town in Bombay; 44 in Calcutta, an English town in Calcutta; 45 in Madras, an English town in Madras; 46 in Calcutta, an English town in Calcutta; 47 in Madras, an English town in Madras; 48 in Calcutta, an English town in Calcutta; 49 in Madras, an English town in Madras; 50 in Calcutta, an English town in Calcutta; 51 in Madras, an English town in Madras; 52 in Calcutta, an English town in Calcutta; 53 in Madras, an English town in Madras; 54 in Calcutta, an English town in Calcutta; 55 in Madras, an English town in Madras; 56 in Calcutta, an English town in Calcutta; 57 in Madras, an English town in Madras; 58 in Calcutta, an English town in Calcutta; 59 in Madras, an English town in Madras; 60 in Calcutta, an English town in Calcutta; 61 in Madras, an English town in Madras; 62 in Calcutta, an English town in Calcutta; 63 in Madras, an English town in Madras; 64 in Calcutta, an English town in Calcutta; 65 in Madras, an English town in Madras; 66 in Calcutta, an English town in Calcutta; 67 in Madras, an English town in Madras; 68 in Calcutta, an English town in Calcutta; 69 in Madras, an English town in Madras; 70 in Calcutta, an English town in Calcutta; 71 in Madras, an English town in Madras; 72 in Calcutta, an English town in Calcutta; 73 in Madras, an English town in Madras; 74 in Calcutta, an English town in Calcutta; 75 in Madras, an English town in Madras; 76 in Calcutta, an English town in Calcutta; 77 in Madras, an English town in Madras; 78 in Calcutta, an English town in Calcutta; 79 in Madras, an English town in Madras; 80 in Calcutta, an English town in Calcutta; 81 in Madras, an English town in Madras; 82 in Calcutta, an English town in Calcutta; 83 in Madras, an English town in Madras; 84 in Calcutta, an English town in Calcutta; 85 in Madras, an English town in Madras; 86 in Calcutta, an English town in Calcutta; 87 in Madras, an English town in Madras; 88 in Calcutta, an English town in Calcutta; 89 in Madras, an English town in Madras; 90 in Calcutta, an English town in Calcutta; 91 in Madras, an English town in Madras; 92 in Calcutta, an English town in Calcutta; 93 in Madras, an English town in Madras; 94 in Calcutta, an English town in Calcutta; 95 in Madras, an English town in Madras; 96 in Calcutta, an English town in Calcutta; 97 in Madras, an English town in Madras; 98 in Calcutta, an English town in Calcutta; 99 in Madras, an English town in Madras; 100 in Calcutta, an English town in Calcutta.

diphtheria and croup, 41 from typhoid fever, and 15 from small-pox. The rate in Brussels also increased to 25.1, and 3 fatal cases of small-pox were reported; and in Geneva the high rate of 29.3 was again recorded. In the three principal Dutch cities the death-rate averaged 25.9; the highest rate was 29.1 in Rotterdam. The Registrar-General's table includes returns from nine German and Austrian cities, in which the death-rate averaged 33.1, and ranged from 23.8 in Dresden, to 41.1 in Vienna and 42.4 in Prague. Small-pox caused 33 more deaths in Vienna and 11 in Buda-Pesth, diphtheria 44 in Berlin, and typhoid fever 4 in Prague. In three of the principal Italian cities the death-rate averaged 29.7, the highest rate being 32.9 in Turin; typhoid fever caused 6 deaths in Venice and 4 in Rome, and diphtheria 9 in Turin. The Roman return relates to the first week in December, no more recent return having been received. The annual death-rate in four of the largest American cities averaged 27.9, and ranged from 23.1 in Brooklyn and Baltimore to 34.5 in New York. Small-pox caused 28 deaths in Brooklyn, 11 in New York, and 10 in Philadelphia. Scarlet fever and diphtheria continue to show fatal prevalence in New York.

AN AUSTRALIAN REMEDY FOR ASTHMA.—As to the correctness of the claim which has often been made on behalf of a species of *Euphorbia* indigenous to Queensland, and known scientifically as *E. pilulifera*, that it affords a remedy for asthmatic and bronchial affections, a correspondent of the Sydney Town and Country Journal writes to that paper that an ounce of the leaves of the plant placed in two quarts of water, and allowed to simmer till the quantity is reduced to one half, will afford a medicine which, taken a wine-glassful at a time, twice or thrice a day, will relieve the most obstinate cases of asthma, as well as coughs and ordinary chest affections. The leaves may be easily gathered and dried, and kept for a considerable length of time. Evidence of the virtues of a decoction of the leaves of this species of *Euphorbia* is very general in Queensland and parts of New South Wales, as other kinds of *Euphorbia* have a considerable medicinal reputation in India and elsewhere. Thus the leaves of the *E. neritosa* are prescribed as a purgative by the native practitioners in India, while the root of the *E. tirucalli* is said to be equal in all respects to the true ipecacuanha. This extensive genus of plants evidently deserves the careful study of skilled botanists and druggists.

DONATIONS AND BEQUESTS.—The British Home for Incurables has received one hundred guineas each from Messrs. Copestake and Company, Mr. Herbert Clarke, and Mr. F. A. Beavan, and fifty guineas from "A Member of the Common Council."—The Society for the Discharge and Relief of Persons Imprisoned for Small Debts have given £100 to the Chelsea Hospital for Women, and £50 additional to the Dental Hospital of London.—Mr. Edwin Lawrence has given £100 to the purchase of freehold land, and £10 10s. to the general fund, of the Royal Hospital for Women and Children.—The Rev. Canon Godwin and Mr. R. Tangye have each given £50 to the building fund of St. Peter's Hospital for Stone.—Mr. Richard Worsley has given £50 to University College Hospital.—Sir William Miller, Bart., has given £50 to the proposed Scarlet Fever Convalescent Home.—Messrs. Crosbie and Blackwell have given fifty guineas additional to the Metropolitan Hospital. The Drapers' Company have given fifty guineas to the Chelsea Hospital for Women.—The Mercers' Company have given fifty guineas to Queen Charlotte's Lying-in Hospital. The Goldsmiths' Company have given £50 to the East London Hospital for Children. The Great Northern Hospital has received £80 17s. 6d. from the will of Mr. Edward Gardner.—Mrs. Hannah Sarah Partridge has bequeathed £200 to the Great Yarmouth Hospital.—Mr. John Harcourt, of Mansfield Street, Upper Westminster Terrace, bequeathed £200 each to the London Hospital, the Westminster Hospital, the Earlwood Asylum for Idiots, and the Hospital for Sick Children, and £200 each to the Charing Cross Hospital, the Middlesex Hospital, the Royal Free Hospital, the Royal London Ophthalmic Hospital, the Samaritan Free Hospital for Women and Children, the Royal National Hospital for Consumption and Diseases of the Chest at Ventnor, the Royal Hospital for Incurables, the London Fever Hospital, the National Hospital for the Family and the Infants, the Metropolitan Convalescent Institution, the Sussex Convalescent Hospital at Eastwick, and the Royal Sea-Bathing Institution at Margate in case of the death of Mrs. Laberna Weston Harcourt. With regard to all these bequests, which will be divided out of the "Trusts" set up for the purpose, Mrs. Turner has given £500 to the Royal National Hospital for Consumption and Diseases of the Chest at Ventnor. Mrs. John Thomas Mangles, of Southampton, has bequeathed £200 to St. George's Hospital.—Sir Moses Montefiore has given £200, Mr. A. L. L. de Rothschild £200, to the proposed Scarlet Fever Convalescent Home.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.
FRIDAY.....	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.
GUY'S.—	Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.
KING'S COLLEGE.—	Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.
LONDON.—	Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.
MIDDLESEX.—	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.
ST. BARTHOLOMEW'S.—	Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.
ST. GEORGE'S.—	Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.
ST. MARY'S.—	Medical and Surgical, daily, 1.15; Obstetric, Tu. F., 9.30; o.p., Tu. F., 1.30; Eye, M. Th., 1.30; Ear, M. Th., 2; Skin, Th., 1.30; Throat, W. S., 12.30; Dental, W. S., 9.30.
ST. THOMAS'S.—	Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.
UNIVERSITY COLLEGE.—	Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.
WESTMINSTER.—	Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—	Medical Society of London, 8.30 P.M. Mr. Edmund Owen will show an Infant who has been treated for Acute Suppuration in the Hip-joint. Mr. Lund (of Manchester) will introduce a new method of treating Simple Fracture of the Patella. Mr. Henry Morris: Ichthyosis and Cancer of the Tongue.
TUESDAY.—	Pathological Society of London, 8.30 P.M. Specimens to be shown—Mr. Eve: Cancer originating in Membranes of Brain; Calcareous Tumour in Brain; Camel's Lung with Filaria Sanguinis. Dr. J. M. Hobson: Malignant Lymphoma. Mr. Roger Williams: Calculus formed on a Shell. Dr. B. Fenwick: Intrathoracic Tumour. Mr. M. Baker: Two cases of Prurigo of Hebra; Acanthiform Keloid (living specimens). Mr. A. P. Gould: Lateral Asymmetry of Bones and Brain. Mr. Alban Doran: Papillary Cysts of the Ovary. Card specimens—Dr. S. West: Defects in Valves of Heart; Obliteration of Coronary Artery, etc. Mr. Golding-Bird: Aneurism from Palm of Hand. Mr. Eve: Perforating Ulcer of Foot. Dr. Lediard (of Carlisle): 1. Dislocation of Ankle; 2. Abscess in Fossa of Skull.
WEDNESDAY.—	Hunterian Society, 8 P.M. Dr. Dundas Grant: A Case of Myxodema. Mr. C. J. Symonds: Acute Palmar Bursitis treated by Pressure. Dr. Hughlings Jackson: Multiple Neuroses the result of Syphilis. Mr. Gilbert: A case of Neurotic Asthma.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL MEN AND HOUSE DUTY.

SIR,—I find that medical men are charged inhabited house duty at the rate of nine-pence in the pound, even though they use two rooms, one as a surgery and the other as a consulting room. A man engaged in business, who uses part of his house as a shop or warehouse, is only charged at the rate of sixpence in the pound. I think this is unjust to medical men, who are rated and taxed the same in other respects as the man who only pays sixpence.—Your obedient servant,

ONE HEAVILY TAXED.

* * In the debate upon the Inhabited House Duties Act of 1851, Mr. Duncombe stated, in the House of Commons the same year, that a great number of professional persons, including medical men, complained that they were rated at nine-pence in the pound for the occupation of houses which were much larger than they required for their private dwellings, and urged that such habitations should, as shops were, be rated at only sixpence in the pound. The Chancellor of the Exchequer, however, made an adverse reply to this equitable request, on the ground that the classes of persons who would be included in this category would be far too numerous. We, nevertheless, hope that the matter will again be brought before the notice of Parliament, and that medical men will soon be relieved of the excessive house duty which is imposed upon them.

DR. JOHN BARCLAY.—In order to practise in France, it is necessary for a medical man not possessing a French degree to pass the requisite examinations of the French Faculty of Medicine, of which he will obtain particulars by application to the Dean of the Faculty of Medicine of the University of Paris. If he desires to restrict his practice to one department of France, he can obtain a licence for practice in that department by passing the minor examination of the *Officier de Santé*.

IMPURITIES OF ANÆSTHETICS.

SIR,—In the correspondence which has been carried on in your JOURNAL on the subject of anæsthetics, there is one point which, so far as I have noticed, has not been touched upon. When a death occurs during the administration of chloroform, it is, of course, quite natural that the surgeon should suspect the purity of the anæsthetic; and we know that, in many cases, the fatal result has been attributed to deleterious substances supposed to be present in the chloroform. Not being a physiologist, I would not venture to express an opinion on the probability of such being the case, except to the extent in which the subject is one of ordinary evidence, such as a jury would be expected to comprehend. Now we know that the impurities which inferior chloroform contains, are simply traces of the "oils" that are obtained in considerable quantity in the purification of chloroform. These "oils" have not been chemically examined, but evidently consist of a complex mixture, as they begin to distil at a temperature below 100° Cent. (212° Fahr.), rising to above 160° Cent. (320° Fahr.). So strong and characteristic an odour does this mixture possess, that one part in fifty thousand of chloroform can easily be detected by the nose. We may say that a sample containing one in forty thousand could never be allowed to pass. The question then arises, is it credible that this small proportion of impurity in a chloroform can in any case have been the cause of death? We shall leave this question for others to answer, only observing that we have never experienced any ill effects from the inhalation of these impurities, even when working with them "pure and simple"; and that the amount of such in an inferior chloroform would scarcely exceed one-hundredth of a grain in the ounce.

It only remains to say that we should be happy to supply samples of chloroform of all degrees of purity, and of the impurities themselves, to any physiologist who cared to investigate the matter.—I am, sir, yours faithfully,
J. F. Macfarlan and Co., 93, Abbey Hill, Edinburgh. D. B. DOTT.

IN Mr. Holderness's note on Fractured Patella (JOURNAL, April 8th, page 500, column 1), for "Lister's temperature-regulator", read "Leiter's temperature-regulator". The signature to the article on Poisoning by Nitrate of Potash should be "Richard Cross", not "Antonio Cross".

A WARNING TO HOSPITALS.

SIR,—There is a man who goes about imposing upon hospitals, named Charles Clark, from Tadley, Hants. He has favoured us with two visits, and, upon the second occasion, he abused our hospitality by absconding with sundry small sums of money, collected from his fellow-patients under the pretence of buying stamps or stationery for them, when he went out for his constitutional walk. The rector of the parish from which he comes writes as follows: "Charles Clark is a very bad character. One of his tricks is to make a home of some London or county hospital during the winter, and then leave; he is a great impostor."

The man can easily be recognised, as he has lost his left hand, and wears a hook. He has also an impediment in his speech, and drags his right leg when walking. If you will kindly give publicity to these facts, they may serve to warn the authorities of other hospitals; and should he (as I think is probable) have obtained admission to some other hospital, I should be very glad to learn of his present whereabouts. He left here on Friday, March 31st.—I am, dear sir, yours faithfully,
SIDNEY M. QUENELL, Secretary.

Westminster Hospital, Broad Sanctuary, S.W., April 5th, 1882.

THE LUMLEIAN LECTURES ON INFLAMMATION.

Delivered before the Royal College of Physicians.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College, London.

LECTURE III. PART I.—ETIOLOGY OF INFLAMMATION.

THE most important of the propositions which I submitted to you in the last lecture was this: that the attribute which distinguishes an infective inflammation (*i. e.*, one which is capable of extending and reproducing itself) from a normal one (which tends to discontinuance on the removal of its cause)—in a word, the property of infectiveness—is but the pathological expression of a chemical state of the tissue and exudation-liquids of the inflamed part, for which, in the absence of any reliable chemical characteristics, we gladly accept the microscopical test of the presence of septic organisms. A second proposition, to which I also attach great importance, related to the agency of the floating particles of air and to the viable organisms which we know to be present in ordinary water, and moreover to be capable of exciting putrefaction. I endeavoured to show that there is no scientific reason whatever for attributing to either of these phlogogenic properties. As I am very desirous to present this question from both sides, I will endeavour, by way of sequel to my last lecture, to place before you the argument of one of the most strenuous and efficient supporters of the opposite view that I know, Professor Hueter of Greifswald. Formerly, says Professor Hueter (*Grundriss der Chirurgie*, page 1), it was taught that inflammation was produced by mechanical, chemical, or thermal irritants. We now know that the most severe injuries can be inflicted without producing inflammation. Consequently, when an inflammation takes its origin from a wound, all that the wound does is to play the part of a door of entrance for the real *noxa*—water-germ, air-germ, or germ which sticks to the surface of the weapon or missile which inflicts the injury—as the case may be. When, on the other hand, the injury is not of such a nature as to occasion a breach of surface—as, for example, in the experiments I related in my first lecture, in which heat was employed for the purpose of producing inflammation—the reason why the warmed part becomes inflamed is, according to Hueter, that its vitality being depressed, air or water germs are enabled to penetrate it. Honestly following out the theory to its legitimate issues, Professor Hueter continues: Septic organisms exist everywhere, ready, whenever access is offered to them, to enter the body and fulfil their morbid function. Consequently, inflammation may be defined, with reference to the universality of its cause, as an *epidemic and contagious disease which prevails universally over the whole world*, with the exception of mountainous regions, near and above the line of perpetual snow. Here there are no germs, and, we may presume, no possibility of inflammation.

Such is the theory. Its ostensible foundation is the alleged experimental fact that the most extensive and severe injuries of vascular parts—involving bone, muscle, cellular tissue—may be inflicted under antiseptic precautions without producing any inflammatory effects whatever. To prove this, Professor Hueter has made extensive series of experiments, all of which had this in common, that large portions of deep-seated tissues were destroyed—usually with the aid of Paquelin's cautery—without injury to the skin or superficial textures. As soon as the cautery had done its work, the external wound, which was so directed that it did not coincide with the track of the cautery, was brought together, and of course treated antiseptically. With the exception of a few instances in which these precautions could not be carried out, the wounds not only healed by the first intention, but gave rise to no disturbance of any kind; so that, inasmuch as the operation was itself performed under deep anaesthesia, it may be fairly assumed that, notwithstanding the severity of the operation, there was little or no suffering. The animals were killed at various periods after the injury, varying from a few days to a few months. In the successful cases, the wounded surfaces of muscular tissue were as it were welded together, so completely that, on microscopical section of the

hardened part, the line of junction could only be distinguished by a blackened mark due to the charring action of the cautery.*

Now, *prima facie*, these facts seem very like establishing Professor Hueter's aphorism; for it is clear that there were here no appearances suggestive of inflammatory exudation. I need scarcely say that there are other facts, both clinical and experimental; though I doubt whether any bear so directly on the point at issue. The most noteworthy are those which relate to the extraordinary results which, thanks to the antiseptic method, have been obtained during the last few years in the transplantation of tissues—such, for example, as the substitution of removed portions of peritoneum, by bits of dead membrane, without producing peritonitis—a kind of sewing of new cloth on to old garments which a few years ago we should have thought absolutely incredible. All of such cases, which it would be easy to multiply, Hueter would say, are instances of injury without inflammation—proofs that if inflammation is the physiological effect of damage, you may, under aseptic conditions, have the cause without its consequences. But I venture to think that this is not the correct way of putting it. All that is definitely proved is, that in the absence of septic contamination, inflammatory changes are of limited extent and duration, not that they are absent. Surely, this is triumph enough for Lister's great discovery.

There is an experiment which is daily performed in the streets of London, and elsewhere besides, which is very much to the point. Its results constitute a very serious objection to the theory that the presence of "viable inflammation-excitors", as Hueter calls them, is a condition *sine quâ non* of inflammation. That experiment is simple fracture, which affords us an example of a severe but localised injury inflicted on a part to which germs cannot possibly find access. In every fracture a good deal of blood is extravasated, and in many a good deal of vascular tissue is damaged. Does that tissue inflame or not? Hueter says, consistently with his theory, No. We say, emphatically, Yes; and need not, I think, fear to stake the correctness of our view of the etiology of inflammation on the issue. Now, the progress of the partly pathological, partly physiological changes which take place in a fractured bone, is exceedingly well known. They have been investigated in man and in animals macroscopically and microscopically. The decision of the question has nothing to do with the first stage in the process—that of extravasation, coagulation, and absorption of blood. It has still less to do with the third stage—that of the formation of the callus. All turns on the appearances which the injured part presents during the short period which begins with the absorption of the extravasated blood and precedes the earliest regenerative changes in the periosteum—those which lead to the formation of the provisional callus. At this time the surrounding muscular tissue, and the medullary cavity of the bone, the contents of the Haversian canals, are alike the seat of infiltration with small cells. The periosteum is separated from the bone, near the line of fracture, by a microscopical layer of similar character, through which the periosteal capillaries pierce to the bone—and all this at a time when no calcareous matter has begun to be deposited in the neighbourhood of the periosteal vessels. The example of simple fracture confirms the proposition laid down in last lecture—that every injury which is sufficiently severe, provided that it fall short of directly killing the tissue, produces inflammatory exudation.

Having occupied more time than I originally intended to give to the subject which at the present moment has, perhaps, more interest than any other—that of the cause and origin of inflammation—the time has come for considering how I may best bring my task to a conclusion within due limits; and, with this view, the best course open to me seems to be to select from the many topics which I have not found opportunity to discuss a few of the most important and interesting.

During the ten or twenty years which followed the anatomical and physiological discoveries of the middle of the present century, pathologists looked in two directions for the explanation of the phenomena of inflammation; namely, to the blood-vessels and their recently investigated muscular coats, and to the vital properties of cells. The vascular phenomena, it was hoped, might receive their complete explanation in vaso-motorial action; the textural changes, in the germination of tissues. In my first lecture, I endeavoured to show that neither of these modes of physiological action is directly concerned in the process. I trust that I have already given you sufficient evidence that an acute local process characterised by heat, redness, and swelling, may be induced under conditions which preclude the possibility of textural germination. In any case, I do not propose to try to add to it, but will

* "Experimentalstudien über das Verhalten tiefer Brandwunden" (*Deutsche Zeitschrift für Chirurgie*, vol. ix, page 381), and "Ätiologische Lehre der Entzündung" (same volume, page 401).

† Glück, Ueber Transplantation, Regeneration, und entzündliche Neubildung. *Langenbeck's Archiv*, vol. xxvi, p. 139.

of a grain of dust between the eyelid and bulb. In many inflammations, this preliminary rush of blood along the dilated vessels is absent: witness the cases dwelt on in my first lecture, in which the inflammatory state comes into existence *d'emblée*, in consequence of exposure to heat or cold; or the case of mycotic inflammation of the cornea, in which the episcleral vessels do not become affected until the infective material has slowly found its way from the ulcerated surface to the limbus; or in the case of erysipelas, where redness and swelling invade the skin in company, without any antecedent active congestion; whence we conclude that, although determination of blood is a frequent precursor of inflammation, it is not a part of it; and we are confirmed in that opinion by the observation that the "inflammatory blush", as Hunter called it, presents itself as the sole response of the vessels to local irritation: of which fact no better illustration can be given than the famous instance in which he observed it day after day in a patient whose toe he had occasion to cauterise regularly. "After each application", he relates (*Treatise on the Blood and on Inflammation*, 1794, p. 158) "the surrounding parts put on a blush; and all the veins on the top of the foot, as well as up the leg, immediately began to swell, and became large and full."

No experiment can be better adapted to show the complete distinction between determination of blood and inflammatory hyperæmia than that described by Dr. Williams in the Gulstonian Lectures to which I have already referred. Hunter had shown by his experiment that it is possible for the inflammatory blush to subside, leaving no trace, or the injured part to be flooded with blood and then return to its original condition. But Hunter's attention was entirely fixed on the blood-vessels, to the action of which he attributed the whole process. For the purpose of separating Hunter's "incipient enlargement of the vessels upon the first excitement of inflammation", (*Treatise on the Blood, etc.*, p. 279) from the definitive changes which followed it, Dr. Williams most judiciously adopted this method of graduated irritation of the web of the frog's foot, which was at that time the only field of experimental observation. He found that a weak solution of capsicum applied to the web causes dilatation with acceleration of the movement of blood (hyperæmia with increase of motion) in arteries and capillaries; but if the solution were strengthened, or the application several times repeated, the quickening soon gave way to slowing and commencing stagnation. (See *Principles of Medicine*, third edition, pp. 241 and 263.) The effect of the weak excitation was transitory, and the observation could be repeated any number of times on the same web. The stronger solution produced permanent damage of the tissue, resulting in inflammatory congestion, exudation, and stasis. In the mammalian mesentery, the same effect may be produced in a similar way. The substitution of 1.5 per cent. solution of salt for the ordinary .75 per cent. solution which is used as an irrigating fluid, has the effect, as Dr. Thomas has shown,* of fluid at once hurrying on the blood-stream; and if this is done at a time when the mesentery has already undergone inflammatory slowing, and the colourless corpuscles are hugging the walls of the veins, these corpuscles at once resume their place in the axial current; so that, so far from the initial affluxus being itself an inflammatory phenomenon, we can, by inducing it, arrest an inflammatory process when it is in progress.

(To be continued.)

* Thomas, "Ueber Entzündliche Störung des Capillarkreislaufes bei Warmblütern." *Virchow's Archiv*, vol. 74, Sep. abdr., p. 27.

REMOVAL OF PLACENTA IN MISCARRIAGE.—Dr. Crummer gives the following instructions in the *Transactions of the Illinois State Medical Society*, 1881. 1. One index finger introduced into the womb while the organ is depressed well into the pelvis, and steadied by the other hand applied externally. In this way a moderately contracted os may be dilated, a sharp antelexion of the uterus straightened, and, using the finger as a hook, the uterus may commonly be thoroughly emptied. 2. With one or two fingers in the vagina for counter-pressure against the anterior surface of the womb, and the other hand making firm pressure over the fundus and posterior surface of the uterus, the contents of the womb may sometimes be pressed out. These procedures, though somewhat painful, do not require an anæsthetic. But, in a certain proportion of our cases, they do not succeed. Very often the detached after-birth can be just felt at the tip of the finger, or glides from it in any effort at extraction. We may then resort to: 3. The introduction of the hand into the vagina and one or more fingers into the uterus, and this requires an anæsthetic. 4. In some cases where the vagina is small, or an anæsthetic not desirable, I have succeeded admirably with Loomis' placenta-forceps in grasping and removing the offending substance.

CROONIAN LECTURES ON THE CLIMATE AND FEVERS OF INDIA.

Delivered before the Royal College of Physicians of London.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE II.—(Concluded.)

Pernicious Forms.—The conditions to which the term "pernicious" is applied occur as intensifications of any of the stages. The cold stage may be unduly prolonged and occupy the whole paroxysm, the patient either sinking, as in the collapse of cholera, or reaction taking place slowly. The hot stage may be intensified and prolonged, the patient becoming delirious, comatose, convulsed; stupor begins with the commencement of the paroxysm, and gradually deepens into complete coma and death, or the symptoms may gradually disappear as the period of the paroxysm passes away. The sweating stage may be very profuse and prolonged, the pulse sinks, and death may take place from exhaustion, or extreme depression, during which the patient is intelligent but hardly sensible of his own weakness, when any exertion or even the erect posture is attended with danger. These are the principal dangers with which I am acquainted. There are other conditions pointing to the cerebro-spinal centres and abdominal viscera, arising out of the general disturbance produced by the malaria rather than by its direct action. Pernicious symptoms sometimes come on suddenly with little warning, after one or two ordinary paroxysms, probably from the intensity of the poison in those who have been unusually debilitated. In the damp hot months in certain parts of India, the symptoms which indicate cerebral disturbance are most likely to occur.

Mashed Malarial Fevers.—To certain conditions the term masked has been given: neuralgia with imperfectly developed fever, hot hands, aching pain extending along the course of the great nerve trunks in the limbs; gastralgia often intense, and various forms of disturbed innervation, functional derangement of the liver and other abdominal viscera, nervous irritability, dyspepsia, asthma, hæmaturia, bronchial irritation, insomnia, and symptoms pointing to the effects of malarial poison on the nervous system. The symptoms may be those of collapse, as in cholera, or apoplexy, epilepsy, cerebral effusion, hæmorrhage from stomach, bladder, bowel, or kidney; but the history and the circumstances under which the symptoms occur, indicate their true nature, and malarial origin. Malarial symptoms, are influenced by the state of the weather, and the natives think by the full or new moon. This subject has been discussed in the *Medical and Physical Transactions of Bombay*, by Mr. Murray and Dr. Peet. Morehead says a familiar fact for the hospital physician in India is to find several of the inmates in his wards affected by febrile disease on the same day, though all were free previously; that these days are coincident with the lunar changes; and that those who have suffered from malarious fever had recurrences on those days. But, as it was generally observed that there were atmospheric changes on those days, the fever was due to them, not to the moon. Such is probably the real explanation of the so-called solilunar influence, advocated by Dr. Balfour, who declared that the meridional periods, diurnal and nocturnal, were distinguished by remarkable changes of the weather, which were most remarkable at the lunar periods.

Malarial Cachexia.—A frequent result of exposure to malarial influences and of repeated attacks of periodic fever is anæmia, or even though there may have been no fever, often a profound state of cachexia, with which is associated structural changes in the abdominal viscera, and notably in the spleen. The sufferer has a puffy blanched face, pearly conjunctivæ and lips, short and hurried respiration, weak cardiac action, hæmic murmurs, and a feeble pulse, a tumid abdomen, not unfrequently dropsy, cedematous lungs and areolar tissue generally, wasted muscles, and a bronzed discoloured skin, with a large spleen extending sometimes as far as the iliac fossa (ague cake). Such is common enough in the notoriously malarial regions of India, where the whole population present more or less of this appearance, and where the physical degeneration is accompanied by an almost equally well-marked mental and physical torpor; depression of energy being characteristic signs of this state. I have known individuals return to this country too late to profit by the change. I have also seen a

venes, ice to the head, revulsives, sinapisms or turpentine stupes to the legs and trunk, and stimulating enemata, in which thirty grains of quinine may be combined, or a few leeches to the mastoid processes, may be useful. Blisters are sometimes applied. Under the influence of quinine the fit may terminate like ordinary ague. Stertor, congestion, coma with high temperature, suggest active measures, but not of a depleting character. When there are gastralgia and vomiting, I have found opium afford great relief. Time does not admit of dwelling on numerous other antiperiodics; none are comparable to cinchona and its alkaloids. The mixed alkaloids now prepared in India from cinchona grown in the plantations at Darjeeling and other hill stations, have been submitted to trial and found very efficacious, though certain objections were made that they caused nausea; it seems as though this and other objections are not so serious as at first imagined, and that the drug will come into general use. Though economically it may have advantages, it will not supersede the sulphate. Dr. De Vry brought this preparation to notice. Dr. Verckhuysen says quinetum is of great value as a febrifuge, but takes longer to act, and will not replace quinine in pernicious fever. It has the same apyretic effect as quinine, but is less powerful; larger doses are, therefore, required at longer intervals before the paroxysm than quinine. It produces no unpleasant effects, no noises in the ear, and can be taken by those who cannot take quinine. It is more efficacious in chronic cases as a tonic, whilst in masked malaria it is incomparably superior to quinine. Arsenic is a valuable febrifuge and antiperiodic. When quinine does not succeed, arsenic sometimes will do so, given in doses of five drops of the liquor arsenicalis. Care must be taken not to continue its use until symptoms of gastric irritation are set up. In the treatment of the early conditions of malarial fever I have never found it equal to quinine; but in cases of chronic malarial poisoning, with frequent returns of fever, neuralgia, or other indications of the chronic action of malaria, I have seen benefit arise from the continued use of arsenic in small doses—three or four drops of the liquor potassæ arsenitis twice a day, after food. The antiperiodic powers of opium are probably the chief reason why opium-eating and smoking has become so widely-spread a habit in China and India. There is little doubt that it does possess such a power, and that in the earlier stages it gives great relief; it relieves pain, soothes and breaks or stops the periodic return of fever; and it seems to assist those exposed to malarial influences in resisting them; it has been used for this purpose since the time of Galen. Trotter, Lind, and others, in the last century, prescribed it, and there may be cases where it might be expedient to use it now; it would probably be hurtful during the hot stage, yet in the cold and sweating stages it might be beneficial. Waring says he has seen it cut short the cold stage like a charm, and mitigate the severity of the following hot stage. I have had no experience of it as a febrifuge, and as there are so many others that would better fulfil the purposes required, except in intercurrent conditions, which might complicate malarial fever, I should not resort to it. Many other drugs are spoken of both in the officinal and native pharmacopœia, but they are inferior to the cinchona alkaloids; arsenic, gelsiminum, biberine, salycine, strychnine, atees (aconitum heterophyllum), piperine, ilicin, bonduc nut (fruit of *Cesalpinia Bonduckii*), salts of iron, zinc, picric acid, the mineral acids, and a variety of native drugs—the hyposulphites and alcohol. These, or some of them, especially iron, may be of service in certain stages of the fever, or in the cachexia following it. Atees is much used in native practice, and is a valuable drug, as an antiperiodic, tonic, or as combined with gentian, chiretta, or other vegetable bitters, but it can in no way take the place of quinine, quinetum, or arsenic. I may not omit to mention the tincture of Warburg. I have never found it better than quinine, though it certainly possesses febrifuge and diaphoretic properties. Dr. Maclean and others speak highly of it, and as its composition has been declared, the objections to its use have been removed; but I must leave it with this brief notice. In the treatment of malarial cachexia, with enlarged liver and spleen, the most important step is change of climate, the judicious use of preparations of iron and quinine (sulphate is best), and attention to the state of the portal system. I do not mean excessive purgation, but gentle action by salines combined with quinine and vegetable bitters. Carefully regulated and nourishing diet, and protection from all vicissitudes of climate must be enjoined. In such cases benefit may be derived from the saline and ferruginous waters of Germany, and from measures that tend to improve the general health. I may add that a prolonged absence from the country in which the mischief originated is necessary. In conclusion, I would remark that though mercury is especially to be deprecated in the treatment of disease connected with malariously enlarged spleen, local application of the ointment of red iodide of mercury, applied as it is done in India for goitre, is often successful in reducing the spleen; and that it does not appear to incur much if any

risk of mercurialism being induced. Professor Maclean speaks favourably of it, and I can endorse the opinion he has expressed. One word in regard to a matter I have omitted. In advanced splenic cachexia the patient should be very careful not to make any exertion; the result may be rapid dissolution with all the symptoms of pulmonary obstruction. The last instance in which this was impressed on my attention was in the case of a young Englishman of eighteen or twenty who had returned from India in a profound state of cachexia—the spleen descending nearly to the ilium, and with all the symptoms of anæmia in the most advanced condition. Under the influence of quinine, iron, and nourishment, he was improving, and there was hope of further progress. One day, in spite of warnings, he rose, walked to the window, and tried to raise it. He went back to bed exhausted and breathless, and died in a few hours.

In my next lecture, I hope to describe some forms of continued fever in India.

THE GULSTONIAN LECTURES ON PULMONARY CAVITIES: THEIR ORIGIN, GROWTH, AND REPAIR.

By WILLIAM EWART, M.D. Cantab., F.R.C.P.,
Assistant-Physician and Pathologist to the Brompton Hospital for Consumption;
Physician to the Belgrave Hospital for Children; Demonstrator of
Physiological Chemistry at St. George's Hospital.

LECTURE III. PART III.—*Concluded.*

Of the alterations in shape suffered by cavities, I have already spoken at sufficient length. The relations of cavities to surrounding parts are also subject to variations. When superficial, and when at the same time closely adherent to the chest-wall, cavities are only susceptible of very limited alterations in their position; but the intervention between them and the pleura of a moderate thickness of spongy tissue enables them to undergo a gradual but decided displacement. This shifting of cavities, as the result of age, takes place in a determinate direction. In all cavities the natural tendency is to a recession towards the root of the lung; and the compensatory development of the healthy portions of the lung usually assists by substitution the normal retraction. Thus, I have sometimes found in the mid-dorsal region, connected with a thickened and shortened bronchus, the remains of a cavity which had obviously retreated from the surface, under the influence of the super-inflation of the lung-tissue which had grown up, as it were, around it. The retraction upwards of cavities at the base is often very striking, but greater practical interest belongs to the history of cavities at the apex.

The direction of the *shifting* of the apex-cavities is remarkably constant. Unless rigidly fixed by adhesions, they invariably tend to retreat from the front of the chest towards the back, and from the sub-clavicular into the axillary region. Consequently, the chronic cavities, frequently detected after death at the outer apex, should not be taken to have necessarily originated there. The remarkable shifting to which I have alluded was pointed out by Dr. C. T. Williams, in his lectures on the Various Modes of Contraction of Cavities in Phthisis Pulmonalis (*Lancet*, 1873, vol. i, pp. 298 and 369). I fully agree with the view which he expresses concerning the special mechanism at work. It cannot be doubted that, on the right side, the retraction is mainly favoured by the great expansion of which the middle lobe is capable. I would not, however, restrict this action to the right middle lobe. Every portion of spongy tissue in the sternal region is possessed of similar capabilities for expansion; and, on the left side, the ultimate results are not far behind those observed on the right.

The recognition of the changes to which I have alluded has a direct bearing, not only upon our diagnosis, but upon the prognosis which we may form in individual cases. Unless we have carefully examined the upper axillary region, we cannot pronounce a chest to be free from excavation. The signs of disease have sometimes entirely disappeared from the anterior aspect of the chest, when cavernous sounds are still plainly perceptible in the axilla. The discovery of a vomica in this situation frequently throws upon the history of the case a clearer light than is derivable from the patient's own statements. On the other hand, in the early stages of subclavicular disease, the rapidity with which the signs are observed to recede may be accepted as a measure of the favourable chances. From this rapid shifting, we derive an

The chief importance of the secondary changes which I have described lies in the loss of breathing surface which they occasion. Involution of the pulmonary surface, and the loss of respiratory tissue incidental to it, are capable of being promoted by artificial interference, especially where pleurisy co-exists. Respiration is influenced by pleurisy in a very definite manner. The natural excursions of the ribs are reduced; the lessened amplitude and power of the diaphragmatic contractions shorten the range of vertical displacement of the lung; and the thorax, as a whole, for the avoidance of pain, assumes a position almost of expiration. Adhesions being favoured by comparative rest, and completed at this stage of imperfect expansion, the base of the lung, in a slightly collapsed and infolded state, becomes connected with a restricted surface of the convexity of the diaphragm. I consider it probable that this tendency may be materially encouraged by the mechanical appliances so often used in the treatment of pleurisy; and that the respiratory excursions may become shortened even beyond natural and instinctive limits. The ultimate results on the outline of the lung are readily perceived. The contraction and the descent of the diaphragm cannot take place without inducing a folding or involution of the basic surfaces. On the other hand, the adherent fringe of the lung is not at liberty to glide into its accustomed groove; but, whilst it becomes curved inwards, its place is supplied by a lateral expansion of the side of the lung. Pleurisy at the base is an extremely common event in phthisis; and it often intensifies in the manner which I have described the involution arising from the contraction of cavities, and from compensatory hypertrophy.

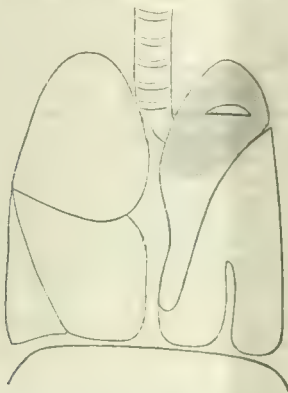


Fig. 11.—Narrow Chest. Fibrous Shrinking of Upper Lobe around a Contracting Cavity. Antero-Posterior Involution at Base from Compensatory Hypertrophy of Lower Lobe.

The rough outline which I have given of this subject, would not be complete without a brief allusion to a form of involution indirectly due to excavation. Great shortening cannot take place in one lung, as a result of the contraction of a cavity, without occasioning some degree of shortening in the other lung. Especially striking is this rise in the

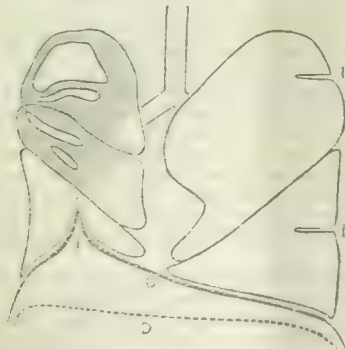


Fig. 12.—Short Chest. Extensive Contraction of Right Lung; Basic Involution, with Invagination of Diaphragm. Secondary Shortening and Involution affecting the Hypertrophied Left Lung.

main level of the diaphragm, whenever the latter, as depicted in the diagram, has become invaginated into the lung—an occurrence of which I have seen a few instances, and which would naturally result where

basic involution had been preceded by intimate adhesion between the lung and the diaphragm. In cases of this kind, the sound lung, whilst it expands in breadth under the influence of compensatory hypertrophy, is restricted as to vertical space. This leads to the formation of a transverse involution, which often occupies the middle third of the axillary surface, and which, as it were, accommodates the sound organ to the curtailed dimensions of its fellow. The interest of the change which I have just described lies in the fact, that the results of excavation are here visited upon the healthy lung. *Ceteris paribus*, the shortening of the hypertrophied lung will favour its encroachment into the diseased side of the chest.

From what has been stated in this lecture, concerning the ascent of the diaphragm in cases of vertical contraction of cavities, and concerning its depression, where the contraction, being horizontal, tends to narrow and elongate the lung, it is easy to divine the direction and extent of the secondary displacements of the abdominal organ. Upon this part of my subject, I need not further dwell; but I would direct your attention to the more important alterations which occur in the position and in the shape of the thoracic organs, and especially of the heart and large vessels.

The aorta, doubtless, owes to the strength of its walls, and to its close connection with the vertebral column, its immunity from the effects of pressure to which other vessels are subjected. The superficial position of the pulmonary artery, and its comparative thinness, render it especially liable to suffer. The shrinking of cavities at the left apex is almost inevitably followed by exposure of the pulmonary artery, and not infrequently by some degree of pressure upon its walls: the clinical signs of these conditions, when present, supply valuable testimony in favour of the diagnosis of contracting vomica. The large veins accommodate themselves with wonderful ease to the great shifting which they occasionally undergo under the influence of excavation, and we seldom notice any serious complications arising in this direction.

Of much greater interest to the practical physician are the alterations in the position, and in the relations of the heart. An attention to these changes is often rewarded with valuable diagnostic results; and I confidently assert that, in some cases of phthisis, the examination of the heart supplies us with evidence more conclusive than is obtainable from an auscultation of the lung.

As a guide to the existing level of the diaphragm, a determination of the position of the heart-beat is of the greatest assistance. The heart's apex, I need scarcely state, does not always coincide with the strongest impulse, perceptible to the hand; nor does it necessarily occupy, as in health, the lowest position. But, should we succeed in ascertaining, by a combination of the methods of palpation and of auscultation, the exact position of this lowest point, we derive absolute information concerning the height of the diaphragm—a subject of the greatest practical importance.

Again, the extent of the exposed cardiac area sometimes throws much light upon the degree of expansion or of retraction of the lungs. Excavation occurring at the left upper lobe, especially in its anterior segment, is apt to be followed by retraction of the spongy substance which normally covers the greater part of the heart's surface. Excavation, in a similar position, on the right side, although it may lead to exposure of the right side of the heart, is usually accompanied by the encroachment of the left sternal fringe over the normal cardiac space, and the presenting cardiac surface is not as a whole increased.

Where the excavation, instead of being anterior and superficial, extends into the depth of the lung, and involves some of the bronchi which are distributed towards the shoulder, and where, moreover, the pericardial surface is adherent to the lung, considerable displacement of the heart outwards takes place on the side affected.

It is obvious that the same contraction will lead, on the left side, to a lateral position, much more extreme than is possible on the right; and that it will also raise the heart to a higher level than follows from right-sided disease. This was long ago pointed out by Dr. C. T. Williams, in his lectures on the contraction of cavities. The specimens and the photographs before you carry their own explanation; you will find in them illustrations of extreme dislocation of the heart towards the left.

The displacement of the heart towards the right is less frequently described, not owing to a less frequency of the apex excavation, but rather owing to the fact that compensatory hypertrophy of the right middle lobe usually supplies in the right half of the chest the place of the tissue destroyed; and also, from the circumstance that adhesions of the right lung to the pericardium are less common than happens on the left. I have frequently met with this displacement; it is well shown in the photographs submitted to you, where I have roughly mapped out the area of the displaced heart and the position of the cavities which have induced dislocation.

In Snakes, there is a small fenestra rotunda left open in the capsule. In front of this, the fenestra ovalis appears; and the rudimentary hyoid arch grows towards it, and, dilating above, gives off an epiphyal; it then becomes arrested, and ossifies to form the columella. There is no tympanic cavity or annulus; and the rest of the hyoid arch is for the most part suppressed.

In such aberrant Lizards, as *Hatteria* and the Chameleons, there is no tympanic cavity nor annulus; and in the latter there is no fenestra rotunda. Moreover, in these types, the columella remains inside the quadrate, like the hyomandibular of a fish. The rest of the hyoid is developed in its lower part in the Chameleon; but in *Hatteria* there is a continuous hyo-stapedial chain from the fenestra ovalis to the floor of the face. In Chameleons, the basi-hyal is immense.

In the typical *Lacerta* and many other high types, the columella is long and continuous, having a proximal plate, a rod, a double ascending, and a tongue-shaped extrastapedial process. Ossification stops at the end of the rounded rod; and here an infrastapedial is given off, which corresponds to the interhyal of Ganoids and Teleostei. The stapedius muscle is now distinct from the digastric, and is inserted into the outer fork of the suprastapedial. The cerato-hyal and basi-hyal are continuous, the latter being a long style. There is a rudiment of a second branchial arch, and there are also two long hypobranchials supporting the larynx. In most types, at any rate, there is no annulus tympanicus. The tympanic cavity is well developed, but the bones surrounding it are not pneumatic. The epi-cerato-hyal does not unite with the infrastapedial, as in *Hatteria*.

In the *Chelonina*, the pharyngo-hyal exists as a cartilaginous rod dilating proximally to fill the fenestra ovalis, and a second joint dilated distally to form the extrastapedial, which becomes circular. There is a cartilaginous annulus tympanicus. The cerato-hyal is aborted; but there is a small hypohyal rudiment attached to the buccal plate. The first cerato-branchial is large; the second is not developed; but there are two hypobranchials forming the thro-hyals. There is a large tympanic cavity; and this is made so much the larger by the quadrate, squamosal, and even the opisthotic, becoming pneumatic. In the smaller kinds of *Emys*, the tympanic cavity is almost entirely in these bones. There is no siphonium carrying air to the mandible; but Meckel's cartilages unite in front, and nearly differentiate a broad basi-mandibular. The basi-hyobranchial is a continuous plate, apiculate in front.

In the *Crocodylia*, the columella is formed in the same manner as in the *Turtle*; but the distal segment, instead of being circular, is formed of two fan-shaped flaps—a supra- and an extra-stapedial. In a very early stage, the cartilage of the mandible and cerato-hyal is continuous. Above the cerato-hyal, there is both an inter- and an epi-hyal segment; the epiphyal unites for a time with the suprastapedial; and the inter-hyal with the inferior angle of the extrastapedial above, and with the top of the cerato-hyal below. This hyo-stapedial chain, much like that of *Hatteria*, continues intact until after the middle of incubation; then, during the last month, the segments all separate again, and the cerato-hyal detaches itself from the articular region of the mandible. At the time of hatching, these parts, which have separated again from the columella, exist as small nuclei. There are a cartilaginous annulus tympanicus, a huge tympanic cavity formed mainly inside the large quadrate, and a median Eustachian tube between the two lateral ones, which last are forked above. These tympano-Eustachian canals open into the basis cranii, which is pneumatic both in the sphenoidal and in the occipital regions; the alisphenoid part of the bony auditory capsule, and the whole occipital arch, are burrowed by air-cavities. From the tympanic cavity, a membranous tube passes to the articular region of the jaw behind the hinge; this siphonium carries air to the pneumatic cavity in the proximal part of the lower jaw.

In Birds, the columella, at an early stage, is very similar to that of *Hatteria*; but only the epiphyal is developed in connection with it. This connection remains; but the whole cerato-hyal region is membranous. The hypophyals meet each other at a sharp angle in front of the first basi-branchial; the second basi-branchial supports the larynx. There is one branchial arch, the upper cornua of which embrace the skull, and sometimes, as in woodpeckers and humming-birds, run forwards to the nasal region. The quadrate is pneumatic, and communicates by a foramen with the tympanic cavity, which lies principally in the hollow wing of the exoccipital. There are two Eustachian tubes, which meet in the middle line under the sella Turcica. The whole skull is pneumatic, and the tympanic cavity communicates with all the surrounding bones. In the Passerine birds especially, the siphonium is ringed with small bones, there being seven of these small tympanics on each side in *Corvus corone*. There is no cartilaginous annulus, and the meatus externus is becoming deeper. The concha, though imperfect in most birds, is large, but membranous in owls,

NITRO-GLYCERINE IN PUERPERAL CONVULSIONS.*

By W. E. GREEN, M.R.C.S. & L.S.A., Sandown.
Surgeon to the Isle of Wight and Newport Junction Railways.

ON August 21st, 1881, I was summoned to attend Mrs. M.; but, as I was absent, my partner, Dr. Barker, saw the patient for me. He found that she was primipara, and that a midwife had been in attendance; and, in consequence of the labour being unduly prolonged, it was causing considerable anxiety to the friends. As the head was presenting, and all seemed to be going on well, Dr. Barker left, leaving instructions to be sent for again in case of necessity. On returning from my morning round, a messenger met me with an urgent request to go immediately, as the patient was in convulsions. On my arrival, I found her lying on the floor in convulsions, which, however, were less violent than they had been. On their first appearance, the midwife had, with considerable presence of mind, applied sinapisms to the calves of the legs and to the nape of the neck; the patient had been convulsed an hour. I had her placed in bed, and, finding the head of the child well down upon the perineum, I requested Dr. Barker (then present) to apply the forceps and deliver at once. The removal of the placenta was followed by a short rush of blood, which soon stopped. The convulsions had ceased before the application of the forceps, but the unconsciousness remained. The pulse was quick and of high tension; the face and eyelids puffy; the legs cedematous, and pitting deeply upon pressure, whilst the feet were cold. Leaving the case in charge of my partner, I ordered a mixture containing eight minims of a solution of nitro-glycerine (1 per cent.) in an ounce of water, with instructions to give a teaspoonful every hour until the evening. The first dose was given to the patient about two and a half hours after the commencement of the attack, the coma being then as profound as at any time; within ten minutes of taking it, the patient regained perfect consciousness, and asked questions about her confinement and child, of which, till then, she had been oblivious. Four or five doses of the mixture were given, and, when seen again during the evening, she had a soft quiet pulse, and was quite comfortable in other respects. The first urine we were able to obtain showed, upon examination, at least two-thirds of albumen; and, upon inquiry, we found that this secretion had been scanty for some months, and that there had been also considerable anasarca of the lower extremities. The patient made a tedious recovery, and it was fully six weeks before all trace of albuminuria disappeared. The pulse-rate and temperature remained abnormally high for some time, and at length it was necessary to wean the baby; after which the patient's progress was more rapid, and at the present time she is in better health than she has been for years.

Having given the history of this case, it will be well to relate by what train of reasoning I was led to select nitro-glycerine as an appropriate remedy. It was my first experience, during a period of more than twenty years, of a case of puerperal eclampsia; and, whilst watching it, I noticed how all the symptoms pointed to it as belonging to that class of convulsions which are identical with uræmic convulsions. There were the pulse of high tension, the cedematous and cold extremities, and the puffy condition of face and eyelids, which combined to show that an albuminous condition of the urine was present. In uræmic convulsions, I had seen benefit accrue from two remedies: first, from the inhalation of nitrite of amyl (such benefit being transitory, and lasting but a short time after withdrawing the remedy); and secondly from bleeding, the relief from which was permanent until a future attack.

Since the introduction of nitro-glycerine into practice as a remedy for angina pectoris, chiefly through the investigations of Drs. Branton and Murrell, I have had considerable experience of its value as a means of reducing arterial tension, and of its power of keeping up this effect for a variable time. I therefore determined to use it when I should next meet with a case of uræmic eclampsia, and, as it were, bleed the patient into his own blood-vessels by dilating them. I believed my theory to be perfectly rational, and that it was so, I think, fully exemplified by the success of the remedy in this particular instance; for the patient not only quickly regained perfect consciousness, but this was maintained without the least approach to a relapse.

There are several causes of puerperal convulsions, but the largest number of cases are the result of a high tension of the arteries, caused by their containing blood which has been imperfectly depurated, probably owing to pressure upon the renal arteries by the gravid uterus.

* Read at a meeting of the Isle of Wight District of the Southern Branch.

now laid down by Dr. Barnes), and, as will be seen, with the fortunate result of recovery of the patient.

On August 26th, 1873, at 11 a.m., a strong, healthy Mahomedan, aged 25, was brought to me, said to be suffering from the effects of a dose of medicine which he had taken about 8 a.m. for fever, supposing it to be quinine. Soon after taking it he began to feel a severe burning pain in his stomach, and this gradually increasing, he begged his friends to bring him over to me. On his arrival his friends showed me the bottle from which he had taken the supposed quinine, and in it I found about a drachm of strychnine tolerably pure, only a little discoloured. Of this he stated that he had poured into his hand and taken, without weighing, a quantity which he thought to be a proper dose of quinine. He was complaining of a severe burning pain in the epigastrium, and spasms of the muscles of the back and legs had set in, opisthotonos being well marked. Having no sulphate of zinc at hand just then, I gave him half a drachm of ipecacuanha powder, followed by copious draughts of warm water; these he took pretty readily, but with some effort; in about ten minutes vomiting occurred, but not freely, so I repeated the dose of ipecacuanha, after which vomiting was very free, the contents of the stomach being ejected with great force. After this, the tetanic spasms continuing to increase, at 3 p.m. I commenced the inhalation of chloroform, which soon relieved the spasms and put him into a good sleep for about an hour; on awaking, the spasms returned, and chloroform was again administered with the same good effects. At 7 p.m. the spasms had much decreased in frequency and force. Chloroform inhalation was continued at intervals, as required, till about midnight, by which time the spasms had nearly ceased, and by morning completely so, his only complaint then being of pain and soreness in the muscles of the back. The man was perfectly conscious throughout, and after the emetics had freely acted, he showed me how much of the drug he had taken, which, on being weighed, was fully two grains. He stated that he had taken no food that morning, either before or after taking the medicine, and this was confirmed by the character of the vomit, which was quite free of any food. This, of course, made me less hopeful of his recovery. The way the man accounted for the possession of the drug was, that one day, about a month previously, he had picked up on the road a paper containing it, and, on showing it to some friends and being told it was quinine, he had put it carefully away in a bottle for future use, and having, the night before taking the dose, had an attack of fever, he thought he would make use of it, and did so with the consequences above described.

PELIOSIS RHEUMATICA.

By J. McNAUGHT, M.D., M.R.C.S., Newchurch-in-Rossendale.

THE two following cases, extracted from my note-book, may be of interest, if read in connection with those brought before the Harveian Society by Dr. Stephen Mackenzie, and reported in the JOURNAL of March 18th.

On April 10th, 1881, I saw a female child, aged six years, whose mother stated that for the last fortnight small red spots had come over the legs and thighs, and gradually died away in two or three days, to be succeeded by fresh crops. The child had complained of pain and stiffness in the legs, and had been feverish and out of sorts. I found her in bed, unable to walk, complaining of stiffness in the legs and pain in the knee-joints, which were slightly swollen. The skin was hot, the tongue foul, and the bowels constipated. Scattered over the legs, thighs, and buttocks, were numerous purple spots, varying in size from a pin's-head to a sixpence. They were unaltered by pressure. The gums were normal, and there were no spots higher than the hips. These discolorations gradually faded away, passing through the varying tints usual to a bruise in about four days. They were succeeded by a fresh eruption of spots of a brighter red colour, rather more raised and unaffected by pressure, and they were now freely scattered over the arms as well as the legs. There was considerable fever and loss of appetite. She was pale and anæmic, and at the apex of the heart a systolic murmur was heard. On the 25th she was better, the spots having faded to a dirty green colour. In a day or two a fresh eruption occurred, and there was a return of the feverishness and of the pain in the joints. The case pursued a similar course for some weeks, the spots fading in about four days, to be succeeded by a fresh crop, which came out usually during the night. There was once or twice slight epistaxis. The treatment at first consisted of liquid extract of ergot, wine, and nutritious food; but as this seemed to do little good, she was put on iron, and then quinine; but seemingly with little benefit, for the disease appeared to gradually disappear independently of treatment at the end of three months. This case corresponds closely to the

description given by Dr. Mackenzie of peliosis rheumatica. I was struck by its peculiar features at the time, and noted it accordingly.

The second case presents very different features. In March 1881, I saw a male child, aged 18 months, which had recently been suffering from teething, irritation, and bronchitis, and was left in a weak condition. The mother said she saw nothing peculiar about it when put to bed at night, but in the morning noticed the pillow much stained with blood, evidently from the nose and the face, as it was when I saw it. One side of the face and eyelid were found of a deep black colour and enormously swollen, as if from a very severe bruise. The other eyelid was discoloured, but to a less extent. On the tip of the tongue were three punctiform ecchymoses, and scattered over the scalp and lower extremities were a few others, not by any means numerous nor of large size. They were unaffected by pressure. The gums were slightly but decidedly spongy below the front teeth. The child was feverish and extremely restless. The treatment was liquid extract of ergot, and for a day or two some improvement took place. Free epistaxis occurred on the third day, and on the fourth night death took place suddenly, probably from extravasation into the lungs, so far as I could gather from the statements of the parents. This is an undoubted case of purpura hemorrhagica, and presents a marked contrast to the first one. The points of special interest are the early age of the patient, the spongy state of the gums, usually said to be absent in purpura, and thus distinguishing it from scurvy, and the sudden death.

CLINICAL MEMORANDA.

ON THE PRESENCE OF OIL-GLOBULES IN THE URINE.

THE presence of free oil in the urine is a sufficiently rare occurrence, I believe, to deserve a brief record. On referring to Dr. Bristowe's *Treatise on Medicine*, I find that "the presence of fluid fat in the form of globules is said to have 'occasionally been observed,' so that it, as a symptom, is by no means common.

I am at present attending a young man, aged 19, the subject of advanced phthisis, who is taking small doses of cod-liver oil twice a day, and his mother about a week ago remarked that she did not think the oil was doing her son any good, as he was daily passing it just as he took it, meaning that the oil was to be seen unchanged floating on the surface of the urine. I was naturally struck with his account of such an unusual symptom, and at first thought that the oil, if it were oil, had gained access to the urine from without in some way or another. I, therefore, directed her to wash the vessel carefully with soap and water, and then to dry it with a clean cloth before her son micturated again, and then to send me some in a clean bottle for microscopical examination. This the mother has done twice, and the result in each case has been the same. I may say that I personally superintended the procuring of the urine on the second occasion. With the naked eye oil-globules were distinctly to be seen floating on the surface, and, on placing a drop under the microscope, the characteristic appearance of the globules could be readily observed. The nitric acid test showed no albumen.

This last day or two the patient has been unable to continue taking his oil, and, as a result, the unusual symptom has disappeared.

O. BOWEN, M.R.C.S.ENG., ETC.

Liverpool, April 8, 1882.

GALL-STONES IN AN INFANT THREE MONTHS OLD.

AT what period of life the formation of gall-stones may be expected is not accurately stated by medical writers, but I think it is tacitly understood that they are surely to be found before puberty.

The following case will be interesting as demonstrating that, at a very early age, gall-stones may be formed and voided, and instructive as an aid in diagnosing the causes of persistent crying in infants, which cannot readily be accounted for by the usual diseases common to childhood.

Recently, I saw a male child, aged three months, who had been entirely brought up at the breast, and who, with the exception of an icteric turn during the first month of its existence, had been very healthy. At six o'clock in the evening, after having been nursed, it commenced to cry, and continued almost uninterruptedly to do so for six hours, when a sedative mixture was administered, which procured disturbed sleep for the little sufferer during the remainder of the night. In the early morning a dose of castor-oil was given, which soon produced an evacuation. On examination of the diaper that was removed, the motion appeared healthy, but the eye was arrested by three small

portion of it there was strong pulsation. His temperature had not exceeded 99°, and in every respect he had felt well. The wound had healed by first intention. There was no pulsation in the radial artery.

On December 21st, the pulsation had disappeared, and the aneurysm was hard except at the lower and internal parts, over an area about the size of a half-crown, where there was still strong pulsation.

It is unnecessary to relate the progress of the case, further than to say that this area of pulsation gradually disappeared until, at the end of a month, the whole contents of the aneurysm were firmly consolidated.

GLASGOW ROYAL INFIRMARY.

THREE CASES OF ANTISEPTIC OSTEOTOMY.

(Under the care of Dr. JAMES WHITSON, Extra Dispensary Surgeon.) THE operations were performed according to the method recommended by Professor Macewen, and the results in all of them were successful.

CASE I.—Peter G., aged 7, was admitted in August 1880, suffering from double knock-knees. On the last day of that month, the patient was put under chloroform, and the legs, having been elevated, were carefully bandaged by means of Esmarch's elastic bandage, from the toes to the middle of the thigh, in order to empty the limbs of blood. A sand-pillow was then placed under the right limb, and an incision made down to the bone with a scalpel, on the inner aspect of the femur, at a point corresponding to a finger's breadth above the external condyle, and half an inch in front of the tendon of the adductor magnus. Before withdrawing the knife, an osteotome was slipped in, and the division of the femur was accomplished without difficulty. The limb was easily straightened, and, the elastic bandage having been removed, a temporary dressing was put on over the incision, till the other limb was operated on. This was done in exactly the same way, and the wounds were dressed with the usual antiseptic dressings, and put up in osteotomy-splints specially made for the patient.

At the end of a fortnight, the dressings were taken down, when both wounds were found to be perfectly healed. The legs were again put up in splints, care being taken to pad the limbs well, in order to prevent any undue pressure.

Within six weeks of the operation, the splints were removed, and sand-pillows placed between, and on each side of the legs.

The patient was dismissed with straight limbs on November 11th; and, for some time before leaving, he was able to walk up and down the ward.

CASE II.—Joseph K., aged 12, was admitted in the beginning of October 1880, suffering from double bow-legs. On the 12th of that month, the patient was put under chloroform, and the limbs, being elevated, were carefully bandaged with Esmarch's elastic bandage, from the toes to above the knees. A sand-pillow was placed under the right limb, and an incision of three-quarters of an inch in length was made over the tibia, about two inches and a half below the knee. The tibia was divided at this point with the chisel. A second incision, about two inches above the internal malleolus, was then made, and the bone was divided with the osteotome. The fibula was not divided, as it yielded to pressure, a green-stick fracture being produced. A temporary dressing was put on, and the elastic bandage removed. The left limb was then operated on, and dressed in the same way. After this, the right leg and then the left were dressed in the usual antiseptic fashion, and put up in osteotomy-splints specially made for the patient, care being taken to pad both limbs well, in order to make them as straight as possible.

At the end of a fortnight, the dressings were taken down, and the four wounds were found to have united perfectly. The splints were reapplied, and kept on for four weeks longer, at the end of which time they were removed, and sand-pillows placed between and on each side of the legs.

The patient went home about the end of November, with straight limbs, having gained at least two inches in height.

CASE III.—Jessie A., aged 4, was admitted during April 1881, suffering from double knock-knees. On May 13th, the patient was put under chloroform, and the legs, being elevated, were carefully bandaged from the toes to the middle of the thighs. A sand-pillow was then put under the right limb, and, an incision being made in the situation recommended by Dr. Macewen, as in the first case, the osteotome was slipped in before the withdrawal of the knife, and the division of the femur was accomplished. A temporary dressing was put on over the wound, and the elastic bandage removed. The left limb was operated on, and dressed in the same way. The usual antiseptic dressings were now put on the right limb, and an osteotomy-splint (for which the patient had been carefully measured) fixed the whole in excellent position. The same process was gone through with the opposite limb.

The girl made a good recovery, and, at the end of a fortnight, the wounds were found to have united. She left the infirmary towards the end of June, with her legs straight and much improved.

REMARKS BY DR. WHITSON.—The temperature in each of these cases was taken twice daily, and was always observed to be about normal. Rectal temperatures are the most reliable; and in osteotomies, where the temperature exceeds 101° Fahr., the dressings should at once be taken down, and the wounds examined, as it is probable that suppuration is imminent. Young patients generally fret a good deal during the first twenty-four hours; more, it appears to me, from intolerance of the position, than any actual pain. The osteotomy-splints act admirably, either in osteotomies, or in fractures of the leg. They keep the limbs in excellent position, the foot being retained at a proper angle by means of the foot-piece; and, from the way in which the knee is fixed, any movement of the parts is rendered next to impossible. The circulation in the extremities should be completely restored before putting on the splints, and afterwards patients should occasionally be asked to move their toes. In the performance of the operation, the limb should be firmly held by two assistants; a sand-pillow gives a firm support during the division of the bone, having no spring, and, from its solid consistency, no tendency to shift its position. It should be covered with jaconet, in order that no blood or other fluid capable of undergoing decomposition may be absorbed by the sand. The density of the bone varies considerably, but in most instances no very great difficulty is experienced in dividing the femur, the tibia, however, is much harder and denser, and requires a good deal of force to divide it. Before performing these operations, I was advised by Dr. Macewen to practise osteotomy as much as possible on a dead body. I did so frequently, and found great benefit from it, particularly as the division of bone is more easily accomplished in the living subject than in the dead.

STRANORLAR UNION WORKHOUSE AND FEVER HOSPITAL.

LIGATURE OF THE COMMON FEMORAL ARTERY FOR WOUND: CURE.

(Under the care of Dr. H. M. JOHNSTON.)

J. W. B., a carpenter, aged about 40, was admitted on May 16th, 1881. He had been paring a wheel-spoke with a very sharp chisel, resting one end of the spoke against his bench, and the other end against his abdomen, and was striking the chisel towards him, when the chisel slipped, and inflicted a deep gash in his groin. Had it not been for the immediate attendance of a retired naval surgeon, who lived quite close to where the accident occurred, the unfortunate man must have perished from hæmorrhage. Compression having been applied, bleeding was temporarily arrested, so as to allow the man to be removed to the Union Hospital, close at hand.

On admission, the patient was pale, almost pulseless, and the surface was covered with a cold, clammy perspiration. Having procured the assistance of Dr. Fenwick, it was decided to at once take up and tie the bleeding vessel. The wound was a transverse one, two inches in length, about two inches below Poupart's ligament, and parallel with it. The patient being placed in the recumbent position, with the limb flexed and abducted, he was brought under the influence of chloroform by Dr. Fenwick. The compress and the fibrinous clots, which for the time arrested the hæmorrhage, having been removed, there occurred a free spouting of arterial blood, from underneath and at the side of the femoral, apparently from the profunda femoris. To clean out all the clots and obtain a good view, it was necessary to prolong the incision to four or five inches in length, an assistant all the time making firm compression with his fingers over the external iliac. After careful dissection through the superficial and deep fasciæ, owing to the free hæmorrhage and the exhausted state of the patient, it was evidently unadvisable to persevere longer in trying to secure the bleeding vessel. The best course appeared to be to secure the common femoral. A little cautious dissection upwards laid bare the vessel, and pressure on it was sufficient to control the hæmorrhage. The artery was secured with a silk ligature, one end of which was left hanging from the wound. Hæmorrhage now altogether ceased; the wound was brought together with a few sutures and bands of adhesive plaster. The limb was laid on its outer side, with the knee slightly bent, and a pillow was placed to support the knee. Hot jars were also applied along the limb.

The wound for the first ten days was daily dressed with carbolic acid dressing, and an occasional linseed-meal poultice applied for a few hours. During this time, the patient had but little fever or constitutional disturbance. The limb had some aching, tingling, pain, which gradually ceased; and the natural heat was restored in a few days. After ten days, the union of the wound was nearly complete,

to epithelioma of the œsophagus, to take one instance, the right lung was entirely or chiefly affected; this seemed to be due to the growth having first involved the trachea, portions then found their way most easily into the right bronchus.—Mr. LONGHURST inquired whether the fluid in the pleura contained any cancer-elements.—Dr. SAMUEL WEST was inclined, with Mr. Butlin, to feel grave doubts as to whether this case was one of primary cancer of the lung; he thought that the growth was probably primary in the mediastinal glands, and spread from them along the peribronchial connective tissue. In a great many cases of malignant disease of the lung, the clinical characters, as in this case, pointed rather to fluid in the pleura.—Mr. ROGER WILLIAMS thought that the theory of the origin of certain tumours only from certain germinal layers was, as yet, in too imperfect a state to be used in any argument.—Mr. STANLEY BOYD referred to a case which he had seen in Jersey last summer. The patient was a middle-aged woman, and the growth appeared to be primary in the lung; for the mediastinal glands were very slightly, if at all, enlarged. The new growth had pierced the diaphragm from above, depressed the liver, and invaded the structure of that organ at certain points. The microscopic appearances were difficult to understand, and he had not yet been able to complete his examination.—Dr. FENWICK, in reply, said that he had not examined the bronchi with special care, but they seemed to be pressed upon by the new growth. If the growth had started from the mediastinal glands, he failed to understand why it had extended into the right lung only.—In reply to Dr. WILBERFORCE SMITH, Dr. Fenwick said that the measurement of the chest on the affected side was increased, and that the movements were limited.

Acne Keloid.—Mr. MORRANT BAKER said that, so far as he was aware, no example of this disease had been recorded in this country. The patient, who was in attendance, was a middle-aged man, who presented on the nape of the neck a flat patch, with an indented overhanging edge, and a smooth dark-red surface, which projected about one-eighth of an inch above the surrounding skin. A few hairs in bundles projected through the surface of the tumour from a lower level. The skin was not especially sensitive; surrounding the patch were a number of firm tubercles, each perforated by a hair, which issued from its summit. The summit had a yellow pustule-like appearance. The larger patch was evidently formed by an aggregation of many of these tubercles. These smaller tubercles closely resembled at first sight the pustules of acne vulgaris, but were entirely different in structure; for each seemed to be composed of soft unbroken red scar-tissue, its summit perforated by a hair, which was rendered especially evident by the yellow quasi-pustular appearance of the epidermis which surrounded the orifice of the follicle. The patient suffered very little inconvenience. He was a butcher, aged 47, who was in excellent health; he attributed the origin of the growth, which began about four years earlier, to a poisoned wound, but this was apparently a mere guess. Mr. Baker had only met with one other instance of the disease: the patient was an old gentleman, who attributed the disease to the irritation of the edge of the collar; he declined any cutting operation, but consented to counterirritation with nitric acid, and the growth did not recur. Professor Kaposi, in writing on Frambesia, referred to a disease in which bright red, papillary, weeping, and partially ulcerating excrescences (which bled easily) existed on the scalp, and proposed to call it *Dermatitis papillomatosa Capillitii*; but Mr. Baker would not have thought of identifying his case with this disease, but that Professor Kaposi and Dr. Hans Hebra, who saw the case during the Congress, recognised it as identical with the disease described by the former. M. Verité informed him that it was identical with the disease called acne-keloid by M. Bazin, and Mr. Baker preferred to make use of this term, because it expressed fairly well the naked-eye features of the growth.—Mr. EVE said that, in the museum of St. Bartholomew's Hospital, there was a large fibroid mass, which had been removed from the neck of a negro. It presented the peculiar arrangement of the hairs referred to by Mr. Baker, and was probably an instance of this disease.

Two Cases of the Prurigo of Hebra.—Mr. MORRANT BAKER showed two lads, who both presented this disease in a well-marked manner; the one was aged 17, the other 12. Both had suffered from infancy, in both the papules were confined to the exterior aspects of the limbs, and in both there was at times a little eczema; this was a rather more prominent feature in the younger patient, who also presented the inguinal buboes to a marked degree. It had at one time been denied that true prurigo (of Hebra) ever occurred in this country, but Mr. Baker believed that it was by no means uncommon, and brought these cases forward now, as they had been seen by Professor Kaposi and others at the time of the Congress, and had been identified by them.—Dr. RAYNER said that recently he had had a case of what appeared to be prurigo, but the papules were found as much on the flexures as on the exterior aspects of the limb, and he had, therefore, hesitated to

call it true prurigo.—Dr. RADCLIFFE CROCKER said that he agreed with Mr. Baker that the cases were not so uncommon as was supposed; for instance, he had three cases at the present time under his care.—Mr. BALMANNO SQUIRE had seen one case of acne keloid, in a young man who had suffered for about seven years from the affection; the case otherwise closely resembled that of Mr. Baker. The application of caustics seemed to cause much irritation, and a fresh outbreak of the so-called pustules, in which the disease appeared to arise, so that the patient had not been relieved.

Papillary Cysts of the Ovary.—Mr. ALBAN DORAN exhibited specimens, showing the seat of origin of these cysts, and the differences between them and the common form. The multilocular cysts, bearing glandular growths and glairy fluid contents, arise from the tissue of the parenchyma, among the Graafian follicles. They rapidly fill the free part of the ovary, altering its form at a very early stage (as shown by a small specimen), and growing into very large tumours with distinct pedicles, for they do not insinuate themselves between the layers of the broad ligament. The multilocular cysts, containing papillary growths and clear fluid, arise in the hilum of the ovaries, from relics of the tubes of the Wolffian body. Hence they resemble papillary cysts of the broad ligament, developed from some of the tubes of the Wolffian body, that lie between the uterus and the parovarium, and that, unlike the parovarium, are normally suppressed. Papillary cysts of the hilum grow to a considerable size before they invade the free part of the ovary, but force themselves between the layers of the broad ligament at a very early stage, so as to be sessile or non-pedunculated. Some specimens were exhibited, showing cysts bearing papillary growths, the part of the ovary containing the ova was still unaffected, whilst the broad ligament was already invaded.

Card Specimens.—Mr. EVE: Three specimens of perforating ulcer of the foot. Mr. STANLEY BOYD: Columnar epithelioma of lower end of colon removed by operation; secondary deposits in the liver.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 14TH, 1882.

THOMAS SMITH, F.R.C.S., Vice-President, in the Chair.

Extirpation of the Kidney for Calculous Pyelitis.—Dr. BARLOW and Mr. GODLEE read notes of this case. The patient was a laundress, aged 57, of somewhat intemperate habits, who came under Dr. Barlow's care in June 1881. Her family history presented no feature of interest; and though she recollected, on being carefully questioned, that she had passed a small calculus twenty-six years previously, she maintained that the present illness dated only from three months previously. She suffered now a considerable amount of pain, which prevented her from moving about, and had at one time a good deal of œdema—of the right leg especially—which subsequently disappeared. The urine contained a large quantity of pus; it was in fair amount, but not much more than about two-thirds of the normal quantity of urea was secreted in the twenty-four hours. The kidney was easily felt, forming a large tumour in the hypochondriac region. The woman was somewhat anæmic, and had a slight cardiac murmur, but was otherwise in good health. The amount of pain, and the quantity of pus in the urine, seemed to justify the authors in suggesting the operation to the patient—though not on pressing it—notwithstanding her comparatively advanced age; and, after due consideration, she consented to its performance. The existence of calculus had been previously ascertained by puncturing the kidney with the needle of an aspirator. The operation was performed, with all antiseptic precautions, by Mr. Godlee on July 14th, that chosen being the abdominal section. It presented great difficulty from the density of the structures round the kidney, but was satisfactorily accomplished, the patient at the time suffering remarkably little from shock. A morphia suppository was at once administered, and some tincture of opium was given by the bowel later in the day. The patient appeared to be progressing favourably for the first twelve hours, and then passed into a quiet sleep. When aroused next morning it was found that the temperature was high; that little or no urine was being secreted; that the respirations were becoming very hollow; and that the patient was in a state of semi-consciousness. From this condition she did not recover, but she died about twenty-four hours after the operation. At the necropsy, the left kidney and the other viscera were found to be practically healthy. It was suggested that the amount of morphia administered had something to do with the patient's death, and that possibly the carbolic acid absorbed during the operation might have helped to this result; though, doubtless, the suppression of urine, from whatever cause it arose, was the most important factor. The parts removed, and half the kidney of the opposite side, were shown at the meeting.

A Case of Pyelitis, in which the Kidney was Explored and Partially

Removal: Death occurring in Thirty Hours from Suppression of Urine.

—Mr. HOWARD MARSH read notes of this case. The patient, a blacksmith, aged 35, was admitted into St. Bartholomew's Hospital in October last. He had had severe pain in the right loin for three years, and for eighteen months the urine had been ammoniacal and had deposited a light-coloured sediment. He had never observed blood. On admission he was pale, and his countenance was worn and anxious. The urine showed pus equal to a third of its bulk on standing, and also a small amount of blood; it was highly ammoniacal and very foetid. The patient complained of pain shooting down from the right kidney in the course of the ureter to the testis. There was some tenderness on pressure over the kidney, but nothing abnormal could be felt either in the groin or anteriorly. There was no stricture of the urethra, and no stone in the bladder. The patient was kept in bed, and in order to ascertain whether his symptoms depended on any bladder-disease complicating the mischief in the right kidney, the bladder was injected every morning, for ten days, with one grain of quinine dissolved in an ounce of slightly acidulated water, and subsequently with water gradually raised to a temperature of 120°. He was also put on a pure milk-diet. But none of these methods improved the condition of the urine. At the end of two months, as he was still passing large quantities of foetid pus, the kidney was explored through an incision extending downwards and forwards from the last rib to the crest of the ilium. It was found greatly enlarged, sacculated, and very firmly bound down by dense inflammatory tissue. On stripping off its capsule—a matter of considerable difficulty—and puncturing its cortical substance, a large quantity of thick and strong-smelling urine escaped. As the whole kidney was evidently disorganised, an attempt was made to remove it, but it was so firmly adherent that this could not be accomplished. What had been exposed was, therefore, included in a double ligature and removed by curved scissors. No hæmorrhage of any moment occurred during the operation, but the patient died in thirty hours of complete suppression of urine. On *post mortem* examination, the right kidney was found converted into a number of large cysts. Three inches below its commencement, the ureter was so narrowed that its canal would only admit an ordinary probe. Above this point it was considerably dilated. These conditions seemed to have been produced by the healing of an ulcer in the ureter, perhaps of a tubercular character. The left kidney had the appearance of being fairly healthy; it weighed six ounces. The author remarked that he was induced to resort to an operation in this case—though, in consequence of the patient's general condition, he did so very unwillingly—in the hope of doing good either by extracting a stone, or by establishing free drainage, or of removing the kidney if it proved to be extensively diseased. It might be a warning for future cases that the condition of the kidney was much worse than there seemed reason to anticipate. Though it could not be felt during careful examination under ether, it was very large; it was so far destroyed that very little renal structure remained; and it was so firmly adherent that its removal was found to be impracticable. Seeing how limited was the success afforded by the incision in the loin, the author thought that experience was likely to show that the best method of removing large kidneys, or kidneys that were bound down by firm adhesions, was by a lumbar section, the incision being made just external to the rectus muscle. He concluded by remarking that, though the results showed that the kidney might be safely exposed by the lumbar incision, and though calculi of small size might be safely extracted from kidneys that were structurally healthy, further experience alone could teach in what cases the kidney might be safely removed. One point must be carefully borne in mind, namely, the liability to suppression of urine from the opposite kidney. He thought the removal of kidney in persons over thirty years of age was, on this account, one of the most dangerous proceedings in the whole range of laparotomy.

Mr. HOWARD MARSH would not like to operate in such cases after the above failure. If Mr. Marsh had cut two ways, with a kind of T incision, he would have done more harm. He then said, however, that he had seen a case, that was, in fact, the rectus abdominis, and that the incision was to be made in the middle of the rectus abdominis. Dr. SMITH thought that the best thing to determine, as regards operation or no operation, was the condition of the urine, especially as regards blood. No operation should be performed when the quantity of urea was small. Mr. P. then distinctly showed that the other kidney was diseased. It was not, however, coming out the kidney, and he said that the kidney was not diseased in a small amount of water. In fact, the water was not by contraction of the vessels, but even when the kidney was not diseased, it was not diseased. The patient died, and passing away of urea. Dr. P. then said that he had seen the case of a lady, aged thirteen, who, for the year, who

began to complain of pain in the left loin, after which pus made its appearance in the urine, but soon disappeared. Mr. M. Baker tried exploration, when much pus came away. No calculus was found, but the boy did very well.—Mr. MORRANT BAKER considered the case to be one of pyonephrosis. There was no question of removal; the pain was relieved, and the pus and urine continued to be discharged. He thought that, on the whole, the abdominal section, with antiseptic precautions, was the best for the patient. If the incision were made in the loin he would not use carbolic acid, as there was too much risk of absorption. It was not always well to proceed to removal at once; the first operation might be purely exploratory.—Dr. MAHOMED was struck with the extreme harmlessness of nephrectomy and nephrotomy. He mentioned the case of a patient who had a large lumbar swelling, apparently due to perinephritis. The patient died of tuberculosis, and the *post mortem* examination showed that an operation would not have given rise to much danger. The kidney itself was of the ordinary size, and only adherent at one point to its surroundings. He thought it would always be better to try an exploratory operation before attempting to cut out the kidney.—Mr. A. J. BAKER said that a large number of recorded cases had proved fatal, at least up to a certain time. Some, when they came under notice, could not well be operated upon, and the kidney could not be removed. It would be a dangerous experiment to cut through the peritoneum into a suppurating kidney. It was better, therefore, to examine it through the loin, and try free drainage for a time. Some cases had done well even when the patients were fifty and sixty. In a recent case, where he had cut through the loin, he did not use the spray, and he was not greatly in favour of exploratory operations.—Mr. GODLEE and Mr. MARSH having replied, the meeting adjourned.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 5TH, 1882.

J. MATTHEWS DUNCAN, M.D., President, in the Chair.

Exemphalos.—Dr. ROUTH showed (for Dr. OSWALD) a *fœtus*. There was protrusion of the intestines and of the brain through apertures in the parietes, and a membrane joined the abdominal and cranial openings. There were hare-lip and a backward curvature of the spine.—The PRESIDENT remarked on the rarity of such bending backward of the spine in *utero*.

Ovarian Tumour.—Dr. JOHN WILLIAMS showed a multilocular ovarian cyst, the pedicle of which had been twisted twice. The whole inner surface and contents of the tumour showed advanced necrobiotic change, but no putrefaction.

Uterine Fibroid by Laparotomy.—Mr. MEREDITH showed an uterine fibroid, weighing six pounds, with both ovaries attached, removed by abdominal section. It had been cut away at about the level of the internal os, the uterine neck encircled with Kober's *ligatures*, transfixed by two stout pins, and secured in the lower angle of the wound. There was a fibroid change in the right ovary, enlarging it to twice its natural size.—Dr. ROUTH said that, in removing the uterus, keeping the stump outside was the important point.—Mr. KNOWLES THORNTON said that the uterine cavity nearly always contained septic matter; and, therefore, when it was opened, the extra-peritoneal treatment was the better: when it was not opened, the intra-peritoneal treatment answered well. In both cases, it was advisable to suture the peritoneal covering of the stump.

Microscopic Sections of Diseased Ovary.—Dr. GALABIN showed sections of the ovary removed by Dr. BRADSHAW in the case to be related, and also of a healthy ovary. The texture of the former was much looser, and contained a larger number of round cells, and these of larger size, than in the latter. Both contained small cysts; Dr. GALABIN thought that these were commonly found, and did not in themselves produce symptoms.

Uterine Fibroid.—Mr. KNOWLES THORNTON showed a detached cyst. It contained a solid mass, covered with kidney-shaped papillae; a projection of bone from which grew several teeth; from another part of the surface grew a small projection, like an abscess head, with long neck. The central part of the mass was solid fat. The pedicle was twisted, the cyst had ruptured, and the peritoneum was full of liquid fat. The tumour was so adherent that its removal was very difficult. The patient recovered without a scar.

Case of Peritonitis.—A paper was read by Dr. FRANKLIN LEECH on the above subject. Case I. The patient, aged 40, was the wife of a workman. She had been ill since the 1st of April, which were brought on by exertion, and which could only be relieved by certain very peculiar means at the time. There was a murmur; the patient was pale and in a weak condition, and the muscle of the heart gradually getting weaker. Menstruation

was normal. There was a prolapsed ovary, pressure on which did not bring on the dyspnoea, but caused much pain. The diagnosis was that the dyspnoea was cardiac, but in some way excited by a prolapsed and very tender ovary. In no other way could the relief by posture be explained. The prolapsed ovary was removed, with the result that the dyspnoea was nearly, but not completely, cured.—Case 11. The wife of a miner, aged 22, a healthy-looking woman, had always been very hysterical. She suffered from constant pain in the left ovarian region, dating from the birth of her first child, three and a half years previously, since which time she had never been free from it, except during the last three months of her succeeding pregnancies, three in number. The left ovary was prolapsed behind the uterus, and exquisitely tender. It was removed, with the result of complete cure. The author believed that the vaginal method of oöphorectomy was the best and simplest for ovaries which were prolapsed or non-adherent.—Dr. ROBERT BARNES regretted that the attitude assumed by London surgeons towards those who practised obstetrics seriously obstructed the progress of this branch of surgery. All great improvements in surgery were largely due to a spirit of enterprise, it might be said of experimental research. He thought that Battey's operation had now emerged from the doubtful domain of experimental surgery, and that we should soon arrive at definite conclusions as to the scope of its application. In a case in which, six months ago, he had removed the ovaries, the fibroid tumour, which formed the immediate cause of suffering, had almost shrunk away. There was a proclivity, from anatomical reasons, to prolapsus and disease of the left ovary, rather than the right. He inquired if the Fallopian tube had been removed? This question was of physiological as well as of surgical interest.—Dr. HICKINGBOTHAM thought that, in Dr. Braithwaite's first case, there was a large amount of hysteria. He attributed some of the relief obtained to the rest and other therapeutic means incident to hospital treatment. He asked what amount of small cysts indicated disease, and what symptoms they produced? They were seen in ovaries removed for widely different conditions.—Dr. HEYWOOD SMITH said that the interest of the cases would be enhanced, if the condition of the patients were reported in six or twelve months; for Dr. Battey found that, when one ovary only was removed, the pain was apt to recur. He thought the abdominal operation preferable in single women; but the incision should be three or four inches in length. The ovaries he had removed he had usually found diseased. He had no doubt that the operation, in proper cases, was destined to be of the greatest service.—Mr. KNOWSLEY THORNTON thought it still an open question whether oöphorectomy was justifiable for ovarian pain; but there was a great field for it for hæmorrhage from fibroids. Accumulated statistics showed that abdominal oöphorectomy was a very safe operation, but that vaginal oöphorectomy was not. He did not think London was behindhand in abdominal surgery.—Dr. GERVIS did not think that the decision, as to the advisability of this operation, should be influenced by the possibility of a subsequent recurrence of hysteria. In the cases in which he had performed it for local suffering, the result had proved its utility.—The PRESIDENT was not opposed to oöphorectomy; but he could not adopt the theory implied in the first case read. To remove one ovary as a treatment of cardiac dyspnoea, he regarded as a wild proceeding; nor could he imagine that it would ever come within the range of rational medicine.—Dr. BRAITHWAITE had removed part of the Fallopian tube in the second case, not in the first. He had secured the pedicle with strong catgut, and united the vaginal wound with one suture only at its lower third. He did not think there was any element of hysteria in these cases. The relief to the dyspnoea in the first case, by the peculiar positions described, showed that it was not altogether cardiac. Since the paper had been sent in, he had heard that the patient was now suffering from cardiac dropsy. Had the operation been done earlier, the result might have been better.

Case of Extra-uterine Foetation, treated by Antiseptic Abdominal Section, with Removal of Foetus and Hypertrophied Placenta: Recovery.—A paper on this subject was read by Mr. KNOWSLEY THORNTON. The early history of the case was narrated at the March meeting of the Society. The author would divide cases of extra-uterine foetation into three classes: 1. Those in which accurate diagnosis is possible; 2. Those in which probability, but not certainty, in diagnosis can be reached; 3. Those in which the nature of the case is not suspected until internal hæmorrhage, or other untoward accident, takes place. In classes one and three, he thought it bad practice not to operate; in class two, an exploratory operation should be performed if the symptoms were urgent. But such operations should only be performed: 1, under strict Listerian precautions; and 2, by a surgeon of special experience in abdominal section: for they were extremely difficult.—Dr. ROUTH said that, wherever there was a growing abdominal tumour, and a complete decidua was voided *per vaginam*, the diagnosis of extra-uterine foetation might be made. The successful removal of the placenta

in this case was due to its hypertrophied condition. Possibly, the placental souffle might have been heard.—Dr. ROGERS said that the souffle heard over fibroids was not so marked as that of the placenta. He thought the presence of milk in the breasts would aid diagnosis.—The PRESIDENT drew attention to the persistent life of the placenta after foetal death, and its great hypertrophy. He did not believe the souffle was placental; he called it uterine. The discharge of an entire decidua was a valuable diagnostic aid. He remembered a case in which such a decidua was passed; rupture of the sac and internal hæmorrhage took place. After a few days, he evacuated the hæmatocele *per vaginam*, and found chorionic villi in the fluid. The patient did well. Now-a-days, he would have had laparotomy done to get the bleeding stopped.—Mr. THORNTON said the souffle was not heard; had it been, it would have strengthened, in his opinion, the diagnosis of fibroid tumour. The case narrated by the President was a very rare one. He thought that now abdominal section would have been attended with less risk than the course followed.

HARVEIAN SOCIETY.

MARCH 2ND, 1882.

WILLIAM HICKMAN, M.B., President, in the Chair.

Erythema Iris.—Mr. MALCOLM MORRIS showed a case of erythema iris.—Dr. WILLIAM SQUIRE considered, from the colour of the patches, it was erythema; and from their shape, iris.—Dr. GRIGG agreed in the diagnosis.

Menorrhagia.—Dr. EDIS read short notes of three cases of menorrhagia. The first was one of ovarian menorrhagia in a young lady aged 18. Tonics had been tried, but had aggravated the difficulty. Regulation of the bowel, attention to diet, and the administration of bromide and iodide of potassium, succeeded in overcoming the menorrhagia. The second case was one due apparently to congestion of the liver, constipation, want of exercise, and the imbibition of alcohol with a view to keeping up the strength. Abstinence from alcohol, regulation of the bowels, and the employment of bromide of potassium, soon relieved the patient. The third case depended on tight-lacing, imperfect mastication from defective teeth, too scanty clothing, and constipation. These several conditions were remedied, and the menorrhagia ceased within a very short time.—Dr. WILLIAM SQUIRE pointed out that there was a rise of temperature before menstruation, and general vascular tension during that period, which tension was diminished by bromides and iodides.

Primary and Secondary Vaccination.—Dr. CLEVELAND read a paper on this subject. In the course of a graphic description of the way in which Jenner made the discovery, he pointed out that Jenner held that only those milkers who contracted cow-pox in the early stage from the cow, when the vesicles were advancing to maturity, were rendered insusceptible to small-pox. After the vesicle had become a pustule, no such immunity could be conferred by it. Jenner also believed that cow-pox was produced by farriers communicating the virus of grease from horses' heels to the cow. Subsequent researches had proved that grease could not give rise to cow-pox. There was, however, a disease with which it was often associated, and which was really horse-pox (*variola equina*), which was communicable to the cow, and also to the human race, and was, moreover, protective against small-pox. The author considered that Pasteur had established beyond controversy what was always maintained by Jenner—that small-pox and cow-pox were modifications of the same disease. This was also proved by Mr. Badcock's experiments in 1840, who obtained vesicles in the human being, not distinguishable from vaccinia, by inoculating cattle with variola, and from these inoculating children. He further considered that vaccinia might be so modified by transmission as to lose its protective power, and attributed the epidemics from 1871 to 1880 in a great measure to inefficiency and neglect of vaccination; and advocated, as a remedy, careful vaccination, to be ensured by the appointment of public vaccinators for all. Dr. Cleveland quoted Dr. W. B. Carpenter, who, in reference to syphilisation by vaccination, said: "Even now, the number of known cases referred to may be counted by tens, although at least sixteen millions of vaccinations have been performed since vaccination was made compulsory." Jenner also recommended revaccination where primary vaccination had not run its course in a regular and satisfactory manner; and Dr. Seaton held that "one thoroughly good primary vaccination to start with, and one careful revaccination after puberty, so conducted as to give evidence that the lymph was absorbed, are all that is necessary for complete protection."—Dr. STEWART pointed out the frequency of small-pox marks in his earlier days, and the great mortality among the unvaccinated. He remembered a family of six children, of whom five died, the survivor being the only one who had been vaccinated; also one of ten children, of whom nine died, the survivor again being the

Turning on to page 108, we find some interesting remarks upon the permanent arrest of lateral curvature—a result which, Mr. Adams later, "very commonly takes place in cases of slight curvature," leaving the patient permanently slightly deformed. The conditions which

[illegible]

are stated to be most favourable to the production of this spontaneous arrest are: 1, equality of length of the curves; 2, absence of debility; and 3, late commencement of the deformity (*i.e.*, after childhood), from mechanical causes, such as bad habits of position. Some cases are recorded, which are illustrated by woodcuts. But, notwithstanding this occasional arrest of increase of the deformity, it is urged that completion of growth does not usually exert much influence in preventing the increase of lateral curvature.

With regard to treatment, Mr. Adams has not found it necessary to modify the principles which he has for many years advocated; but, in the appendix, he describes some of the new methods of treatment. The plaster-of-Paris jacket he has found quite unsuited to the treatment of this deformity; but, in incurable cases, the plastic felt jackets have been, to a certain extent, useful.

With reference to the principles of treatment to be adopted, a new classification is given. Cases are separated into deformity from (1) physiological causes; (2) commencing structural causes; (3) confirmed structural causes. This arrangement appears to us essentially practical and useful.

With reference to the means of diagnosing the commencement of structural changes, the prominence of the angles of the ribs upon the convex side of the curve in the dorsal, and of the spinous processes in the lumbar region, observed when the patient stoops, are particularly worthy of remark, as being a more certain means of diagnosis than the displacement of the apices of the spinous processes.

The various systems of treatment are well discussed; and the author carefully points out the extent to which each system may be relied upon in the treatment of the different classes of this deformity.

SCROFULA AND ITS GLAND-DISEASES: AN INTRODUCTION TO THE GENERAL PATHOLOGY OF SCROFULA. With an Account of the Histology, Diagnosis, and Treatment of its Glandular Affections. By FREDERICK TREVES, F.R.C.S., Assistant-Surgeon to, and Senior Demonstrator of Anatomy at, the London Hospital; late Wilson Professor of Pathology at the Royal College of Surgeons. London: Smith, Elder and Co.

THIS work deserves careful reading, being written, evidently after a good deal of study and research, by a surgeon who has already shown considerable knowledge of the pathology of scrofulous glandular disease. Mr. TREVES's lecture on this subject appeared in our pages at the end of last April. In that discourse, the lecturer discussed at length the microscopical appearances observed in strumous lymphatic glands; and gave reasons for establishing the doctrine, that the giant-cells found in diseased lymphatics are simply lymph-coagula, involving in their coagulation a greater or less number of cellular elements, and are not essential, but merely indicate stages or degrees of a morbid process. This process is essentially a tendency, on the part of the individual, to inflammations of a peculiar character, the most prominent feature being the constant implication of lymphatic vessels and tissue. As to the precise relation between scrofula and tubercle, the author is of opinion that the former is commonly associated with the latter; and, in rare instances, where tubercle is not found in the morbid tissues of a scrofulous subject, changes that elsewhere are observed, as the precursors of tubercular deposit, are to be found in those tissues. The tubercle seen in purely scrofulous diseases is usually of an immature character, as compared with the tubercle of typical tubercular diseases: hence the distinction between scrofula and tuberculosis is merely a question of degree, scrofula being the milder disease.

Mr. Treves's work is founded on the principles enunciated at the above-mentioned lecture, delivered last year at the Royal College of Surgeons. He maintains his original opinions on the nature of tubercle, and is strongly opposed to classifying it among neoplasms. "The fact remains," says the author, "that, in spite of possible differences of origin, a number of pathologists regard tubercle as a new growth. 1, however, would venture to urge that tubercle is merely the product of a peculiar form of inflammation; that it is no neoplasm in any other sense than that it is an inflammatory neoplasm." He further insists, that the tubercle is a direct product of inflammation. He points out how the enlargement of a cervical gland can often be traced to some simple inflammation—in the mouth, for example. Lymphatic glands reproduce morbid conditions transmitted to them from the periphery, in the present case the cervical gland inflames; but, as a secondary result, the products of the inflammatory process become altered from the simple type, and tubercle appears. The original inflammation stands to the tubercle in relation of cause to effect: "at no time, in the course of the gland-affection, could one say, here inflammatory action ends and the growth of a neoplasm begins." Inflammatory processes tend to spread far and rapidly, and to cure themselves spontaneously,

and this is seen in scrofula; neoplasms that spread quickly are just those that show the least signs of even partial and local return to healthy conditions.

Mr. Treves is sceptical on the subject of inoculability of tubercle; the experiments to prove this doctrine have been meagre in good results. Eruptions of tubercle have followed inoculation; but, to maintain the theory of the infective nature of tubercle, it must be shown that no other matter or tissue can produce a like effect; that no peculiar morbid tendencies exist in the animals subjected to experiment; and that the results of inoculation are fairly constant. The micro-organism alleged by Klebs, Hueter, and others, to produce tubercle on inoculation, failed to set up that morbid change in Deutschmann's experiments; and, in Schüller's researches with tubercular matter, contusions of joints produced tubercular joint-disease in animals living amongst others that had been rendered tuberculous, but not in subjects that had been kept apart from the latter. This exposes a serious source of fallacy.

The chapter on the definition of scrofula contains much with which the readers of the lecture will be familiar. In treating of the relation of phthisis to scrofula, he denies any relationship of cause and effect; but considers that they represent, and are due, to the same morbid process. Phthisis may be termed *scrofula* of the lung, and a scrofulous lymphatic mass may be regarded as phthisis of a gland; the two may often exist in the same subject, but the one does not cause the other. Yet, clinical and pathological evidence does not support the belief in the frequency of scrofulous glandular disease in phthisical patients. Their simultaneous existence is rare, although their pathological nature is identical; and this is owing to a certain antagonism between scrofulous diseases of all kinds. Concurrent scrofulous affections are found to be rare in the records of the well-known institution at Margate, excepting in clear examples of cause and effect, where one affection was *always* glandular, as ophthalmia and enlarged cervical glands, or ulcers of foot with inguinal bubo. Otherwise, only one grave strumous disease existed in the same patient. This being the case, we need no longer wonder why the changes which cause scrofulous disease of the glands are rarely seen in a phthisical patient, there being an antagonism between the similar pathological condition that, in the former case, attacks the lymphatics; in the latter, develops in the lungs. Such are the author's opinions; in fact, at the end of his chapter on this subject, he complains of "absurd objections to this identity of scrofula and phthisis." In fact, he recognises only a local and a clinical distinction, and establishes that antagonism by which the two different local forms of disease come to be rarely coincident.

In the second part, Mr. Treves describes the changes in lymphatic glands in scrofula, the subject of his lecture at the College of Surgeons. This part is embellished with fourteen drawings of the microscopic appearances of sections of strumous glands, in different stages of disease, from the ordinary inflammatory changes, which take place in the centre of the gland, to the appearance of the "giant-cells"—his opinions on their nature we have already mentioned—and to the caseation and fibrillar changes observed in more chronic scrofulous conditions. With regard to the primary disease that causes the strumous enlargement of a gland, Mr. Treves adds an important qualification to his remarks quoted above from the earlier part of his work. Some simple inflammation—about the mouth, for instance—sets up this affection of a cervical gland. But similar inflammations of the integuments, etc., of the extremities are not nearly so prone to cause rapid strumous enlargement of the axillary and inguinal glands. The author's explanation is that the kind of peripheral mischief, most frequently and rapidly followed by scrofulous affection of the neighbouring glands, is that which is situated in the adenoid tissue of a mucous membrane. Hence the frequency with which the bronchial and mesenteric, as well as the cervical glands, are implicated. Since the anatomical distribution of the lymphatic glands should be well known to those who study the subject of Mr. Treves's work, a chapter is devoted to this subject, and it is based on Dr. Curnow's *Gulstonian Lecture* for 1879.

Space forbids us to enter at length into the questions of treatment of scrofulous glands, as enunciated by our author. Mr. Treves believes, as we have all believed for years, in healthy surroundings, cod-liver oil, iron, and sea-air. "One of the best 'mineral waters' would appear to be the Adelheid spring of Heilbronn." Suppuration should be checked by puncture as soon as possible; and poulticing is not recommended till the skin over a glandular abscess has yielded or been punctured; otherwise, increase of abscess-cavities and undermining of the integument are promoted. Iodine finds little favour with Mr. Treves, but he advises the use of the iodide of lead ointment in very chronic, indolent glandular enlargements. Excision is recommended for old, solitary, indolent, freely movable, and well-defined glands; for similar glands in groups, situated in regions where their sudden suppuration would be mischievous; and for a gland that exercises injurious

Lamson. An inherited predisposition to insanity is not to be predicated of individuals, however mad their progenitors may have been, unless the individuals themselves show signs of defective mental equilibrium or disorder of the nervous system; and so, in connection with criminal responsibility, a proof of insanity in ancestors is only of value as corroborative or interpretative of existing indications of mental disease. These indications, it may be argued, were not wanting in Lamson, but may be recognised in the fantastic ideas and extravagances of conduct which several witnesses describe. The toxic influence, however, of the drugs of which he partook is in itself adequate to explain his preposterous statements and wild behaviour; for morphia, like alcohol, if taken in sufficient quantity, will disturb the action of any brain, whatever its hereditary tendencies may be; and the utmost that can be said of Lamson's supposed inherited taint is, that it perhaps disposed him to contract the morphia habit, and that it aggravated the effects of that habit.

As regards the second fact alleged in Lamson's favour, that he had, by the use of narcotics, weakened his intellect and paralysed his will, it must be observed that irresponsibility for criminal conduct cannot be admitted in anyone addicted to such drugs, unless a continuous state of mental disorder, abolishing the knowledge of right and wrong at the time of committing the act, has been set up by them. The delirious excitement which exists while they are still circulating in the blood and poisoning the nerve-centres, does not confer irresponsibility any more than drunkenness does. It is only when a mental state analogous to delirium tremens, or mania *a potu*, or chronic alcoholism, has been induced by narcotics—a state which will not at once terminate when their use is abandoned—that insanity of such a nature as to exempt from punishment can be said to exist. Now, did insanity of this kind exist in Lamson? We regret to say that there is, up to this time, no certain proof that it did. The delusions, restlessness, prostration, and oddities of conduct, of which his friends speak, seem to have occurred while he was actually under the influence of narcotics; and his friends, indeed, seem to have regarded him as a man abandoned to a bad habit, and not as one bereft of reason. No attempt seems to have been made to place him under restraint in a lunatic asylum; and immediately before the tragedy at Wimbledon he was living alone in London, and under no kind of supervision.

It is probable that popular notions as to the effects of the habitual use of narcotics on the human organism are greatly exaggerated. Sir George Birdwood maintains that opium in moderation is not only innocuous, but beneficial to East Indians; and instances might be quoted in which longevity and high intellectual activity have been shown to be compatible with an excessive consumption of this drug in Europeans. It cannot be questioned, however, that morphia, taken in the manner and amount in which Lamson took it, is pernicious and demoralising. Atropine, which he appears to have combined with the morphia, ought, to some extent, to have antagonised its effects; but it is quite possible that two such alkaloids, taken together for a long period, might be more injurious to health and mental integrity than either of them taken alone. We have not recorded facts sufficient to justify any authoritative statement as to the consequences of the protracted employment of a mixture of morphia and atropine, and far less are we in a position to say what might be the result of the habitual use of a mixture of these with aconitine. The Rev. Mr. McElroy says Lamson told him that he used atropine, but preferred aconitine, which, as far as we are aware, has never hitherto been taken by any one habitually in the manner of morphia, or in order to secure agreeable sensations. But without speculating on the possible effects of the continuous use of certain drugs or combinations of drugs, the important point seems to be to determine what was Lamson's mental condition at the time of committing the crime of which he has been convicted, as far as that is at present known to us. And in the evidence bearing on this point, we certainly do not recognise a description of the dreamy, retiring, contemplative mood of the habitual opium-eater on the verge of insanity, nor of the mental confusion, or weakness, or delusions of

the lunatic. Lamson was vigorous, ingenious, and astute in attempting to raise money to meet his pressing wants immediately before the murder. Mr. John Law Tulloch, medical student, testifies that on the 3rd of December, the day of the murder, Lamson acted so strangely at the Eyre Arms, that one of his friends asked him if he had just escaped from a lunatic asylum, but Lamson's condition at this time did not evidently impress Mr. Tulloch with his incapacity to transact business, for he cashed a cheque for him; nor with his inability to take care of himself, for he permitted him to start for the Continent unaccompanied. Mr. William Tulloch, an accountant, also testifies that at this time Lamson was so strange and excitable that five friends who saw him were inclined to think him mad; but he supplies perhaps the clue to Lamson's strangeness and excitability by mentioning that he saw him use the hypodermic syringe that day. As Mr. Bedbrook has not in the witness-box, nor since, alluded to any striking peculiarity in Lamson's behaviour, we may conclude that there was nothing in it to attract his attention. Nay, we may infer that he noticed nothing suggestive of insanity in his guest, from the fact that he swallowed a capsule which he handed him and permitted his pupil to swallow another. Lamson's conversation with Mr. Bedbrook bore no trace of mental bewilderment, agitation, nor of delusions, but dexterously led up to the criminal act, for which he had come prepared, to wit, the administration of the poison-charged capsule to his afflicted brother-in-law. No one reading Mr. Bedbrook's account of what took place at his house on the 3rd of December can detect in Lamson's words or acts any symptoms of mental aberration, nor of the immediate pernicious influence of narcotics. His victim certainly did not think him insane or narcotised, for, while he remarked that he was not looking well, he said nothing that pointed to the faintest suspicion of his sanity or sobriety.

It is suggested that Lamson, having an unreasonable faith in the efficacy of aconitine, had come to use it recklessly, and, that depraved and weak-minded in consequence of his indulgence in morphia, he gave a poisonous dose to his brother-in-law with culpable heedlessness, but without homicidal intention. Dr. Volkin, who was associated with Lamson in a hospital at Bucharest for six months during the Russo-Turkish war, asserts that he administered aconitine to a reckless and unwarrantable extent, and that he, Dr. Volkin, had to remonstrate with him on the subject. It would be interesting to know what is precisely meant by administering aconitine to a reckless and unwarrantable extent, and what were the results of this kind of practice; and it is impossible to avoid the criticism that something more than remonstrance was needed on the part of Dr. Volkin when he saw such a hobby or system of practice being pursued by one, whom, he now says, he knew at the time to be of unsound mind, and irresponsible for his conduct. But the answer to the suggestion that Lamson gave the aconitine to Percy Malcolm John recklessly, is that he gave it surreptitiously. If he were administering a remedy which he believed to be beneficial, what necessity was there for concealment any more than with regard to the quinine which he had openly prescribed for his brother-in-law? No one can doubt that the aconitine was lodged in the capsule, which he filled up with sugar, and induced his brother-in-law to swallow in the presence of Mr. Bedbrook, as an innocent illustration of a way of avoiding nauseous tastes; and no medical man can doubt that the quantity of aconitine found in the body of Percy Malcolm John could have been administered with only one purpose, and that a murderous one. The most rash and ignorant tyro—and Lamson was not a tyro in the use of this drug—could not have administered such a dose as a medicine. But, again, if this dose of aconitine had been recklessly or accidentally given, why was not the truth avowed at once, why was the attempt made to conceal its administration, at the risk of such an inevitably disastrous misinterpretation of the act, in the event of its being proved and brought home to its performer?

Poisoning is by no means a common form of homicide amongst the insane, and is, indeed, almost inconceivable as a lunatic crime, except as the result of a delusion. But when poisoning was resorted to by a deluded lunatic, there would assuredly be other evidences of the exist-

the manner of administration had reached perfection; but the chloroform and the patient himself must always be taken into account, and this element was left out of sight in M. Gosselin's formula.

We are desirous to invite discussion rather than to offer criticism of these views of our eminent French colleagues, and therefore for the moment abstain from any comment.

RESPONSIBILITIES OF PRISON SURGEONS.

WE note, with pain and regret, that an attack—and as it appears to us on the face of the published facts, and the result of the inquiries which we have made on the subject, a most unjustifiable attack—has been made upon the medical officer of Her Majesty's prison at Chester, in respect of the death of a prisoner who had recently been confined in the gaol, under a magistrate's sentence, for a short term of imprisonment. We gather, from the evidence, that this man had been sentenced to a month's imprisonment with hard labour; on being examined, however, by the medical officer, this gentleman observed symptoms which indicated irritability of the heart, and spasmodic distressed respiration coincident with it. Knowing these symptoms, and having examined the man, the medical officer at once reported that he was not, in his opinion, a fit subject for hard labour, and recommended that this part of his sentence should, on medical grounds, not be carried out. The hard labour was therefore, in virtue of the report of the medical man, not enforced; and the fact that it was not imposed was entirely due to the diagnostic skill and the intelligent humanity of the medical officer. There was nothing in the prisoner's condition, during the remainder of his stay in the prison, to indicate any further aggravation of his symptoms, nor any condition calling for active medical treatment. Accidentally, however, it happened that it was desirable to remove one or two of the prisoners from the cells to the infirmary, in order to make room for others. Having regard to the condition of the man in question and to the fact that hard labour had not been enforced in virtue of the medical report, he was selected, with the medical officer's approval, with two others, and sent to the Infirmary; the reason being, not that there was any change in his symptoms or condition which required hospital treatment, but that, as three persons had to be removed from the cells, he was thought to be one of those who might with the least inconvenience be so removed. He had no attack of illness while in the infirmary, and his condition did not then call for any medical treatment; but he had the advantage of rest and quiet, so far as his irritable disposition allowed him to avail himself of such an opportunity. He left the prison apparently no worse than when he came in, but, on the contrary, probably rather better, but still very subject to the cardiac attacks incidental to the condition of the heart, which make any man's life under such circumstances (as it is quite unnecessary to state to our medical readers) a matter of most uncertain tenure, and liable at any moment to sudden termination. He was seen at 12 o'clock on the day of his discharge from the prison by the medical officer, who found him in his usual condition, but having a somewhat irregular pulse. He moved about very freely all the morning, and his condition was not one to inspire any special uneasiness or alarm at the time; and, on inspection, there was nothing in his state to suggest any immediate cause for anxiety, or any reason for exceptional measures. This man had the power and the habit of rapidly accelerating at will the heart's action, and inducing a condition of great cardiac irritability and excitement, with coincident faintness; and the evidence goes to the effect that he was in the habit of doing this, either to excite pity and obtain stimulants, or as a means of displaying personal irritation. These attacks of sudden faintness, which, as we have said, he seemed to have the power of bringing on at will, were no doubt extremely injurious to himself, and might obviously at any moment end in death. On leaving the infirmary, he was assisted down the steps, which were somewhat slippery; and, when being put into the conveyance to be taken to the workhouse, he brought on one of these attacks of excitement and faintness, and asked for brandy, which was given him in consequence. He arrived at the

workhouse in a state of considerable exhaustion, and shortly afterwards he died.

It is not a little surprising that any sort of charge should be founded upon such circumstances; and it is certainly in the highest degree discouraging to medical officers, who perform very difficult duties under circumstances requiring the exercise of discretion tempered with humanity, and often making serious calls on the one hand on their judgment, and on the other hand, on their kindness, that in such a case as this the action of the medical officer, which was obviously dictated by a combination of sound judgment and humanity, should not only be called in question, but that it should be attacked in language which would be unfitted almost for any occasion, and has certainly no justification whatever in the circumstances stated. Medical officers of prisons have much responsibility, and important powers. In this case the responsibility was accepted, and the power was exercised in the modification of the sentence which the magistrate had imposed. The man was freed from hard labour, which, in his condition, might prove highly injurious to him, and he was allowed rest throughout the whole term of his imprisonment. This would certainly, under the circumstances, be the most judicious form of treatment. To make the medical officer responsible for the fact that in one of the attacks of angina, to which he was subject, the man died shortly after removal from the prison, would be inexcusable in a layman; but it is still more so where those who exercise judgment in the matter have preliminary medical knowledge. It is really an abuse of language of the most grave kind to refer to such a death as being "brought about by unnatural means;" and we can only conclude that those who have used such language in the case have either not investigated it at all, or have been misled by partial and incorrect statements and imperfect knowledge of the facts.

It is an odd way of supporting the medical officer in the discharge of his duties, to suggest that in such a case it is not he who is to blame, but some occult personages who may be supposed to have fettered his judgment, and who have impeded his action. This is only a thin veil for disguising an altogether undeserved censure. As a matter of fact, after carefully examining the whole of the details, we can see nothing else in this case but an ordinary death from angina pectoris, occurring in a man who had evidently, for a long time, held life by a slender thread, and had put himself several times in the way of that sudden termination to his career which always threatens a man suffering from this insidious and formidable disease.

THE WORK OF THE METROPOLITAN ASYLUMS BOARD.

A RECENT speech of Dr. Fowler, at a meeting of the City of London Union Guardians, is a valuable contribution to the discussion on the action of the Metropolitan Asylums Board. He points out what everybody appears to have forgotten, that, if the sick poor are to be more kindly treated than they were under the old *régime*, their treatment must necessarily be more costly, especially if the medical superintendents of the sick asylums are liberal in the use of iced champagne, a luxury which probably a small proportion of those who pay the rates could procure for themselves and their children. Although this, however, explains some part of the expense, that part is but a comparatively small part. The main portion of the expense complained of arises from the fact that the Asylums Board hospitals have been used, not only as hospitals for paupers, but as sanitary hospitals. The responsibility for this, moreover, does not rest with the Asylums Board, who are by law compelled to take whomsoever the boards of guardians may choose to send. The Asylums Board, having no power of refusal, are entirely at the mercy of the guardians, who, notwithstanding, complain loudly of the expenditure of which they themselves are the cause.

Let the guardians confine their orders of admission to the Asylums Board hospitals to the actual pauper, and the expenditure will diminish. Had they done this in 1871, there would have been no need for the Hampstead site as a small-pox hospital; and, consequently, all the litigation and expense which has followed would have been saved.

Had they done the same thing last year, there would have been no need for Darenth, and no need for the ships about which there has been so much foolish criticism. In the general *mille*, miscalled government, carried on in the metropolis by guardians, vestries, and boards of works, it was not perceived that, although there are scores of sanitary authorities within the metropolitan area, not one of them had made any provision for epidemic disease. When, therefore, in 1871, the general epidemic of small-pox appeared in the metropolis, concurrently with its existence in England and the continent, as one of the minor results of the Franco-German war, London was wholly unprepared. What was the duty of scores of sanitary authorities proved to be, as is very often the case, the duty of no one. At this time, the pauper small-pox hospitals were approaching completion, and the vestries, having made no provision for small-pox, left the work to the guardians, and the guardians unfortunately did it. Their duty was with paupers, and they might, and we think should, have refused to have anything to do with any person not receiving relief from the rates. Moved by whatever cause, they did not only their own work, but the work of the vestries; or, to put it more correctly, they took advantage of the law to compel the Asylums Board to do this work, thus practically making the Asylums Board, in regard to epidemic disease, the pauper authority and the sanitary authority. Having done this, they turn round and cry out about the expense which their own action has necessitated. What sort or kind of reason is there in this? The truth of the matter is in a nutshell. Just before the completion of the Asylums Board Small-Pox Hospitals at Homerton and Stockwell, commenced the severest small-pox epidemic of the last fifty years; since that time there have been two other severe epidemics, and the Asylums Board did their best to deal with them. The consequence was, a larger bill than the public had been accustomed to, slightly increased, no doubt, by the kindly medical superintendents, who more or less freely ordered into Hampague. Hence the expenditure: *the bill of the epidemic*.

The way to get rid of the small-pox expenditure is to get rid of the small-pox. To do this is the work of the sanitary authorities and the guardians, not the work of the Asylums Board. All that the latter board can do is to admit the cases sent to their hospitals. It is needless to say that, if the metropolitan population had been efficiently vaccinated, there would not have been any small-pox epidemic. The guardians, then, who are responsible for the efficiency of the vaccination, are responsible for the results of its inefficiency. From all which it appears that the cause of the much complained of expenditure of the Asylums Board lies with the persons who complain.

It is worthy of record that, during the month of March last, only one death was registered in the whole of the township of Pontefract, which, according to the recent census, possesses a population of 6,335 persons.

DR. F. S. THOMSON will deliver a course of lectures at the Grosvenor College, Basinghall Street, on the subject of "The Liver and its Disorders," on April 25th, 26th, 27th, and 28th. These lectures, which are free to the public, commence at six o'clock each evening.

We are pleased to hear that Sir Erasmus Wilson maintains the improvement of which we were able to report the commencement last week; and it may now be hoped that, in a short time, he will be able to resume his more active duties.

In the last report on Brixton prison the medical officer states that scurvy, which had formerly assumed a chronic form, has now become purely acute, there being only 52 cases recorded during the year, the lowest number for the past twenty years.

A Bill has been introduced into the New York State Assembly, ordering all persons selling persons of any nature to put up the same in a designated bottle or box, with a printed label giving the antidote in English and German. In case of failure to comply, the wholesale or retail dealer is declared guilty of misdemeanor.

THE memory of a remarkable and devoted woman will be perpetuated in the manner she herself would certainly have approved, by the "Sister Dora" Convalescent Home, of which the foundation stone was laid on Saturday at Milford, near Stafford, by two of the grandchildren of the late Bishop Selwyn.

A noticeable feature in the mortality statistics of the Middlesex and Hertfordshire combined districts, recently reported on by Dr. C. E. Saunders, is the large number of deaths from cancer. During the past year no fewer than 68 fatal cases were attributed to this disease, against 44, the mean of the preceding six years.

DR. BARCLAY, Senior Physician of St. George's Hospital, retires this week, by lapse of time, from the office which he has long held. For the office of Assistant-Physician, which will thus be rendered vacant by promotion, Dr. Ewart, whose Gulstonian Lectures are now appearing in our pages, and Dr. Isambard Owen, are candidates.

At the meeting of the Royal Medical and Chirurgical Society on the 28th ult., Mr. Bryant described a new operation for excision of a stricture of the descending colon. This operation, which Mr. Bryant had only once performed, was, we learn, repeated on the 15th instant by Mr. John Marshall at University College Hospital. The operation itself was successful, but the patient subsequently succumbed.

IN accordance with M. de Lesseps's proposition, the Paris Academy of Sciences has appointed a commission to examine the system of quarantine practised in the Suez Canal. The members of the commission are MM. Wurtz, Pasteur, Bouley, Baron Larrey, and M. de Lesseps. It is reported that M. Bouley will energetically oppose the views of M. de Lesseps, and that he will be supported by MM. Wurtz and Pasteur.

On Thursday, the 11th instant, the external iliac artery was ligatured at the Grosvenor Hospital, Birmingham, by Mr. Bennett May. The case was one of an aneurysm of the common femoral, extending above Poupart's ligament; and the ligature used was a piece of common catgut, tied as usually is practised. The operation was done antiseptically; and, within a week, the wound was well healed, and the aneurysm had become small and much contracted.

At the consultation at St. Bartholomew's Hospital on Thursday last, Mr. Savory showed a man, about eighty years old, who had a small epithelioma of the lower lip. A tumour had been removed from this situation twenty-six years ago, and no recurrence took place for twenty-four years. As Mr. Savory observed, though epithelioma of the lip is the least malignant form of that disease, yet it is rare to have an opportunity of seeing a case in which operation has procured so long an immunity.

M. PASTEUR has presented to the Paris Academy of Sciences an instrument invented by M. Burq, which he calls the "Vaccinator." It can be used without causing either pain or loss of blood. It collects and preserves, in a dry form, vaccine, especially human vaccine, on small metallic needles; sixty at a time receive the vaccine, which suffices to vaccinate fifty people. The Medical and Surgical Section of the Academy is commissioned to make a report on M. Burq's instrument.

THE Duke and Duchess of Edinburgh this week visited the British Hospital in Paris founded by Sir Richard Wallace. They were received by the Duchess, the Honorable Alan Herbert, M.D., and Dr. Pratt, who took them through the sick and convalescent wards, the nursery, the dispensary, and a large sitting room, where patients who are not confined to bed can read books and journals. Sir Richard Wallace wishes the establishment to be known as the British, and not the English Hospital. It is one of the most charmingly and scientifically conducted hospitals in Europe, and is conducted with admirable care, kindness, and skill.

THE QUEEN AT MENTONE.

WE understand that Her Majesty, on leaving Mentone, sent a sum of 4,500 francs to the local charities, and many presents were distributed by her command among those who had contributed to her comfort. Dr. Henry Bennet received, through Sir Henry Ponsonby, a valuable gold medallion signet, with the royal initials and arms, and a gracious letter, expressing Her Majesty's thanks. Since the Queen's departure, telegrams have been received at Mentone, sent from Windsor at Her Majesty's command, which signally indicate her continued interest in her late abode—inasmuch as they contain a request to be daily informed of the state of the weather at Mentone. Her Majesty's departure from Mentone has been the signal for a break up of the season. Most of the visitors not occupying houses are leaving: some to return home, and some, the more prudent ones, to explore other health-stations on the coast, or to travel in Italy. After spending the winter on the Mediterranean shores, it is imprudent to return to our climate before the middle of May.

DEATH OF CHARLES DARWIN.

THE eminent biologist, Charles Robert Darwin, LL.D., F.R.S., died in the 74th year of his age, at his residence Down House, Down near Orpington, Kent, on Wednesday, April 19th. His celebrated work on Evolution was published in 1859. The deceased received many honorary titles from British and Foreign Universities and learned societies, but will be remembered for generations as the chief expositor of that most important theory which traces the origin and development of species to pre-existing forms. He was a grandson of the celebrated naturalist Dr. Erasmus Darwin.

THE SUPPOSED POISONOUS EFFECTS OF BORAX.

MR. W. R. GADE writes to the *Times*, to warn people against the use of boracic acid as an antiseptic with articles of food, such as milk. With reference to Professor Barff's proposed boro-glyceride, Mr. Gade relates his experience in Sweden, where he applied boracic acid to milk during warm weather, and succeeded perfectly in keeping it sweet. After using this milk for a short time in hot weather, two of his young children became languid and drowsy, with a failing appetite. Although this was at first attributed to the weather, they did not improve; a doctor was therefore called in, who, on learning the circumstances, pronounced them being slowly poisoned with boracic acid, which, he stated, was "anodynous". The action of boracic acid has not been much investigated; but its effects have been stated to be diuretic, antilithic, emmenagogue, and mildly anodyne. It has hardly ever been used internally in this country; its use having been chiefly directed to external applications, especially to aphthous ulceration of the mouth in young children, in which case it acts probably as a destroyer of minute organisms. Considering how freely it has been used for such a purpose without any bad effects being noted, it cannot be a poison of much strength. At the same time, the fact of its being a germicide is undeniable, and it may therefore not be entirely inert in man; while the case above-mentioned seems to point out the advisability for caution in its use, until further inquiry shall prove it to be innocuous.

ROYAL MEDICAL BENEVOLENT COLLEGE.

THE twenty-first festival dinner of the above named institution was held on Wednesday evening at the Langham Hotel; Mr. Marshall, of University College Hospital, presiding, in the regretted absence, through illness, of Sir Erasmus Wilson. In proposing "Success to the Royal Medical Benevolent College", he said, since its opening by the Prince Consort, the institution had been again and again extended. A chapel had been built; and, owing to the munificent generosity of Sir Erasmus Wilson, the benefits of the charity had been greatly augmented. During its existence, fifty-six aged pensioners, most of them females, had been received into the asylum; and 1,380 boys had passed through the school. There were now twenty-four pensioners, formerly members of the medical profession, or dependent thereon; fifty founda-

tion scholars, orphans of medical men; and 150 boys who were receiving an admirable education for a smaller sum than they would have to pay elsewhere. Examinations were held by the Oxford and Cambridge Board, and scholarships and free admissions to medical schools were offered. One of the former pupils had won the Victoria Cross. Attention had been paid to sanitary improvements and the erection of various buildings for the treatment of boys when sick, and the strain on the funds had been great. A list of subscriptions and donations was announced.

DEATHS UNDER ANÆSTHETICS.

WE have to record this week the occurrence of two deaths during the use of anæsthetics, both of which occurred at Guy's Hospital. The first of the deaths occurred under chloroform. The patient was a woman aged 38, who had sustained a fracture of the leg. Some little difficulty was encountered in reducing the fracture; and, at the woman's earnest request, chloroform was administered, the heart having been examined, and no indication of disease having been found. It was given on an ordinary open flannel inhaler, a few drops at a time; and the patient had inhaled it for about two minutes, when both pulse and respiration ceased. Every effort to restore the patient was made, but without success. At the *post mortem* examination, the lungs were found healthy and free from congestion; but the heart was surrounded by a quantity of adipose tissue, which intruded into the muscular substance of the organ in places. The liver was very fatty; the kidneys slightly. The brain was remarkably wasted, so that the sulci between the convolutions were unusually wide, and the membranes were much thickened. This condition of brain resembles very closely the atrophy so commonly met with in chronic alcoholism; and, if this conjecture be correct, it may serve also in some degree to explain the sudden death, for patients who have been accustomed to large quantities of alcoholic stimulants are always bad subjects for the anæsthesia of chloroform. An inquest was held on the case, and a verdict was returned that the deceased expired under chloroform properly administered.—The other death occurred during the administration of ether. The patient was a young man, who was about to be operated on for empyema. When he had been brought under the influence of the anæsthetic, he was rolled over on to the sound side. Almost immediately, great difficulty in breathing set in, pus began to well out of the mouth, and he rapidly died—suffocated, apparently, by the accumulation of pus in the air-passages. At the *post mortem* examination, in addition to the pus in the pleura, numerous fistulous communications were found between the bronchi and the pleural cavity. This case seems to us to furnish a needed warning in relation to the use of ether during operations for empyema. Ether, as was shown by the Committee of the Royal Medical and Chirurgical Society, exerts its lethal action first on the respiration; and it also, as is well known, causes a greatly increased accumulation of mucus in the throat. Both of these conditions must operate most unfavourably on a patient already deprived of all use of one lung; and, when such a patient is turned on to the healthy side, not only is the action of the lung on that side still further embarrassed, but there is a great probability that pus will find its way, by fistulous openings, as happened in this case, from the pleural cavity into the trachea; and there, partly by its mechanical action, and partly by exciting spasm of the glottis, determine a fatal asphyxia.

SMALL-POX IN SUFFOLK.

A SOMEWHAT serious outbreak of small-pox has occurred at Barrow, a village in West Suffolk. The disease appears to have been imported from Essex by a son of the publican of the village; and, as the nature of the illness of the persons who caught the infection from this youth was not at first recognised, the disease got a firm hold before any precautions were taken to prevent its spread. Under the direction, however, of the health-officer, Dr. Scott Kilner, a system of domestic quarantine has been adopted, thorough disinfection practised, a temporary hospital fitted up for the reception of the patients, and =

prisonment for having unlawfully and wilfully given false certificates in the case of three persons who had died under his treatment. The prosecution was instituted by the Medical Defence Association, who are to be congratulated on the result. The *Liverpool Mercury*, in commenting on the case, points out that, were it not for such organisations as the Defence Association, there would be practically no means of detecting the spurious medical practitioner where the deception is carried to such a length as in the present case. It points out, too, the danger to the health of the poorer classes, which we have often insisted on, of ignorant and unscrupulous practitioners being allowed to prey upon them; and trusts this conviction will serve to set the public on their guard against such malpractices. In these sentiments, we need hardly say, we fully agree. We regret to see that several qualified practitioners appear to have countenanced the defendant in his quackery.

SMALL-POX AT SYDNEY.

THE epidemic of small-pox at Sydney seems now to be virtually at an end. Writing under date of the 28th February last, the Sydney correspondent of the *Times* states: "We have succeeded at last, after a hard fight, in getting small-pox under, and have not now a single case in Sydney, and only two at the hospital, which is about nine miles from Sydney. Many of our recent English visitors, coming from where small-pox is chronic, have laughed at the idea of stamping it out; but we have succeeded at considerable expense and with some interference with individual liberty, and the result is considered to be worth the sacrifice."

AMBULANCE WORK IN RUSSIA.

IN Russia, as well as in Germany, "Lectures for First Aid to the Injured" have been given recently on our English model. Like Professor Esmarch of Kiel, Dr. Charles Reyher of St. Petersburg had occasion, during the International Medical Congress in London, to become acquainted with the institutions existing for such purposes under the control of the St. John's Ambulance Association. Immediately after Dr. Reyher's return, he succeeded in inducing the direction of the Russian Red Cross Society to institute similar lectures in St. Petersburg. The first course of these lectures was given in January and February last, on five Sunday evenings, partly in the apartments of the Red Cross Society, partly in the surgical wards of Dr. Reyher. The examination of pupils took place on the Sunday before Easter, in the presence of the Committee of the Red Cross Society. Care was taken to avoid all specially medical terms and details. A picture of the human organism was drawn in general outlines, and directions were given how to assist the injured before the surgeon's arrival without doing harm; and, as briefly as possible, a series of conditions was demonstrated, in which a non-medical man could help provisionally before the surgeon's arrival, such as rendering a fracture immovable; first dressing of wounds as a defence against infection from outside; compression of the principal vessels during severe bleeding; the management of Esmarch's India-rubber tube; artificial respiration, etc. It was impressed on the pupils that, for all bandages and manipulations, the simplest objects should be used, such as are to be found anywhere (for instance, splints made from newspapers, waistbelts and revolver-strings in cases of bleeding, instead of Esmarch's India-rubber tube, etc.). The pupils were practically exercised on living models. The pupils of the first course were policemen, who proved to be very skilful in the improvisation of all possible bandages. For the next courses, applications are received from all classes of society. The Society of the Red Cross desires to admit to these lectures and exercises not only policemen, but railway officers, tramway-conductors, workmen in factories, and the pupils of seminaries who serve afterwards as clergymen in the villages all over the country. So far as may be foreseen, this beneficent institution of courses will not only be adopted by all classes of the population of St. Petersburg, but will spread itself quickly over the whole country. The Society of the Red Cross is under the patronage of Her Imperial Majesty the Empress, and has district administrations in every govern-

ment of the Empire. To these will be sent, for imitation and further distribution, the programme of the lectures delivered lately, the physiological diagrams and cards, the *aides-memoires*, and text-books of aid in cases of injuries or sudden illness, on the plan of that compiled by the late Surgeon-Major Shepherd, and made accessible to the Russian Red Cross Society through the kindness and courtesy of Captain Herbert C. Perrot, Chief Secretary to the St. John's Ambulance Association.

THE STRUGGLE OF RACES.

IN his annual report for the past year, the Mayor of Savannah draws attention to the great disparity in the percentage of mortality among the white and coloured races. The annual rate for one thousand whites for the year 1880 was 19.85, and for one thousand coloured 45.47, these rates being calculated on the United States census tables during the same year. In the struggle for existence carried on between the white and coloured races in many parts of the globe, it is always "colour loses".

ASEPTIC VACCINE LYMPH.

MUCH practical interest attaches to the subject treated in the *Jahrbuch für Kinderheilkunde*, Neue Folge, Band xvii, p. 172, by Dr. R. Pott, who gives the results obtained by him in experimenting with vaccine lymph modified by combination with salicylic, boracic, and carbolic acids. The mixtures employed consisted of salicylic solution (1 to 300), boracic acid solution (3.5 per cent.), and carbolic acid solution (1 to 5 per cent.), each of these being combined with an equal part of humanised lymph. All proved active except the 5 per cent. carbolic acid solution. This result corresponds with that obtained by Dr. Braidwood and Mr. Vacher in their more extensive and carefully prosecuted experiments detailed in their second and third reports to the Scientific Grants Committee of the British Medical Association. We do not learn from Dr. Pott his method of procedure, the amount of care he bestowed on testing the inoculative efficacy of the vaccine he used, his manner of mixing it with the antiseptic solution, the length of time during which the vaccine was exposed to the antiseptic influences before inoculation, the cleanliness of the instruments he used, and other such details. On the other hand, Dr. Braidwood and Mr. Vacher have insisted on the great importance of using special instruments for each set of experiments; on the necessity of testing the efficacy of the vaccine itself before drawing inferences from its action when mixed with antiseptic solutions; on the influence of lengthened contact with the antiseptic, especially in the case of carbolic acid; and on the falsity connected with the ordinary manner of conducting such experiments by inoculating a subject on the one arm with vaccine, and on the other with the experimental fluid. In their second report, they state "that a saturated solution of salicylic acid does not impair the efficacy of the vaccine contagium"; and that a saturated solution of boracic acid "impairs the vitality of vaccine contagium little if at all, even after having been kept some days in contact with the contagium-particles." On the other hand (in their first report), their conclusions in regard to the influence of carbolic acid on the vitality of vaccine were "(a) that the immediate inoculation of a mixture of vaccine and a moderately strong solution (1 to 20 aq.) of carbolic acid succeeds in a certain number of instances; (b) that such a mixture, preserved for some time, seventeen days to six weeks, fails to produce vesicles"; and that the mixture of vaccine with stronger solutions of the acid, and likewise with carbolate of glycerine, "destroys the efficacy of vaccine". They have further distinctly proven that antiseptics in the gaseous state are much more potent destroyers of the vitality of vaccine than are such in solution or in fluid form. Dr. R. Pott claims the following advantages for these aseptic lymphs: 1. The "erysipelatous poison" contained in the lymph is probably destroyed, and the early vaccinal erysipelas in this way prevented; 2. Such lymph may be kept for years without spoiling; 3. The lymph is thinner, and contains no fibrinous coagula. To us, these inferences appear strange and illogical. We are not aware that the "erysipelatous poison" has yet been demonstrated; but we know that Jenner laid down the axiom (and the every-day experi-

members with advice and supervision, so as to secure the sanitary conditions of their dwellings; 2. To enable members to procure practical advice on moderate terms as to the best means of remedying defects in houses of the poorer classes; 3. To aid in improving the sanitary condition of the city by the use of such means as may, in the opinion of the Council, be calculated to promote that object. It will thus be seen that the Association is to be on the same lines as the Edinburgh one, which has worked so well. Dr. Russell, Medical Officer of Health for Glasgow, was present, and stated that the officials of the city viewed the movement with cordial sympathy.

IRELAND.

THE proposed new scheme of education and examination adopted by the Council of the Royal College of Surgeons in Ireland, and which has been referred to on several occasions in the JOURNAL, has now received the approval of the Home Secretary.

THE annual fancy dress ball, in aid of the funds of the North and South Charitable Infirmarys, Cork, will be held in the Assembly Rooms on the 21st inst.; and from the influential committee who are organising it, a very substantial addition to the funds of those institutions may be confidently expected.

IN the Castlebar District Lunatic Asylum, last year, 351 patients were under treatment, 61 having been admitted during the year. The percentage of recoveries on admissions was 50.81, and on total number in asylum, 8.85. There was no death recorded during 1881.

MERCY HOSPITAL, CORK.

THE twenty-fifth annual meeting of the friends and supporters of this hospital was held last week, and although its financial condition is not so satisfactory at the commencement of this year as in 1881, yet there is a balance to credit of £150. On the motion of the High Sheriff, a vote of condolence was passed to the family of the late Dr. Holmes on their bereavement.

AN ABATTOIR FOR DUBLIN.

A PUBLIC abattoir, the first building of the kind in Ireland, was formally opened in Dublin last week by the Right Hon. the Lord Mayor of the City and the civic authorities. In no other large city, perhaps, was there greater need for such an establishment, as owing to the large number of ninety-seven of the licensed slaughter-houses in existence, it is almost impossible for the sanitary authorities to put a stop to the notorious trade in diseased and unsound meat. Not less than a quarter of million of pounds of diseased meat was seized and confiscated in Dublin last year; but this probably represents only a portion of that consumed by the public. To Dr. Cameron, Superintendent Medical Officer of Health, and to Mr. E. Dwyer Gray, M.P., High Sheriff of the City and late chairman of the Public Health Committee of the Corporation, belong the credit of carrying out this important work. The abattoir is a model one. It is in the immediate vicinity of the cattle market, with which it is connected by a subway. The buildings include thirteen rooms for slaughtering animals; a like number of lairs; a hall 133½ feet long by 49 feet wide, for the reception of dead meat, triperies, and rooms for the storage of blood and offal until they are removed. Great attention has been paid to the paving, lighting, and sewerage of all the departments of the abattoir. The buildings are well ventilated, and its walls tiled wherever animal matter is likely to come into contact with them. The advantages which may fairly be expected to result from the use of the abattoir are, that animals will be slaughtered therein in the most humane way that can be devised; their carcasses will be dressed in a cleanly manner; due precautions will be taken to prevent any diseased carcasses from being used as food for man; the flesh and offal, incidental to a slaughter-house, will

be disposed of in a manner least likely to be prejudicial to health; lastly, and most important of all, the use of the abattoir will gradually, it is hoped, lead to the disuse of those of the slaughter-houses which, being situated in the oldest and most crowded parts of the city, are not capable of improvement. The works cost £16,000.

THE ROYAL UNIVERSITY.

A MEETING of the senate of this university was held on Tuesday last for the election of its first fellows and examiners. The senate resolved to allocate for the present twenty-four of the thirty-two fellowships they are empowered to create, and they elected twenty-one of them. They allocated six fellowships to classics; four to mental and moral philosophy; four to natural philosophy; and two to chemistry. They also decided to postpone until the return of his Eminence Cardinal McCabe from Rome the appointment to one of the fellowships allocated to English, mental and moral philosophy, and natural philosophy respectively. They further resolved to postpone the election of Fellows in the natural and medical sciences. Of the twenty-one gentlemen elected Fellows, two, viz., those fellowships allocated to chemistry, are members of the profession. They are Professor John Campbell, M.B. of the Catholic University, and Professor Maxwell Simpson, LL.D., M.D. of Queen's College, Cork. The following examiners were appointed;—*In Surgery*: A. H. Corley, M.D.; P. J. Hayes, F.R.C.S.E. *In Medicine*: B. G. McDowell, M.D.; S. M. MacSwiney, M.D. *In Midwifery*: John A. Byrne, M.B.; H. Macnaughton Jones, B.A., M.D. *In Materia Medica*: F. J. B. Quinlan, M.D.; J. S. Reid, M.D. *In Medical Jurisprudence*: E. W. Davy, M.A., M.D.; M. O'Keefe, M.A., M.D. *In Anatomy*: C. J. Nixon, M.B., LL.D.; J. P. Pye, M.D.; Peter Redfern, M.D. *In Physiology*: J. J. Charles, M.A., M.D.; C. Coppinger, F.R.C.S.I. *In Botany and Zoology*: A. G. Melville, M.D.; G. Sigerson, M.D. The fellowships are tenable for seven years. The emolument of the office is £400 per annum; but, in the case of Fellows holding other professorial appointments, only an annual sum sufficient to make their total emolument from all such sources equivalent to £400.

BELFAST ROYAL HOSPITAL.

A SPECIAL meeting of the General Committee was held, on the 17th instant, in order to appoint a house-surgeon, in the vacancy caused by the retirement of Dr. James Smyth, from ill-health. The Committee of Management unanimously recommended Dr. James Barrow, a former student of the hospital, and, there being no opposition, he was elected. The hospital has usually been in a chronic condition of impecuniosity; but latterly, its prospects appear to be improving, as we learn that all the accounts have been paid to the 1st of the month, and the committee have a balance in hand of £600 to defray the necessary expenses for April. The desirability of establishing a Saturday hospital collection among the working classes has long been under consideration; and, if sufficient encouragement is obtained from the leading manufacturing firms in Belfast, it is probable that a trial of the scheme may be made during next winter.

It is stated that Dr. Duncan Mackay, Medical Officer of Health for Inverness, though not officially employed to analyse the materials of which the "hot cross buns" were made which occasioned so much sickness on Good Friday, has examined the buns, and discovered a salt which exhibits all the appearance of arsenic.

CONVALESCENT HOME AT FOLKESTONE.—The foundation stone of the new St. Andrew's Convalescent Home, Folkestone, was laid by the Duchess of Edinburgh on Wednesday, the 18th instant. The work of the home has hitherto been carried on in two rented houses imperfectly adapted to the purpose. During this period, the institution has been enabled to admit 2,717 patients, but the demands made upon it have been continually increasing. By the kind consideration of the lord of the manor, the Earl of Radnor, who is one of the patrons of the charity, an excellent site in a healthy situation on high ground overlooking the sea, has been secured on easy terms, with sufficient land around it to serve as a pleasant garden for the use of the patients. The sum required to complete the building is about £9,000, in addition to £7,000 already given.

important to bear in mind that occasionally in these cases suppuration in a joint occurs. 3. We may consider the arthritis in question as that of true acute rheumatism superadded to the attack of scarlatina, and quite as independent of what may be called the scarlatinal poison as an intercurrent varicella might be.

There is much to be said for each of these views, and it is possible that they may be respectively true in different cases. Even those who claim that the affection is true acute rheumatism, are willing to concede that it often occurs as a complication rather than as a sequela; and there would be something gained by observations on a number of cases as to the exact period after scarlet fever at which joint-symptoms arise. The rash being generally a definite thing, it would be advisable to reckon from the day of its appearance.

Much attention has of late been directed to tonsillitis in regard to acute rheumatism. It would appear in some cases to be an initial symptom of the attack, and in others an antecedent with a distinct interval. More details are needed, and ought not to be very difficult to obtain.

With regard to the ordinary features of a primary acute attack when fully established, there is but little information needed; but the slight later attacks will well repay study, and this is especially the case when the disease is uncomplicated by heart-affection, the results special to which need elimination. The rheumatic attacks of children need special study; the sweating may be very slight, the fever of short duration, the joint-trouble insignificant, whilst, as is well known, the heart-affection is considerable.

In regard to the arthritis of acute rheumatism, it is generally postulated that the subsidence is complete, although there is proneness to relapse. But there are some alleged cases of suppuration having occurred as a sequel of rheumatic fever, where scarlatina was out of the question. Of such very rare occurrences it would be valuable to get some further well recorded examples, in which the early part of the attack is perfectly typical. The same may be said in regard to cases of fibrous thickening around and ankyloses of joints, after acute rheumatic attacks, where gonorrhoea can be excluded.

In children who are the subjects of heart-disease presumably rheumatic, and sometimes in adults also, subcutaneous nodules are to be found in the neighbourhood of both large and small joints, and on the hairy scalp and the forehead, varying in size from a pin's head to an almond. They often appear in crops, and, as they are generally painless and the skin over them most commonly unaffected, they need to be searched for; and information is particularly required concerning their relation to active disease of either heart or joints.

There is ample scope for observation in regard to the skin-eruptions associated with acute rheumatism. It is now well recognised that polymorphous erythema is often an intercurrent phenomenon in rheumatic fever, though the cases in which it occurs are sometimes ill-defined in regard to arthritis. Records of cases are needed in which urticaria and purpura have been observed during the course of, before, or after an undoubted acute attack. A case often referred to by Sir William Jenner may be here quoted in illustration. A patient was brought to hospital with signs of acute pericarditis, but no joint-trouble. Urticaria appeared, which convinced Sir William Jenner that the case was truly rheumatic, and this was soon confirmed by subsequent characteristic appearances about the joints, and the further progress of the case.

The number of questions which gather around the subject of rheumatic heart-disease is legion; but there is at least one which is eminently practical, and the solution of which can only come from the records of family practice—viz., in what proportion of cases in which there is an unquestionable murmur present during the attack does the murmur entirely pass away, the heart remaining sound so far as physical examination can establish? It has been too lightly assumed that such transitory murmurs are hæmic, so called; but it would be better for clinical purposes to eliminate the term altogether, and simply record auscultatory observations and notes on cardiac dulness and impulse in regard to the question of dilatation.

Leaving now the history of the attack, we come to some simple questions in regard to the patient which, if answered on a sufficiently large scale, may assist in building up a definition of what is meant by the rheumatic diathesis. These relate to the common ailments to which the patient is specially subject, and the previous illnesses for which he has needed the doctor's care.

On the subject of the treatment of acute rheumatism, it may be truly said that in no disease are more careful notes necessary as to the entire duration of the illness. Furthermore, it is of the greatest practical importance to get definite statements as to the length of time in the convalescent period during which special drugs are administered, with a view to obtaining collective experience as to the avoidance of relapse.

Appended is a copy of the form which has been adopted for the collective investigation of this subject. And it may here be emphatically stated that the Committee desire to give the fullest recognition to individual observations bearing not only on the questions here indicated, but on others cognate to them.

Form of Card about to be Issued.

Observer's name.	Extent of Joint-Affection.		
Address.	Many joints.	Few joints.	
Date of last observation.	Migratory.	Fixed.	
Initials of patient.	M. or F.	Age.	Result—recovery complete, partial, death.
Married.	Single.	Widowed.	
Occupation.	Persistence of disease in one or joints.		
Temperate.	Intemperate.	Total	
abstainer.	Suppuration in one or joints.		
Food—sufficient, insufficient.	Ankylosis of one or joints.		
Place of residence.	Heart-Affection.		
Locality—high, low, dry, damp, exposed, confined.	Before	present	Peri-carditis.
Atmospheric condition—dry, damp, wet, cold, hot, mild, changeable, sun, clouds.	attack	During	Mur-mur.
Prevailing wind at onset of attack.	After	Position of apex-beat	
Recent Antecedents.	Skin-Eruptions.		
Scarlet fever.	Before	present	Nature.
Tonsillitis.	attack	During	Date.
Pharyngitis.	After	During	
Other diseases.	After	Subcutaneous nodules—present, absent.	
Exposure to wet, to cold.	How many previous attacks.		
Over-fatigue, sudden, prolonged.	Age at first attack.		
Shock.	To what common ailments is patient specially subject?		
Date of onset.	For what other diseases has observer attended patient?		
Attack severe, moderate, mild.	Remarks on any special feature of case.		
Duration of fever	days,	of pain	Sequelæ.
Whole duration of attack.	Plan of Treatment.		
Sweating—slight, considerable.	How long has patient been under care of observer?		

THE COLLECTIVE INVESTIGATION COMMITTEE'S MEMORANDUM ON CHOREA.

SIR,—I am anxious, with your permission, to add a word to what has already been said on this subject by Dr. Donkin and Dr. Mahomed. Dr. Donkin, as I understand, is of opinion that the expression in the schedule "vague pains" would stand best by itself; and that a sentence in the memorandum, stating that with children such pains, with or without pyrexia, often signify rheumatism, would be better away, inasmuch as it prejudices the point at issue. Whilst bearing testimony to the careful preparation and revision of both schedule and memorandum, I cannot but think that the justice of this criticism will appear when the actual working of the inquiry is considered. All observers are agreed that limb and joint pains are commoner with choreic children than with others. The question turns upon the character of these pains. But this point is here determined beforehand: first, by their being included under the heading "rheumatism"; and, secondly, by the statement of the memorandum that in childhood such pains, with or without fever, are characteristic of rheumatism. There is, in fact, no recognition whatever of any pain except the rheumatic. Dr. Mahomed observes that the Committee will not judge so narrowly, but will take each case upon its own merits. But, if this be so, it is obvious that the Committee will exercise a liberty which they do not allow to the original observers. By the form of their questions, they compel these to conclusions which they may themselves reject.

But, although Dr. Mackenzie has in this one place allowed his own predilection to peep out (as which of us would not?), I have no fear but that, in the result, we shall obtain valuable and trustworthy returns as to the relationship of chorea to rheumatism. The schedules, it must be remembered, are issued to experienced men, who may be trusted to assert themselves with sufficient plainness, and to keep clear of pitfalls on one side or the other. They will know how to make erasures and additions accordingly. Everyone of us has already his own convictions upon the point which it is now proposed to bring to the test of figures. The question which Dr. Donkin has raised will serve as a useful reminder as to the necessity, as well as the difficulty, of entering upon such an inquiry cautiously and with an open mind.—Your obedient servant,

OCTAVIUS STURGES.

Wimpole Street, April 17th, 1882.

A LECTURE on "Modern Dress and Fashionable Deformities" will be given, on behalf of the National Health Society, by Mr. E. Noble Smith, on Saturday, April 22nd, at four o'clock, at the Hampstead Vestry Hall, Haverstock Hill, when Mr. Spencer Wells is announced to take the chair.

I am, Sir, a member of the Committee on the Study of Aural Surgery, of which I have the honor to be a copy.

The Committee is deeply impressed with the importance of the subject, and considers that at the evident want of knowledge among practitioners in matters concerning diseases of the eye, and the way of their being able to deal promptly and effectively with cases of an acute character, and accounts for the very large number of sighted cases which are met with in daily practice.

After carefully considering all the suggestions received, and discussing the various cases for presenting the study of Aural Surgery, your Committee has arrived at the conclusion that candidates for admission into the profession should have a practical knowledge of at least the essentials of otology, and that as compulsory attendance on lectures and hospital practice might be deemed undesirable, the object in view could best be attained by the licensing bodies including otology among the subjects for examination.

The Committee, therefore, earnestly recommends that you will request all the examining bodies to include Aural Surgery in their examinations, placing it on the same footing as *ophthalmic* surgery, and that you will further draw their attention to the special importance of a practical examination in this subject.

(Signed) URBAN PRITCHARD, Chairman.

E. CRESSWELL BABER, Honorary Secretary.

Members of the Committee:—Messrs. George Abbott (London), John Appleyard (Bradford), T. Gelson Atkins (Cork), Thomas Barr (Glasgow), Arthur H. Benson (Dublin), A. Gardiner Brown (London, since deceased), Edgar A. Browne (Liverpool), John Walton Browne (Belfast), Lennox Browne (London), James Patterson Cassells (Glasgow), John Chiene (Edinburgh), Andrew Clark (London), Henry Hugh Clutton (London), Alphonso Elkin (Manchester), William Bartlett Dalby (London), T. Curtis Denby (Belfast), John Henry Drew (London), J. J. Kirk Duncanson (Edinburgh), Robert Ellis (Newcastle), H. L. Ferguson (Dublin), George P. Field (London), Charles Edward Fitzgerald (Dublin), Thomas C. Floyd (Birkenhead), Francis George Hamilton (London), Arthur Hensman (London), George Frederick Harrison (Brighton), Lucius Holland (Newcastle), W. Gordon Holmes (London), Archibald Hamilton Jacob (Dublin), William Powell Keall (Bristol), Charles George Lee (Liverpool), Samuel Macauley (Newcastle), Peter McBride (Edinburgh), Johnstone Macfie (Glasgow), Angus Macmillan (Hull), Farquhar Matheson (London), Joseph Seymour Metford (Bristol), Dawson Nesbitt (London), John A. Nunneley (Leeds), Arthur Wiglesworth Orwin (London), Jacob Pickett (London), Frederick Morrish Pierce (Manchester), William Laidlaw Purves (London), J. M. Elborough Sealiff (Brighton), Robert Sinclair (Dundee), John B. Story (Dublin), Henry Rosborough Swanzy (Dublin), Llewelyn Thomas (London), William James Tivy (Clifton), Robert Torrance (Newcastle), George Thomas Walker (Liverpool), Charles Warden (Birmingham), William Cairns Wicks (Newcastle), John St. Swithin Wilders (Birmingham), William Wright Wilson (Birmingham), Edward Woakes (London).

It was moved and seconded,

That a copy of the Report of the Committee on Aural Surgery be sent to the various examining bodies for their information.

Whereupon an amendment was moved and seconded,

That the Committee on Medical Education be reappointed, and the Report of the Committee on Otology be referred to it.

The amendment having been put from the chair, the same was declared to be carried.

The amendment was then put from the chair as a substantive motion, and was declared to be lost.

The original motion was then put from the chair, and the same was declared to be carried.

The Committee then considered resolutions on Homœopathy forwarded from three Branches—viz., the South-Western, the Staffordshire, and the East York and North Lincoln—of which the following are copies.

1. Resolution of South-Western Branch:

"That this meeting desires to direct the attention of the Committee of Council to the Association to the resolutions, in regard to homœopathic practitioners, passed at the annual meeting of the Association in 1852, and reaffirmed at the annual meetings of 1858 and 1861; and now calls upon the Committee of Council to put in force, as speedily as possible, By-law 3, against homœopaths and all members of the profession who assume designations implying the adoption of special modes of treatment."

2. Resolutions of East York and North Lincolnshire Branch:

1. "That this meeting desires to express its entire disapproval of the views in relation to consultation with homœopathic practitioners expressed by the readers of addresses in medicine and surgery at the annual meeting of the Association at Leeds in 1861."

2. "That this meeting desires to direct the attention of the Committee of Council to the Association to the resolutions in regard to homœopathic practitioners, passed at the annual meeting of the Association in 1852, and reaffirmed at the annual meetings of 1858 and 1861; and now calls upon the Committee of Council to put in force, as speedily as possible, By-law 3, against homœopaths and all members of the profession who assume designations implying the adoption of special modes of treatment."

3. Resolution of Staffordshire Branch:

"That it is the opinion of the Staffordshire Branch of the Association that By-law 1 of the Association be enforced with regard to those who practice homœopathy, whether such persons have been admitted members of the Association prior to or subsequent to their profession and practice of homœopathy."

Dr. Rees Philipps then placed before the Committee of Council the views of the South-Western Branch on homœopathy.

It was moved and seconded:

"That, as it has been resolved by the Annual Meeting of 1852, and reaffirmed by the annual meetings of 1858 and 1861, that there are three classes of practitioners who ought not to be members of the Association, viz: (1) real homœopathic practitioners; (2) those who practise homœopathy in combination with other systems of treatment; (3) those who, under various pretences, meet in consultation or hold

professional intercourse with those who practise homœopathy; it be an instruction to the Committee of Council to request [a member stated to be practising homœopathy at Plymouth] to withdraw his name from the list of members of the Association."

Whereupon an amendment was moved and seconded:

"That the South-Western, East York and North Lincoln, and Staffordshire Branches, be informed, that the Committee of Council does not see sufficient reason for reversing the opinion expressed by it on October 12th, 1881."

"That the President of Council be requested to convey this intimation to the Branches."

The amendment having been put from the chair, the same was declared to be carried.

The amendment was then put as a substantive motion, and declared to be carried.

Read letter from Dr. Milner Fothergill, respecting his proposed motion of alteration of By-law 12 at the annual meeting in August next.

Resolved: That the motion of Dr. Fothergill be placed on the Agenda of the first general meeting of members, to be held on Tuesday, August 8th, at 8 o'clock in the evening.

The proposals of 152 candidates for membership were then considered.

Read letter, stating that one of the nominees was a homœopath, that his proposers proposed him knowing this.

Resolved: That 151 of the candidates, omitting the candidate practising homœopathy, be and they are hereby elected members of the Association.

Resolved: That the minutes of the JOURNAL and Finance Committee of to-day's date be approved and adopted, and the recommendations carried into effect.

The minutes of the Journal and Finance Committee contain the examination of the quarter's accounts ending on the 31st March, amounting to £3,007 19s. 4d.; the auditors' report for the quarter, certifying office payments £834 11s. 4d., and receipts for quarter £4,343 1s. 8d.; also recommendation to invest a further sum of £1,000.

The Treasurer then placed before the meeting the financial statement for the year ending 31st December 1881.

Resolved: That the financial statement for the year ending 31st December 1881, be received, approved, and, in accordance with By-law 33, published in the JOURNAL.

Resolved: That the minutes of the Habitual Drunkards Committee of to-day's date, together with the report on the Dalrymple Home Association, be approved; and the recommendation carried into effect. See report, page 594.

Resolved: That the minutes of the Collective Investigation Committee of the 31st January last, be approved.

The minutes of the Collective Investigation Committee contain the appointment of Dr. Mahomed as honorary secretary.

Moved by Dr. Ward Cousins, seconded by Dr. Grigg, of which notice had been given,

That the following alterations in By-law 35 are desirable:

1. The President of the Association to be an *ex officio* member of the JOURNAL and Finance Committee.

2. The annual retirement of four of the elected members, who shall remain ineligible for re-election for two years.

The motion having been put from the Chair, the same was declared to be lost.

Dr. Ward Cousins then handed in notice of motion of alteration of By-laws at the Annual Meeting in August next, of which the following is a copy:

Dr. Ward Cousins gives notice that he will move, and that Dr. Grigg will second,

That the following alterations in By-law 35 are desirable:

1. The President of the Association to be an *ex officio* member of the Journal and Finance Committee.

2. The annual retirement of four of the elected members, who shall remain ineligible for re-election for two years.

Resolved: That the President of Council, the Treasurer, Dr. Chadwick, and Mr. Husband, be appointed a subcommittee to draw up the annual report.

Resolved: That the minutes of the Scientific Grants Committee of to-day's date be approved, and the recommendations carried into effect.

The minutes of the Scientific Grants Committee contain the particulars of the examination of three applications for grants, one of which, for £25, was granted; the other two were deferred.

GUY'S HOSPITAL.—The biennial dinner of past and present students of Guy's Hospital will take place at Willis's Rooms on Thursday, May 18th. Mr. Edward Cock, Consulting Surgeon to the Hospital, has consented to preside. Mr. H. G. Howse is the honorary secretary.

HASTINGS FUND.

£477 invested in 4 per Cent. London and North-Western Railway Preference Stock, in the name of the British Medical Association.

Dr.—1881. £ s. d.
To Balance brought forward 9 6 0
Interest, one year, on £477 12 12 0

£47 12 0

By Balance due from Hastings Street 27 12 0

£27 12 0

We have examined the foregoing accounts with the books and vouchers of the Association, and find the same to be correct.

April 6th, 1882.

PRICE, WATERHOUSE, & CO.

CORRESPONDENCE.

THE ASSOCIATION FOR THE ADVANCEMENT OF MEDICINE BY RESEARCH.

SIR.—Your correspondents are perhaps premature in criticising the constitution of the above Association; and certainly are in error, if they suppose that there is any exclusive feeling on the part of those who are endeavouring to form a society of such far-reaching aim, and of such paramount importance to the profession, as this is. When Dr. Ferrier's prosecution was exciting attention, it was obvious that the question at issue was not a personal one, but one in which every man of science was interested. It was competent for any one, or for the whole body of the profession, to take action at once; but those who did so considered that the best method was, not only to obtain the co-operation of the bulk of the profession, but of its great leaders and representatives; and they, therefore, framed the present scheme as best constituted for the purpose. It was obviously necessary to gain the co-operation of the universities, colleges, and learned societies, as having not only weight with the profession, but with the public. Their assistance was at once obtained; and it was then thought most desirable to place the movement in the hands of the Presidents of the two London Colleges, who should head and inaugurate it. The Presidents at once and most heartily promised their aid; and the first meeting was held, as reported in your columns. Every one has hitherto expressed his great satisfaction at the results. It was quite impossible, at this preliminary meeting, that even all the Fellows of the College could have been invited; they would at once have choked the library.

It is true that the first council will be composed of the presidents of the learned societies, and of others who will be nominated by the two presidents. They must necessarily select men who will do the work of the council in committee; and they will seek further throughout the country—at least I have been informed that, at the next meeting, the names proposed will be some of the most distinguished men of the provinces. I am sure that it has been the aim of all engaged in promoting the Association to gain the co-operation of all in the profession. The question which has given the impetus to it is one between the profession and the public; and it only requires a perusal of some recent writings to discern the animus of our opponents, and to secure the sympathy of the entire profession. Any disagreement among us will be readily seized on by them. The Association is scarcely yet formed, and no doubt changes will be introduced when experience has proved them to be useful.—I am, your obedient servant,

SAMUEL WILKS, *Treasurer (pro tem.)*.

Grosvenor Street, April 1882.

SIR.—The criticisms of Dr. Barnes upon the constitution of the Council of this Association are conceived in so friendly a spirit, that we cannot doubt the improvements he suggests would be cordially accepted if they would make its working more efficient. But would this be the case?

Dr. Barnes agrees as to the wisdom of making the Council consist of representatives of the Colleges of Physicians and Surgeons, of the medical faculties, and of the medical societies; but he prefers direct election to representation by the several presidents and their nominees. It appeared, however, to those who drew up the regulations, that election would involve waste of time and energy, without really securing more efficient representation, while no one can doubt that a body composed of those who have been chosen to fill the highest offices in their

several societies on account of their general eminence, will speak with greater authority to the Government and to the public than one composed of delegates selected for a special purpose. That the presidents of the two colleges should have considerable influence on the council is nothing more than fair, seeing that they are responsible for its action.

To have secured the co-operation of the Universities of the British Medical Association, the Royal Society, and the other scientific and professional bodies enumerated, is surely a great point gained. If Dr. Barnes fear that in the Council discretion will be more apparent than zeal, he must remember that the object of the Association is not popular agitation; it is not primarily controversial. The working physiologists of the three kingdoms have expressly stated that they do not desire (at least, for the present) to attempt to abolish the Act, of which we are all ashamed, but to secure its being harmlessly administered. To speak with authority to public opinion, and to bring effectual pressure upon officials, needs other means than those which are suited to the arena of controversy: controversy with opponents who will correct Sir William Jenner upon points of medicine, Professor Huxley on science, and Dr. Barnes on gynaecology. Another object of the Association is to educate public opinion; and the series of articles lately published by Paget and Wilks, Gull and Carpenter, Brunton and Yeo, prove that this has not been neglected.

With regard to the valuable letters of Dr. Thin and Mr. Hallows, on the importance of interesting the profession in local centres on behalf of the cultivation of medical science by way of research; one of the rules of the new Association provides that corresponding Members of Council shall be appointed throughout the country, who will form centres of intelligence and help to those who have so well defended "the workers in medical science against the attacks of ignorant, but persistent, opponents."

Although the eminent men of Scotland, Ireland, and the provinces, will be well represented on the Council, the main burden of business will almost of necessity fall upon the members resident in London. But there will be room for all, and welcome.

Only experience can show what future modifications may be desirable. At present a good beginning has been made, and with united action, and a wise mixture of zeal with discretion, we are certain of a good continuance.—I am, etc.,

A MEMBER OF THE PROVISIONAL COMMITTEE.

April 12th, 1882.

THE RAISON D'ETRE OF LYING-IN HOSPITALS.

SIR,—In your comment on my letter in the BRITISH MEDICAL JOURNAL of to-day, you say that I do "not know the real question at issue." The letter was not meant to do so, but was merely intended as a reply to certain strictures on page 400 of your JOURNAL. There you say "the new committee will set energetically to work to bring the hospital up to the level of the obstetric knowledge of the day." This sentence, as I read it, means that the hospital has hitherto been *below* this level, in the opinion of the writer of the article, and is an assumption of superiority that is charming to contemplate. If you will take the trouble to read my letter again in this light, you will see that I merely endeavoured to show that, up to that date, our staff had shown as good results as those of any hospital, and that, consequently, they were not behind the time, and did not deserve censure. From this point of view, the lying-in wards of the workhouse were mentioned, and it was shown that a comparison between the results obtained in these, with those of intern maternity charities, was unfair to the latter.

The saying that "any woman, at the time of labour, may be in danger," leaving out the word "special," and arguing that all women may, therefore, fitly go into hospital to be confined, and that the manifesto alluded to concedes all this, I shall leave, and pass on to another part of your comment. You say "nothing is now more clearly demonstrated than that, by the strict application of improved hygienic and antiseptic measures, the mortality of lying-in hospitals may be kept down to a point that will bear comparison with domiciliary midwifery." Now, sir, I deny that this has been proved; at any rate before accepting the statement, you must show your proof. You surely do not expect this to be believed on your mere assertion. Moreover, the statistics of one, or even two years, will not be satisfactory proof. I ask for at least five years' statistics. In the year 1880, in the British Lying-in Hospital, there were 139 cases, and three deaths; in 1879, 169 cases, and one death; in 1877, 158 cases, and eight deaths; total, 466 cases, and twelve deaths, or one death in about thirty-nine cases. In 1881, I see there were 160 cases, and one death. This brings the total figures up to 626 cases, and thirteen deaths, or one in forty-eight. This is the kind of proof that is forthcoming from all sides, and I sub-

vious year. Diphtheria was an important factor in the zymotic group, causing 5 deaths, against 1 in 1880. Of these 5 deaths, 2 were due to impure water, and the remaining cases were associated with sanitary defects. Five cases of small-pox occurred during the year, but happily none were fatal, a result which must be attributed to the energetic action of the health-officer in securing immediate isolation of the person attacked, together with the speedy disinfection of the premises where the disease first appeared. In this connection, Mr. Winter Clarke draws attention to the advantage which Bury possesses, in having a building set apart for the reception and isolation of infectious cases. In view of certain emergencies which may at any time arise, he suggests that a separate building should be constructed for small-pox patients alone, since the present hospital has no adequate means for completely separating such cases from those of an infectious but less objectionable character. As regards the sanitary condition of his district, Mr. Clarke reports that the water-supply has been recently extended, and that the town is now abundantly supplied with this great necessity of life and health. The drainage-arrangements, however, seem capable of improvement; for, while the streets are well paved, well drained, and clean, there are many courts and yards which lack these important conditions. There are, moreover, many objectionable cesspools in the older parts of the town, though progress is being made in this respect. Middens, etc., are gradually being abolished; and more houses are becoming connected with the sewers, 114 such connections having been made during the past year.

RICHMOND (SURREY) RURAL DISTRICT.—Many portions of this important district seem in a very unsatisfactory condition. A large part, Dr. Adams states, "is dependent on cesspools, which, in the crowded condition of portions of the district, are an abomination: the small back yards of the cottages being completely honeycombed, and the soil reeking with foul vapours. The water-supply also is far from satisfactory, since it is intermittent, and inspection has shown that many of the cisterns are in a very foul condition. Notwithstanding that there is much likely to be prejudicial to health in the district, a remarkably low death-rate is reported, the rate for the past year being equal to 13.59 per 1,000. Of the total deaths, 13 were attributed to measles, 10 to diarrhoea, 5 to scarlatina, and 3 to whooping cough; the total zymotic mortality (31) being equal to a rate of 2.12 per 1,000. During 1880 the total deaths from these causes were only 22, the increase being due to the fatality of measles which, while entirely absent in that year, were generally prevalent during 1881. Thirteen cases of small-pox came under the notice of the health-officer, three of which were unvaccinated, two were doubtful, and one had only one mark. Seven of the cases were treated in public institutions, and the remainder at their own homes. None of these latter cases terminated fatally, but Dr. Adams does not, unfortunately, state the result of those treated at the hospital at Highgate. In alluding to the prevalence of this disease, attention is properly drawn to the want of hospital accommodation for the treatment of cases of infectious disease. The nearest accommodation of this kind is either at Highgate or the Liverpool Road, the journey to either of which is far too great for people prostrate with dangerous illness.

CARMARTHEN URBAN DISTRICT.—The death-rate of this district for 1881 was only 18.9 per 1,000, against 21.16 for 1880, and an average rate for the preceding nine years of 22.7. From zymotic complaints, three deaths only happened, against thirty-seven in the previous year. Bronchitis and pneumonia were also less fatal than usual, but there were thirty deaths from scrofula. The infantile mortality was somewhat high, forty deaths being those of children who had not completed their first year. Infantile convulsions accounted for twelve of these deaths, chest-diseases for nine, scrofula for four, and croup for two. The condition of the district under Mr. Hughes' charge seems to have been thoroughly and systematically inspected, and little seems needed but the improvement of some of the foot-paths. Neither the infectious hospital or the disinfecting oven was used during the year.

TYNE PORT.—This important port has now come under the sanitary supervision of Mr. Armstrong, the energetic health-officer for Newcastle. Mr. Armstrong finds that the most common defects in the vessels which he inspected were insufficient ventilation, darkness or dampness of forecables, and insufficient ventilation or filthiness of closets. During the year there were 3,309 vessels inspected by the inspector, 1,101 of which were found in a good condition, 1,887 were passable, and 258 were in a bad state. With the exception of six vessels, which had left before they could be revisited, the defects appear to have been remedied in accordance with the inspector's requirements. Thirteen cases of infectious disease were admitted into the floating hospital from vessels arriving in the port, as compared with a total of eleven in the previous year. The admissions for 1881 included five

of small-pox (two hæmorrhagic), four of enteric fever, one of febricula, one of German measles, one of diphtheria, and one of tonsillitis. Mr. Armstrong explains that these admissions, although few in number, were widely distributed over the year, and caused the wards to be kept in frequent use. The hæmorrhagic cases of small-pox bore no traces of vaccination, and both died. Of the remaining eleven cases, ten recovered and were discharged, while the last patient was, at the date of the report, convalescent, and would be able to leave the hospital in a few days.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology, at a meeting of the Board of Examiners, on the 13th instant, and when eligible will be admitted to the pass examination.

Messrs. Arthur F. Stace, James S. Robertson, and Charles L. Hudson, students of the Middlesex Hospital; Hugh Armstrong, William A. B. McCabe, and Niell MacGillycuddy, of University College; Albert R. Jolliffe, Edward Felix, and Arthur D. Jollya, of the Charing Cross Hospital; Ernest W. Phillips, Alfred H. Tubby, and Reginald M. H. Randell, of Guy's Hospital; Herbert W. A. Branson and Cornelius C. Caleb, of King's College; H. Grattan Guinness, of the London Hospital; William J. Maurice, of St. Thomas's Hospital; Richard Pinhoon, of St. George's Hospital; and William A. Wills, of the Westminster Hospital.

Four candidates were rejected, including one for six instead of three months.

The following gentlemen passed on the 14th instant.

Messrs. J. D. Johnstone Harris, John C. Smith, and John McK. Ackland, of the Charing Cross Hospital; Charles Chambers, Franke C. H. Smith, and Lawrence Barnett, of University College; Percy D. Bray and Ernest H. Freeland, of the Middlesex Hospital; Robert N. A. Wallinger and John P. W. Gray, of King's College; George E. C. Anderson and William H. Bowes, of Guy's Hospital; Ralph T. Cann, of St. Thomas's Hospital; George C. Macdonald, of the Westminster Hospital; George W. H. French, of St. Mary's Hospital; Robert Trevor, of St. George's Hospital; and Thomas W. Heywood, of the Manchester School.

Eleven candidates were rejected, making a total of 45 out of the 232 candidates examined, who, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, including two who had an additional three months.

The following gentlemen, having undergone the necessary examinations, were admitted Members of the College at a meeting of the Court of Examiners on the 18th instant.

Messrs. Clare A. Everest, L.R.C.P.Ed., Gipsy Hill; R. Broughton Knowles, L.R.C.P.Ed., Sussex Street, S.W.; R. Bissell Mole, L.R.C.P.Ed., Redditch; Michael H. Feeny, L.R.C.P.Ed., Castlebar; Robert Beswick, L.S.A., Chesham; Francis J. Lea, L.S.A., Downside, Bath; Robert W. Jalland, L.S.A., Horncastle, Lincolnshire; W. Carrington Hearnden, Sutton, Surrey; Thomas W. L. Beales, Holland Road, Kensington; George H. Vos, B.A. Cantab., West Dulwich; Arthur F. G. Codd, Clarendon Road, W.; William H. Evans, Seaton, Devon; Arthur Bowe, Shipley, Yorkshire; John J. Y. Baber, Thurlow Square, S.W.; Bertram H. L. Stivens, Chester; Alfred H. Willoughby, Aberdeen Place, W.; Frederick W. Hewitt, B.A. Cantab., Grove Place, S.W.; Hinton E. Bateman, Canterbury; Thomas Sinclair, M.D. Queen's Univ. Irel., Belfast; and Simpson Powell, L.S.A., Southborough, Kent.

Nine candidates were rejected.

The following gentlemen passed on the 19th instant.

Messrs. George H. How, M.D. Phil., Hayling Island; Bassett C. E. F. Gunn, L.R.C.P.Ed., Rochester; Cecil J. Muriel, L.R.C.P.Lond., Norwich; William C. Bull, B.A. Cantab., Bromborough, Cheshire; William B. Paterson, Fleet Street; Herbert E. Rowell, Lewisham; William H. Linney, Haverstock Hill; Harry Swift, B.A. Cantab., Ely, Cambs.; Gilbert E. Butler, Hobart Town; George H. Phillips, Newcastle, New South Wales; John C. Jackson, Wellington Road, N.W.; Thomas Horsfall, L.S.A., Masham, Yorkshire; William A. Payne, Oswestry; Horace H. C. Murray, Wray Crescent, Tollington Park; Arthur Orton, L.S.A., Foleshill; Frank L. Phillips, L.S.A., Moseley, Warwickshire; Arthur C. N. Goldney, L.S.A., Hammersmith; Adolphus J. Richardson, M.A. Cantab., L.S.A., Sidney Square, E.; Robert Black, L.S.A., Brighton; and J. Best Trapp, L.S.A., Bedford.

Five candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 6th, 1882.

Berry, John Bourne, Eagle Lodge, near Galway.
Bush, James Paul, Bristol Royal Infirmary.
Benison, William Bedell, Holly Bank, King's Heath.
Horsfall, Thomas, Marsham, Yorkshire.
Jalland, Robert Wallace, Horncastle, Lincolnshire.

The following gentlemen also on the same day passed their Primary Professional Examination.

Bernard, Alfred George F., St. Bartholomew's Hospital.
Dean, Francis, St. Bartholomew's Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held

A WOMAN and her four children, at Ketley, near Wellington, in Shropshire, have narrowly escaped death through partaking of some jam purchased at a shop in the district. They were taken ill, with all the symptoms of irritant poisoning. Some of the jam was sent to the county analyst, who found the stuff to consist of "gooseberry tops", apple, rhubarb, etc., the mixture of which produced an injurious ferment.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The usual Quarterly Court of Directors of the above Society was held on Wednesday, April 12th, at 5 P.M.; Mr. Charles Hawkins, V.P., in the chair. A letter was read from the President, Sir George Burrows, Bart., expressing his regret at not being able to attend the meeting. Dr. Pitman, V.P., proposed a resolution expressing the sympathy of the Court with their President on his recent severe domestic affliction, which was carried unanimously. Four new members were elected; the deaths of three were reported, as well as the resignation of another. Applications for grants were read from fifty-six widows, seven orphans, and three recipients of relief from the Copeland Fund; and it was resolved that a sum of £1,126 should be distributed among them. Three fresh applications for relief from widows were read, and grants to them were made amounting to £55. The death of one widow was announced, and the marriage of another. The directors recommended that Dr. Bissett Hawkins should be elected, at the annual general meeting, a Vice-President, in the place of Dr. Billing, deceased; and that Dr. F. Weber, Dr. Burdon Sanderson, John Sebastian Wilkinson, Esq., Walter Rivington, Esq., G. Carrick Steet, Esq., and Arthur Evershed, M.R.C.P., should be elected in the place of the six senior directors who retire. The annual general meeting was fixed to take place on May 17th, at 5 P.M.

THE PARKES MUSEUM.—A general meeting of the subscribers to the Parkes Museum of Hygiene was held on Tuesday, April 18th, in the Museum of University College. In the absence of Sir William Jenner, Mr. Berkeley Hill (treasurer) was voted to the chair. The meeting was held to consider the advisability of making application to the Board of Trade for a license to incorporate the museum. The treasurer presented a statement of accounts from the commencement of the undertaking, in 1876, to the end of March this year, from which it appeared that the income, including the profits of the International Medical and Sanitary Exhibition, had in round figures amounted to £2,506, while the total expenditure for the six years had been £962, leaving a balance of £1,544. Dr. Poore read the report of the Executive Committee, which, after giving an account of the work the committee had been able to accomplish since its formation, stated that the committee had unanimously resolved to recommend to the subscribers that the museum be formed into an association, under a licence of the Board of Trade. Under such a licence the museum would enjoy all the advantages of being a corporate body. Among other reasons which made the incorporation of the museum a matter of necessity, was the fact that it was about to enter on a new place of existence. The room at present used as a museum was full; and intimation had been received from the Council of University College that the room would be required for other purposes at the end of the present session. Since the opening of the museum it had been visited by over 5,000 persons interested in sanitary progress, exclusive of those who attended the lectures and demonstrations which were given gratuitously during the winters of 1880 and 1881 by members of the Executive Committee, and those who attended the inaugural meeting of 1879, and the first annual meeting at the Mansion House in 1880. During the past winter, owing to the crowded state of the museum, the lectures and demonstrations had had to be discontinued. Dr. Russell Reynolds proposed, and Dr. Steele seconded, the adoption of the report, which was agreed to unanimously. The draft memorandum and articles of association, under which it was proposed that the museum should be incorporated, were unanimously approved, on the motion of Professor Corfield, seconded by Mr. Rogers Field. On the proposal of Dr. Sieveking, seconded by Dr. Gowers, it was agreed that the Executive Committee should be dissolved as soon as the incorporation of the museum was completed. A vote of thanks to the chairman concluded the meeting.

HEALTH OF FOREIGN CITIES.—The following facts and figures, derived from a table in the Registrar-General's last weekly return, afford trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities. According to the most recently received official weekly returns, the annual death-rate was equal to 24.0 in Calcutta, and to 32.8 in Bombay; cholera caused 18 deaths in Calcutta, and measles 69 in Bombay, while "fever" fatality showed the general excess in both these cities. The annual return from Alexandria does not appear in the table. In twenty-one European cities, the death-rate averaged no less than 31.0, and exceeded by 6.6 the average rate prevailing last week in the twenty-eight large English towns. The death-rate in St. Petersburg was so high as 57.7, and

corresponded with the rate in the previous week; the 740 deaths included 48 fatal cases of typhus and typhoid fevers, and 35 of scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate, however, averaged only 24.6; measles caused 15 more deaths in Copenhagen, and 3 fatal cases of diphtheria were reported in Stockholm. In Paris the death-rate declined to 28.2, although the 1208 deaths included 53 fatal cases of diphtheria, 51 of diphtheria and croup, and 25 of small-pox. In Brussels the rate was equal to 24.9, and the deaths included 4 from "fevers" and 7 from whooping-cough. The rate in Geneva declined to 27.1 from still higher rates in previous weeks. In the three principal Dutch cities the death-rate averaged 28.8; the highest rates being 28.9 in Amsterdam and 30.1 in Rotterdam. The Registrar-General's table includes returns from nine German and Austrian cities, in which the death-rate averaged 30.1, and ranged from 20.8 in Dresden and 22.6 in Berlin, to 38.8 in Buda-Pesth and 40.8 in Munich. Small-pox caused 25 more deaths in Vienna and 11 in Buda-Pesth; diphtheria again showed fatal prevalence in Berlin, Dresden, Munich, and Trieste. In two of the principal Italian cities, the death-rate was equal to 28.9 in Venice and 28.8 in Turin; typhoid fever caused 6 deaths in Turin and 2 in Venice, and 7 fatal cases of measles occurred in Turin. The annual death-rate in four of the largest American cities averaged 26.8, and ranged from 22.3 in Philadelphia to 32.4 in New York. Small-pox caused 12 deaths in New York and 11 in Philadelphia. Scarlet fever showed fatal prevalence in New York and Brooklyn; and 13 fatal cases of typhoid fever were recorded in Philadelphia.

A SANITARY convention was held at Greenville, Michigan, on the 11th and 12th of April, under the auspices of the State Board of Health. Addresses on subjects relating to public health were delivered at the session of the convention, followed by general discussion on the subjects treated. Among the subjects discussed were the following:—The prevention and restriction of small-pox, diphtheria, and scarlet fever, the disposal of decomposing organic matter, a school of hygiene, the relation of the newspaper press to sanitary reform, and the importance and means of securing pure air. An exhibition of sanitary apparatus was also provided for.

MEASUREMENT IN THE MEDICAL APPLICATION OF ELECTRICITY.—A paper on Measurement in the Medical Application of Electricity, the joint production of Dr. W. H. Stone and Mr. W. J. Kilner, was read by Dr. Stone at a recent meeting of the members of the Society of Telegraph Engineers and Electricians. Dr. Stone first spoke of the erroneous ideas existing with regard to the power of electricity as a healing agent. That electricity was, however, an excellent aid in curing disease he had conclusively proved, but what he desired to speak of was the power of measurement of electricity in medical application. He described the three chief forms of electric current, and the resisting power of the body in different forms of disease. In health the resistance was naturally the greatest, but even in juvenile patients it was very great. Such resistance was, however, very much reduced when the part to which the electricity was applied was wetted with salt-water. To be able to accurately measure the current was highly necessary, and although the current could be passed through the body with impunity, yet the shock could be great enough to cause death. That this was so they had proof in the two deaths that had occurred of late (one at a Music Hall, and the other at Hatfield), of men through taking hold of the conductor to the electric light. In the first case, the man lived for sixty minutes after the occurrence, but in the second, death was almost instantaneous. In the discussion which ensued, Mr. Priest spoke of the rapid advance made in electricity, and said that, while it was a matter for congratulation that it was found to be beneficial in curing disease, it was much to be regretted that persons should endeavour to make the public believe that it could be applied to hair and tooth brushes, and other similar things, and used to cure all manner of disorders. At the conclusion, a vote of thanks was accorded to the authors of the paper.

WELLINGTON (SOMERSET) URBAN DISTRICT.—Dr. Meredith draws the attention of the sanitary authority to the imperative need of improvement in the ventilation of sewers, and of care in the construction of house-drains. The old privy system is being gradually abolished, all new houses communicating with the sewer. Of fifty-four samples of well-water analysed, only four were found fairly good, and nine good, while of the remaining samples the bulk were very bad. Measles were prevalent in the district during short intervals, but the disease was of a mild type, except in the work-house, where it proved very severe. Five of the children of the master and matron caught the disease, together with forty-eight of the pauper children—in all fifty-three cases, of which seven terminated fatally. With the exception of some cases of scarlet fever, typhoid fever, and whooping-cough, the district experienced no other form of epidemic disease. The death-rate for the year was equal to 18.23 per 1,000.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to advertisements, changes of address, and other business matters, should be addressed to the Manager, at the Journal Office, 161A, Strand, London, and not to the Editor.

MORTALITY IN INDIAN PRISONS.

SIR.—With reference to your leading article in the JOURNAL of March 11th, 1882, on the "Mortality in Indian Prisons," permit me to make a few remarks in explanation of the high rate shown to exist in the gaols throughout that country. No doubt, a few years ago much required to be done to improve the sanitary condition of Indian prisons, but much has been done, with little benefit, as shown by the figures quoted by you; and truly all that can be said of the result is, that there is "some cause for congratulation."

In 1856, I published in the *Indian Annals of Medical Science* a paper on Jail Diarrhoea as it occurred in an Indian prison under my medical charge. This disease constituted 27 per cent. of the total number of admissions into hospital during five years, and 57 per cent. of the total number of deaths during that time. There were sanitary defects in the prison, but the conclusion at which I arrived was that these were not sufficient to account for the high rate of mortality. On examining the hospital records for thirteen years, from 1843 to 1855 inclusive, I found that the disease had been most prevalent among prisoners who had been less than two months incarcerated. A table drawn up at that time shows 441 admissions from diarrhoea. Of these, 109 had been under two months in gaol; while, among prisoners who had been confined for ten, eleven, and twelve years, the numbers were 2, 4, and 3 respectively.

The prejudices of natives, as a rule, do not admit of *post mortem* examinations, but these prejudices are less respected in the case of inmates of prisons; and, in my experience, the examinations made showed, in the majority of cases, the existence of disease of long standing.

You ask why the mortality to strength among prisoners should be so much greater, from the diseases mentioned, than among sepoys in Bengal and Bombay. The cause is, I think, very evident. Sepoys are picked men; they are medically examined, and not admitted into the ranks of the army unless pronounced to be in good health, and in every respect physically fit; as a general rule, they belong to a class holding comparatively a good social position. On the other hand, native prisoners are commonly miserable specimens of humanity, unhealthy and impoverished when incarcerated, their whole system in many cases poisoned from exposure to malaria; added to which, on first admission, they suffer from the depressing influence of confinement and a life different from that to which they have been accustomed. To these and like causes are, I think, to be attributed the high rate of mortality in Indian prisons, not to any backwardness on the part of the officers in charge in detecting and pointing out sanitary defects, nor (in my experience) on the part of the authorities in carrying out their recommendations.

It is true that the death-rates among the inmates of Indian prisons are appalling when compared with those among the native troops or others in Government employment, but we have no means of making an accurate comparison between the mortality in gaols, and that among the class of the native population to which, as a general rule, prisoners belong. If the means were available, it would probably be found that the results are not so unfavourable to the inmates of prisons.—I am, sir, yours truly, GEO. MACNAY, M.D., L.R.C.P., Deputy Surgeon-General, Inverness, March 16th, 1882. Indian Army (retired).

CLUB PAYMENT FOR FRACTURES.

QUERIST (Sittingbourne).—We believe the general rule is, that club payments do not include fractures or surgical operations.

HAS THE DURATION OF HUMAN LIFE IN ENGLAND INCREASED DURING THE LAST THIRTY YEARS?

SIR.—Dr. Rabagliati has failed to show that an increased death-rate at the higher ages is other than the necessary consequence of diminished mortality at the lower ages. His article, taken broadly, might be regarded as a warning to insurance companies to beware how they maintain any longer their old basis of calculation in regard to the value of human life. But a careful examination of the statistics which he has adduced will assure even the most reckless life-office, not to mention the most prudent, that it has little cause to fear any general failure of human longevity, so far as England is concerned.

In Letter II, Dr. Rabagliati says: "The deaths from old age have been continuously diminishing for the last thirty years. 'Old age' does not technically commence till sixty-five. If life were becoming longer, if conditions were becoming more favourable to long life, we should expect to see more people living to the longer ages." What can be the meaning of such extraordinary language from the pen of one who, in his previous letter, had acknowledged that, comparing the deaths occurring in the year 1879 with the average for the twenty-eight years immediately preceding, the deaths in 1879 were, as regards males, "at 65 to 75, 7.8 per cent. more; at 75 to 85, 11 per cent. more; and at 85 and upwards, 7 per cent. more;" and, as regards females, "from 65 to 75, 11.6 per cent. more; from 75 to 85, 5 per cent. more; and above 85 years of age, 4.8 per cent. more." Could any better proof be given that more people live to old age, than the fact that more people die at old age? Even the census returns are scarcely so trustworthy; for the age of the living is frequently falsified, the age of the dead rarely so. But, in order to show that Dr. Rabagliati is in error in supposing that the influences which have been brought to bear, with a view to lengthening human life in England, have had a beneficial effect on infants only, it needs only to point out that all the persons above referred to as dying at 65 years and upwards in the year 1879, were more than 35 years of age before the thirty years began, upon the death-rates of which the comparison is founded.

If Dr. Rabagliati had confined his remarks to what he says in Letter III, about the change of cause of death in adults, little exception could have been taken to them; but the proofs which in reality support his statements in that letter are quite distinct from the statistics brought forward in Letters I and II. Worry, and the high pressure under which we now exist, are the destroyers of many who, in the olden days, would have succumbed to some more prosaic "cause". Competition, and its congener, anxiety, are, however, less under the control of the medical profession than other causes, so that the admitted change of cause of death speaks loudly in praise of professional skill and enterprise, particularly in the education of the public mind in regard to sanitary matters. Moreover, competition and worry seem to be less certain and rapid in their fatal effects than the causes which they are said to have supplanted; for the fact still remains, that more people die old now than was the case thirty years ago.—I have the honour to be, sir, your obedient servant, D. BIDDLE.

Kingston-on-Thames, March 16th, 1882.

MEDICAL CORONERS.

SIR.—Allow me briefly to comment on the observations of "Incog." in your issue of April 13th. I endorse fully his views as to the appointment of coroners; although my London experience is at variance with his as regards the calling of medical evidence and making a *post mortem* examination. For many years, I was engaged in an extensive London partnership. In addition to the ordinary inquests which fall to the general practitioner in his own practice, the late respected Mr. Wakley and his successor frequently honoured me with casual *post mortem* examinations in my district. It was customary with these gentlemen, especially the former, in almost all cases, to order a *post mortem* examination. Since retiring to the country, I notice the contrary practice, and will cite two cases.

An elderly man was in his chair when the wife retired to her bedroom. After ten minutes' absence, she found him dead on the floor. There was no other person in the house. He had not been under any medical attendance for some months. I was summoned immediately after death. There was no inquest, no death certificate demanded, nor any explanation required of me.

A shepherd went to his early morning duty, apparently well. About two hours afterwards, he returned, and was found by his son, a lad about thirteen, hanging in a shed adjoining his own house, not dead. I cut him down immediately on my arrival, but life was extinct. My presence at the inquest was not required. The wife of the deceased was seen at a dancing saloon the day after the funeral.

This is the usual custom in this medical coroner's district.—I am, etc.,

SURGEON-MAJOR.

"EVA" asks "whether it is legally correct to address a M.D. as 'esquire'." We are not aware that the question of legal correctness has ever been raised with regard to the designation. In the tables of social precedence, however, doctors (that is to say, those who have taken the degree of doctor in an university) rank next above esquires; and therefore the addition of "esquire" is, strictly speaking, superfluous. It is, however, very common; and neither our fair correspondent nor any of her friends, using it, need fear the interference of the law.

FEES TO MEDICAL WITNESSES.

SIR.—*Apologies* of your article in the JOURNAL of March 25th on this subject, let me give you a recent experience in one of our inferior courts here in Scotland. Late in the afternoon of Wednesday, I was served with a summons to attend the next day at the Sheriff's Small Debt Court to give evidence in regard to a woman who was raising an action against her landlord, and whom I had only seen once about ten months ago. As I had previously been called to attend this court in a similar capacity, without being paid for it, I determined to raise the question the very first opportunity that offered. I made application to the agent in the case for the fee; and as it was not forthcoming, when I was placed in the witness-box, I explained the matter to the sheriff, and asked him to ordain that my fee be paid before my evidence was taken. After considering the matter for a few moments, his lordship—who, I should say, treated me with the most perfect courtesy—decided that as I was present in the witness-box, I was bound to give evidence. My evidence was accordingly taken; and now I suppose I may ask in vain for my fee, as I have had to do on previous occasions.

Perhaps some of your readers may be able to inform me on this point, whether I would have been justified in still refusing to give evidence, in spite of the decision of the sheriff.—I am, etc., F.R.C.S.E.

After referring to the Scotch Law of Evidence, and to the last edition of Mr. Glashan's text-book upon the Sheriff's Courts of Scotland, we do not think that our correspondent could legally refuse to give evidence in the court which he was summoned to attend for this purpose, without the payment of his fee, when requested to give his testimony by the sheriff. It appears that this officer has a discretionary power vested in him, but is not compelled by the Act of Sederunt of the 10th of July, 1839, to fix the sum to be paid to a witness, and to order its payment by the party adducing him or his procurator or agent. Medical men giving professional evidence are allowed higher rates of remuneration than they would be for giving other testimony. We have not been informed on what ground the sheriff has refused to order payment of our correspondent's fee; and if he does not know, it may be advisable to again apply to this subordinate judge for the same, and to ask him to state his reason for refusing to direct payment of such if he persists in this objection.

DR. O. W. WIGHT, the health officer of Detroit, has published a paper which he read before the State Sanitary Convocation at Ann Arbor, Michigan, on February 28th last, on "How to Combat Small-pox". Dr. Wight has no new arguments to adduce on the subject, but he draws attention to the fact that "slovenly vaccination with imperfect or worthless virus brings the great and beneficent discovery of Jenner into disrepute;" and he suggests that, "with the view of preventing accidents," the blade used by the operator should be held in flame after each vaccination.

MEDICAL ATTENDANCE UPON THE ARTISAN CLASS.

SIR.—Mr. F. H. Worswick's uncontradicted letter in the BRITISH MEDICAL JOURNAL of April 1st leads one to the following serious deductions.

1. Medical men are not properly paid by the working classes, because that class is not induced to be thrifty, but instead, to spend all they get, and to rely on the workhouse, or some more useless provision for old age.

2. Clubs and insurance societies, workmen are taught to look upon with at least some suspicion: see the Government inspector's reports, and the cases of insolvency which in practice have occurred, in spite of checks on frauds.

3. For other reasons, no very general confidence is placed in Government savings' banks and postal insurance, though of course a certain number will doubtless avail themselves of these facilities in time.

Hence, not only is the working man in an entirely false position as regards the product of his labour as a means of refuge in disease or old age, but the general ratepayer has to suffer, because no efficient system is established for the due self-protection of workmen. Hence, also, the medical profession have to get from him what they can, and also admit that, as a class, they are unable to inaugurate a system for at least their own protection which would secure payment for services rendered.—Yours, etc., J. H. W.

CRAMP.

SIR.—In reply to "Spasm," I have lately had a very troublesome case of cramp in an old gentleman. It attacked him usually at night, and on stooping. I raised the end of his bed two inches by placing blocks under each leg, and found that the following mixture was most beneficial: Magnesiæ carbonatis 3j; ætheris 5ss; tincture cardamomi comp. ℥xxx, as a draught, to be taken three times a day. I am glad to say he now has quite recovered.—I am, etc., E. H. H.

CROONIAN LECTURES ON THE CLIMATE AND FEVERS OF INDIA.

Delivered before the Royal College of Physicians of London.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE III.—PART I.

In my last lecture, I described fevers of malarial origin, and also certain morbid conditions depending on the same causes. I now proceed to consider fevers which are due to ordinary causes, such as produce febrile disturbance anywhere; also others which are so closely assimilated to the malarial remittents and specific fevers, that it is difficult to differentiate, and obviously impossible to consider, them under such designations as febricula or ephemeral fever.

As to the precise nature of their cause, we know no more than we do of that of malaria itself; nor are we assured that there is an essential difference, unless it be that a predominance of animal organic decomposition and effluvia gives a distinctive character; but the importance and frequent severity of the fevers, and their etiological affinity to the remittent forms, render it expedient to recognise the existence of a type of fever of a continuous or subcontinuous nature, which by some authorities is ascribed to the combined operation of a double agency; by others to malaria alone, or to changes that result in transformation of type.

I would propose the addition of endemic enteric or continued fever, but would not insist on the term "endemic", if another would more appropriately indicate the type of fever to which I refer. The arrangement should be as follows.

Continued Fevers in India and Tropics.

- (a) Ephemeral or febricula.
- (b) Ardent or thermic fever.
- (c) Endemic enteric or continued fever.
- (d) Specific enteric fever.

This would give greater precision to registration, and lead to more definite conclusions as to disease about which it cannot be denied there is some confusion in reference to its true nature and causation, it being regarded as either remittent, continued, or specific enteric, according to the views of respective observers.

Without presuming to question the diagnosis, I venture to think that there may be a too rigid application in India of views of disease as it occurs in this country, and that sufficient allowance is not always made for the influence of conditions whereby disease may be modified and made to assume features strange to it in temperate climates. Some medical officers modify their views of disease after experience in India; and it is fortunate that they do so, as exclusive application of theories, which are strictly appropriate here, will not always be so in India and in the tropics. The late Dr. Babington, in an address to the Epidemiological Society, made the following remarks: "We require, therefore, in a study of disease, as of geology, a wide field, in order that we may found theories on a sufficiently broad basis to avoid the risk of coming to partial and erroneous conclusions." Or, as Dr. Morehead says: "Disease in India is not disease in England; and a catholic science of medicine can only be created by the harmonious action of labourers in varied climates and conditions of people."

Ephemeral Fever or Febricula.—A mild form of simple fever is frequent in India, which is due to ordinary causes, such as changes of temperature, excesses in eating or drinking, fatigue, excitement, disordered secretion, or functional derangement of abdominal viscera. It is most frequent in the hot season, but may occur at any time. When it happens in persons newly arrived in the country, it is probably free from any malarial taint, though the onset may resemble ordinary ague. In natives and old residents, these simple attacks of ephemeral fever or febricula are probably of a malarial nature, and, if not checked, may assume the character of an ordinary intermittent. The symptoms are, *malaise*; headache; foul tongue, which is white, with red edges; disordered bowels; nausea, or sickness; high temperature, 104° – 106° ; preceded by chills, rigors, *malaise*, muscular pains, followed by diaphoresis. In plethoric or intemperate people, the reaction may be severe, with high fever and delirium; to which may be added congestion of liver or gastro-intestinal mucous membrane; but generally the characters are simple, and, in otherwise healthy people, readily yield to treat-

ment, which consists in free relief of the bowels, in some cases an emetic, diaphoretic medicine, tepid sponging, a restricted diet, and rest. With this, the patient is generally restored to health in a few days. Most people, soon after arrival in India, have fever; and, as a general rule, soon recover. Few escape, and to Europeans it is an acclimatising process.

Ardent or Thermic Fever.—This is a more serious disease, and varies in intensity from simple to intense fever, or, reaching its maximum, to sunstroke—the exciting cause being solar or artificial heat.

Dr. Wood, in his recent monograph on fever, gives the results of experiments which show that a certain degree of heat, by inducing vaso-motor paralysis, causes intense pyrexia, which, if not mitigated, rapidly destroys life by causing failure of the respiratory centre, and confirms the fact that high temperature is capable of causing fatal nutritive disturbances, and that thermic fever does the same. The peculiar odour and offensive perspiration, the altered or suppressed urine, the frequent watery, offensive, involuntary evacuations, the condition of the blood found after death, are all indications of the profound influence excited by excessive temperature.*

Heat may cause simple fever; but, if aggravated, the symptoms become more urgent; the temperature may rise to 106° – 108° , or higher, and life is in the greatest peril. The predisposing causes are previous illness, debility, intemperance, constipation, bilious derangement, imperfect breathing in crowded rooms and barracks, ill-ventilation, defective perspiration. The vitiated and over-heated blood paralyses the heat-controlling centre; there is great rise in temperature, and death, if the patient be not relieved.

Exhaustion and syncope may occur during fatigue, or when there is depression from any cause during exposure to a high temperature, as in the case of engine-room men in the tropics, when the temperature in the vicinity of the furnaces rises to 120° and upwards; or in the case of men who are exposed to the sun's rays, which, taking effect on the head, neck, and body, produce a condition like shock. The skin is pale, cold, and moist; the pulse feeble. Death may occur from failure of the heart; or asphyxia and apnoea may supervene after premonitory symptoms of depression and weakness, during exposure of the head and spine to the direct rays of a powerful sun, when the atmosphere is much heated, and the nervous energy is depressed by fatigue, illness, or dissipation. The respiratory centres are overwhelmed by the sudden rise of temperature, and respiration and circulation fail. The heart's action having been brought to a close by heat, in the manner shown by Claude Bernard and Lauder Brunton, that the effect of a very high temperature on animals is first to accelerate, and finally to stop the heart, in a state of tetanic contraction. In other cases, there is ardent fever. The body being intensely heated, this may occur independently of the direct sun's rays, at night, in the shade, in a house or tent, especially in persons who are depressed by fatigue, bad air, over-feeding, alcoholic stimulants, want of rest, and notably when the air is impure from overcrowding or from insufficiency of cubic space.

The body-temperature may rise to 108° , or even higher; there are dyspnoea, hurried respiration, restlessness, and pungently hot skin. The pulse in some is full and labouring, in others quick and jerking; the face and neck are livid and congested; the carotid pulsation very perceptible; the pupils, at first contracted, dilate widely before death. Coma, stertor, delirium, convulsions, frequently epileptiform in character, with relaxation of sphincters and suppression of urine, are the precursors of death; and there may be cerebral hemorrhage.

Many fatal cases among Europeans are so caused. The premonitory symptoms appear some hours or even days before the dangerous conditions supervene. There are *malaise*, disordered secretions, profuse and frequent micturition, restlessness, insomnia, apprehension of impending evil, hurried and shallow breathing, præcordial anxiety, giddiness, headache, occasionally nausea or vomiting, thirst, anorexia, and fever, which soon becomes fervent heat of skin. The pulse varies. These conditions frequently are worst at night, and the patient may pass into a state of unconsciousness and die.

Ardent fever may supervene on ordinary ephemeral fever, especially when the atmosphere is loaded with moisture so as to prevent evaporation from the person.

The dry atmosphere of Upper India is better tolerated than the damp atmosphere of Lower Bengal or parts of Southern India, though the temperature is lower. Hot dry air favours evaporation, and thus keeps the body cool; whilst in damp air, as evaporation decreases, the natural cooling power is greatly diminished. Vigorous, healthy per-

* "External heat applied to the body of a normal animal (or man) so as to elevate the temperature produces derangement of the functions of innervation, of circulation, of nutrition and secretion, similar to those seen in natural fever, the intensity of the disturbances being directly proportionate to the rise of temperature."—Wood, "Fever".

sons, of moderately spare frame, with sound viscera and temperate habits, can sustain great heat, if the atmosphere be pure and moderately dry. Fresh arrivals in India are more prone to suffer than those who have become accustomed to the climate and have learned how to protect themselves. A native can bear an amount of sun on his bare head and naked body with indifference that would prostrate an European; but, when the temperature rises above a certain point, all succumb, and natives suffer and die like others.

Tolerance of heat depends much on the vigour of constitution and actual state of health. The refrigerating powers of the body in health enable it to support a temperature considerably above that of the blood. In the hot winds, little inconvenience is felt so long as perspiration is free; but, when that fails, suffering ensues, and the danger is great.*

Of those who recover, or rather who do not die, many remain invalids for life, which is frequently shortened by obscure cerebral or meningeal changes, which affect the sufferer in various degrees of intensity. Irritability, impaired memory, epilepsy or epileptiform attacks, headache, mania, partial or complete paraplegia, or blindness, and extreme intolerance of heat, especially of the sun's rays, rendering the person incapable of serving in hot climates or of enduring any exposure to the sun; or it may lead to gradually complete fatuity, dementia, or epilepsy; chronic meningitis, with thickening of calvaria, which may account for the intense cephalalgia; or, in a lesser degree, in disordered innervation and general functional derangement, which seriously compromise health.

In cases where death has occurred suddenly from exhaustion, there is no very remarkable morbid change. The heart may be contracted, but often flaccid. The lungs, brain, and membranes may be congested, but they are sometimes the reverse. The venous trunks, especially those of the abdomen, and the right side of the heart, may be filled with blood, which is dark, grumous, imperfectly coagulated, and effused in patches of ecchymosis, rendering the body rapidly livid. Coagulability is impaired, and it is deficient in oxygen.

In death from thermic fever, the lungs are often (not always) deeply congested; the heart is contracted by coagulation of myosin, and the whole venous system is engorged. The body, even before death, may be marked by petechial patches and extensive livid ecchymosis. The blood is generally more fluid than natural, and acid in reaction. The globules are sometimes crenated, and have a diminished tendency to form into rouleaux. The body for some time after death retains a high temperature. When opened, the viscera feel pungently hot. Rigor mortis comes on very rapidly. The brain and membranes may be congested; in some cases, there are evidences of cerebral hemorrhage and serous effusions in the ventricles.

Treatment.—In cases of simple exhaustion, remove the person to a cooler place. Give a douche, but not too prolonged, or it may depress; remove tight and oppressive clothing, apply ammonia to the nostrils, etc. Enjoin rest, and avoid exposure to over-fatigue or to great heat. When the person is struck down suddenly by the sun, remove him into the shade, and let a douche of cold water fall on his head and body. At the capture of Rangoon, in 1853, numbers of men struck down by the fierce April sun were so treated, and only two, who had been bled, died.

When I say such cases recover, I refer to the reaction at the time. In some, there are consecutive symptoms of fever, headache, etc.: could we trace their subsequent history, it is probable we should find that complete recovery never occurred.

Future exposure to the sun should be carefully guarded against: the sufferer should be removed to a cooler climate, and protected from excitement; whilst the greatest care is taken to avoid errors or excesses of diet and stimulants.

In thermic fever, the object is to reduce temperature as speedily as possible before tissue changes take place. The use of quinine by hypodermic injection has been thought to produce good results by reducing temperature. It was first used, I believe, by Dr. Waller in Calcutta.

Bleeding has been abandoned, except in rare cases. There are cases in which it may be necessary to avert suffocation, but they are exceptional. Where it has appeared to give relief, the improvement has generally been transient, and followed by relapse into a more dangerous and fatal condition.

The application of cold by affusion, or by ice, taking care not to reduce the temperature too low, is beneficial, a thermometer being placed as a guide in the axilla or rectum. The bowels should be relieved, and cooling drinks given. The most severe symptoms having subsided, the febrile condition is to be treated on ordinary principles; the diet must be carefully regulated. As improvement progresses, and symptoms of intra-cranial mischief supervene, iodide of potash and counter-irritation may be of service; removal to a cooler climate is essential. As a general rule, it is desirable that the sufferer should not return to a hot climate, and he should be guarded against all exposure to heat, overwork, and anxiety.

In simple cases of sun fever (which are not to be confused, as they often are, with insolation), where the reaction is not excessive, the treatment is that of ordinary ephemeral fever.

Continued Fever.—Writers on Indian and tropical disease have described a form of continued fever liable to be modified by visceral complications, and to terminate fatally,—*post mortem* examination revealing pathological changes of various degrees of importance. It is attributed to circumstances attending life in tropical or subtropical regions—such as heat, atmospheric vicissitudes, terrestrial emanations, personal habits, no very distinct characters differentiate it from remittent, which has assumed a continued form. Twining, Annesley, Martin, and others, regarded it as a variety of malarial fever, in which perhaps there is little difference of opinion. But perhaps it is necessary to distinguish it from specific continued fevers, with which it may be confounded. In typical cases of remittent, the diagnosis is clear enough; but in many it is difficult, if not impossible: for the characters of the temperature curve vary so little that it is not a sure guide. Other fevers in India may assume this condition, especially if not dealt with properly at first; and visceral complications are generally, if not always, the precursors and concomitant of the change of type.

[To be continued.]

THE LUMLEIAN LECTURES ON INFLAMMATION.

Delivered before the Royal College of Physicians.

By J. BURDON SANDERSON, M.D., LL.D., F.R.S.,
Professor of Physiology in University College, London.

LECTURE III. PART II.—ETIOLOGY OF INFLAMMATION.

We have now, I think, clearly before us the phenomena of the inflammatory afflux. It so resembles a reflex action, in the way in which the vessels of an irritated part respond to the stimulus, that the view which must naturally suggest itself is that of its reflex nature. To come to a conclusion as to whether it is so or not, let us first look at the question from the purely physiological side. There are vascular reactions which resemble the inflammatory very strikingly in their character, about which we know that they are reflex. To what extent does that similarity indicate identity of mechanism? One of the best known of these instances is that of the submaxillary gland. In 1851, it was discovered by Claude Bernard (*Leçons sur la Physiologie et la Pathologie du Système Nerveux*, Paris, 1858, vol. ii, page 144), that the influence of the lingual nerve on the secretion of that gland, which Ludwig had made known by his experiments in 1851, is really due to the chorda tympani; and that this remarkable nerve has two distinct afferent functions: that, on the one hand, it presides over the secretion of the gland; on the other, over the circulation of blood through its vessels. In such a way that, when the chorda tympani is excited electrically, the gland reddens; vessels, before invisible even with a lens, become easily distinguishable; the veins fill with blood (which, instead of being crimson, is scarlet), paler like arteries, and, if cut, spirt also like arteries.

Now it is quite clear what John Hunter would have thought of this experimental fact, if he had seen it. He would have at once recognised its analogy to the inflammatory flux, and would have explained it by reference to what he called a "common principle in the animal machine," namely, that vessels become large in proportion to the necessity of the part. In the sixty years that had passed since his death, that idea of Hunter had developed into the doctrine of what was called *vital action*—the doctrine that the distribution of the blood to different parts of the body, or to different organs, is determined

* The following remarks are taken from a paper by the late Dr. James C. Watson, M.D., F.R.S., published in the *Transactions of the Royal Society of Edinburgh*, vol. xiv, part ii, 1844, p. 100. Dr. Watson, in his paper, discusses the question of the influence of heat on the human body, and remarks that "the human body is capable of sustaining a great deal of heat, and that the power of sustaining heat is increased by the use of clothing, and by the use of food, and by the use of exercise." Dr. Watson also remarks that "the human body is capable of sustaining a great deal of heat, and that the power of sustaining heat is increased by the use of clothing, and by the use of food, and by the use of exercise."

by the attraction for the blood which the tissues were supposed to exercise. This doctrine was present to all physiologists at that time, and led Bernard to make various experiments, for the purpose of determining the physiological relation between the two effects observed—namely, increased secretion, and the flush which accompanied it. From the fact that these effects were not really simultaneous, the vascular effects being seen earlier than the increased secretion, he inferred that they were independent; but this was not proved until Heidenhain ("Ueber die Wirkung einiger Gifte auf die Nerven der Glandula Submaxillaris," Pflüger's *Archiv*, vol. v, page 309), profiting by the remarkable property of the alkaloid atropine, in annulling the function of secreting nerves, showed that in an atropinised animal (that is, an animal in which atropine enough had been injected into the circulation to paralyse the secreting mechanism), vascular congestion of the submaxillary gland could be excited, either reflexly or directly, without stimulating it to increased secretion.

Here, then, was a case which might be strictly compared with the inflammatory blush, for it was unmixed with any other physiological effect. To this first example of determination of blood to a part, directly dependent on central influence, many others might now be added from the records of experimental physiology. I will mention only one of them, and that chiefly on the ground that it seemed to offer a rather plausible explanation of the phenomenon which now engages our attention. I refer to the experiments ("Ueber die Erweiterung von Arterien in Folge einer Nerven-erregung," Ludwig's *Arbeiten*, 1866, pp. 1-29), of Professor Christian Löwen of Stockholm, with whose charming personal qualities we had many of us an opportunity of becoming acquainted last August. What Löwen discovered was that, under certain easily realised conditions, an active congestion of the rabbit's ear, as intense as the paralytic hyperæmia of Bernard and Brown-Séquard, observed after section of the vascular nerves of that organ, could be determined reflexly—that is, by stimulation of its sensory nerves; and that, in other parts of the surface of the body, similarly localised hyperæmia could be produced by localised stimulation.

I have referred to these instances of reflex dilatation of the blood-vessels in the most cursory way, because, in reality, their bearing on the question immediately before us is only indirect. The really important fact that we learn from them is, that some mechanism exists in the blood-vessels of such a kind as to suggest active dilatation; for, in all of them, we see that a few seconds after a stimulus, of which the influence is received, whether reflexly or directly through a cranial or spinal nerve, the vessels dilate. Now, at a period not very remote from the present, such an action appeared to a great many physiologists impossible—it seemed impossible, I mean, that a blood-vessel could be acted upon by stimulating its nerves otherwise than to produce contraction of its calibre; for the simple and obvious reason that, in arteries, neither the ring fibres nor the longitudinal fibres could, by their contraction, produce such an effect, and because no other mode of action of a muscular structure, excepting contraction, could be recognised. The difficulty was regarded as so serious that the experimental proof, given long ago by Schiff (*Untersuch. über Physiol. des Nerven-Systems*, 1855, page 140), that there were such things as dilating nerves, was accepted with the utmost unwillingness. Now, we are convinced of the fact, that the nerves of muscles of the external parts of our bodies generally dilate, under the same conditions that the vessels of our viscera contract; and we recognise, in this antagonism* between outside and inside, a factor of great importance in the adaptation of the circulation of blood to the needs of the organism. But, as I have already hinted, for reasons which are easily stated, we must not allow ourselves to be misled by the apparent analogy of such effects as, e.g., that of the reflex congestion of the ear of the rabbit produced by stimulation of its sensory nerves, into supposing that they have the same meaning as inflammatory congestion.

One reason is that of time. I have more than once spoken of the inflammatory blush as transitory. The meaning of such a word as

transitory is relative. As compared with inflammatory congestion, it is transitory; but, compared with a reflex response (such as occurs in the rabbit's ear, or in the submaxillary gland), it is lasting. The one is a question of minutes, the other of seconds. But the really conclusive reason why we are absolutely certain that the Hunterian effect is not dependent on, though it is influenced by, the brain or spinal cord, is, that it occurs in all perfection in paralysed parts. It is a very long time since Mr. Simon (*Lectures on General Pathology*, 1850, page 76) observed, in a patient whose eye was anæsthetic in consequence of disease affecting the fifth nerve, that, when a grain of irritant substance was introduced underneath the upper eyelid, the conjunctiva became at once hyperæmic, although the patient felt absolutely nothing. This observation of Mr. Simon's was perhaps the earliest of the kind. However that may be, the truth of its teaching has been abundantly confirmed since. In the frog, it is a matter of no great difficulty to ligature the root of the tongue in such a way as to exclude the blood-vessels. If this be done, the circulation, of course, goes on naturally, and you may observe it on the smooth surface, under the microscope, as Waller did. If, while you are doing so, the surface be touched with a hot wire, it responds with a blush, just as the normal tongue does.

Side by side with these facts, may be placed those which show that paralysed arteries respond to stimuli which act on them through the blood which circulates through them. The organ best adapted for showing this is the kidney. Half-a-dozen years ago, Dr. Mosso (Von einigen neuen Eigenschaften der Gefässwand, Ludwig's *Arbeiten*, 1874, p. 156) discovered that, when artificial circulation is maintained through an excised kidney, under constant conditions as regards the pressure and temperature of the blood, the rate of flow through the organ undergoes variations which manifest themselves in changes of volume, and are due to the independent action of its arteries. Starting from these facts, Dr. Roy of the Brown Institution (*Transactions of the Cambridge Philosophical Society*, July 1881) has carried our knowledge of kidney-innervation much further. He has investigated with the utmost minuteness the mode in which the arteries of the living kidney respond to a variety of conditions affecting them through the blood with which they are supplied; and has proved, among other important facts, that the effect of certain diuretic remedies, which is due to the direct dilating influence on the renal arteries, is as well marked after all the renal nerves have been divided as in the normal kidney. It is clear, therefore, that the arteries possess physiological endowments of a remarkable kind independently of the nervous system. The next question is, How do they act? And, to get at this, we must briefly consider what the normal state of the arteries is; and, inasmuch as our object is to eliminate the influence of the central nervous system, we must confine our inquiries to arteries from which the channels of cerebro-spinal influence have been cut off. When, by the nearly simultaneous discoveries of Bernard, Brown-Séquard, and Augustus Waller, the fact first became known that the arteries of organs of which the vaso-motor nerves were divided became enlarged, it was supposed that the state of paralysis was permanent. In short, as Brown-Séquard said in 1851, motor nerve is to muscle what vaso-motor nerve is to artery. Not many years later, Schiff discovered what everyone is now familiar with, that the paralysed artery recovers, and sometimes even recovers its normal state of contraction, or, as we call it, its tonus. Tonus, therefore (by which I mean simply that the artery, when subjected to the internal pressure to which it is accustomed, is of its natural size), is one of the independent endowments of arteries. Another endowment is that of rhythmical contraction. Everyone has watched the rhythmical contraction of the arteries of the rabbit's ear. A few have, perhaps, seen the corresponding phenomenon first observed by Mr. Wharton Jones in 1852*—the slow pulsation of the veins in the wing of the bat. At that time, vaso-motor nerves were not known. When they were discovered, the influence of section was tried, and it was thought that these pulsations ceased. It is, indeed, only by experiments made during last year (Luchsinger, von den Venenherzen in der Flughaut der Fledermause, Pflüger's *Archiv*, vol. xxvi, p. 445) that we know that these rhythmical movements are absolutely independent; for, if the circulation be maintained artificially, the rhythmical motions continue for many hours after the death of the animal. The evidence we thus derive from the manifestation in paralysed vessels of these two physiological endowments—namely, tonus and rhythmical action—that such vessels are in a functionally active state, naturally leads us back to the notion entertained by some of the older physiologists, that the relation of the arteries to the central nervous system is similar to that of the heart. Of this similarity there can be no question. Of the blood-vessels it can be stated as truly as of the heart, that their tonus is capable of being influenced by the cerebro-spinal nervous system in

* The first step towards the discovery of this antagonism was made in 1870 by Heidenhain ("Ueber bisher unbeachtete Einwirkungen des Nerven-Systems," etc.; Pflüger's *Archiv*, vol. iii, p. 504), who found that increased action of the vasomotor centre, however produced, led to increased vigour of the circulation and to increased temperature of superficial parts, notwithstanding the arterial constriction which, until then, had been regarded as the sole effect of such action. This observation had results comparable in importance to the first discovery of the vasomotor nervous system; for, by suggesting that the regulatory influence of the brain and spinal cord on the blood-vessels was more complicated and more perfect than had before been imagined, it led to those later investigations too numerous to mention (Goltz, Gaskell, Heidenhain, Vulpian, Stricker, etc.), by which it has been learnt that vascular nerves differ in function not only according to the vessels to which they are distributed, but according to the physiological states of those vessels. Vast as is the work which has been accomplished in this line of investigation since 1870, it is but the introduction to what has still to be done.

* Discovery that the veins of the bat's wing are endowed with rhythmical contractility. *Philosophical Transactions*, 1852.

the common Mole, a complete study of the earlier stages of the mandibular arch yields the following results. In the Mole (*Tupaia europæa*), which has, in the adult, extremely small ossicula auditus, the embryonic mandible is as large as in the Sauropsida; the top of the bar forms a very distinct quadrate lobe, and there is below a short posterior and a long internal process. The rod then runs on, thick and solid, inside the thickening tissues which form the ramus, together with the internal branch of the third division of the fifth nerve and the chorda tympani from the seventh on its inner side, and the outer branch of the third division of the fifth on its outer side. The two Meckel's cartilages meet, unite, and form a basi-mandibular rod, which, however, does not become segmented off.

The tissue outside Meckel's cartilage becomes differentiated into a large superficial plate of cartilage, and outside this, a thin bone, the dentary. The latter rapidly ossifies all the cartilage, except the posterior angle, and the ascending articular process: part of this cartilage lines the glenoid cavity of the squamosal, part forms the meniscus, and the rest remains as the articular condyle. The angular process soon becomes ossified.

Subdistally, Meckel's cartilage ossifies for a considerable extent as a hyo-mandibular, and then coalesces with the dentary. There is also a bony tract inside Meckel's cartilage, which is only partially distinct, and represents the splenial and coronoid of the Sauropsida. Proximally, the thick knob and the broad part giving off the two processes become ossified endosteally, a separate centre being formed in the internal angular process of the cartilage.

A splint of bone, the mandibular *ectosteal* articulare, appears at the same time, and then all the three centres coalesce. Also, in the tract close to the articular head of the ramus, there is another bony splint, which partly gives off from its edge (behind) another smaller piece; these two subdistinct rudiments have all the characters and relations of the supra-angular and the angular of the Sauropsida.

In Ornithorhynchus, the splenial is much more distinct than in the Mole, and it has a well formed thick crest, half-separate, answering to the coronoid of the Sauropsida. In other mammals, including Man, the ectosteal articulare is the only posterior splint, and it is early fused with the ossifying cartilage.

In half-grown Moles, the hinder splints—supra-angular, angular, and articulare externum—form a very remarkable crested, ridged, and laminated structure; but, in the adult, all this has been absorbed, and the small processus gracilis is all that is left of these growths. On the outside of the membrana tympani, which is stretched by the internal angular process of the mandible—the manubrium mallei—a superficial crescent of cartilage, and a still more superficial crescent of bone, appear. In many kinds, these fuse early; in Carnivora, the bone unites with the cartilage after it has ossified; it does not in the lesser Bats.

The ridge inside the permanent malleus is for the tensor tympani, and answers to such projections inside the articulare of Sauropsida as are for muscular attachment of its adductor.

In the Monotremes, the malleus remains large, and the incus is very rudimentary; in these and in several other kinds of low Mammals, the hole in the stapes is either absent, or very small; and thus the latter more nearly resembles the shaft of the columella of Sauropsida. The tympanic bone is nearly straight, having only a spike behind, and it thus does not form a ring. This bone is evidently the counterpart of the interopercular of fishes, as the cartilage is a low-placed opercular ray of the mandible.

In conclusion, it may be remarked that in this part of the organism, as in every other, embryology fails to give the slightest hint of the chasm which ultimately exists between Man and the most anthropoid of the remainder of the Mammalia.

THE FARRINGTON GENERAL DISPENSARY.—The presidency of this old-established institution, which became vacant by the death of Lord Hatherley, has just been accepted by Lord Coleridge. At the annual meeting, held last month, it was stated that 32,000 patients had attended the institution during the year, and the medical staff reported that these patients appeared to be of a deserving class, and that they did not believe that the charity was in any way imposed upon. On the 30th of last month an amateur dramatic performance, in aid of the funds, took place at St. George's Hall. A full audience witnessed an exceptionally good representation of "Masks and Faces," and the funds of the institution will receive about £50 profit after the expenses incidental to the performance have been paid.

PRESENTATION.—Mr. A. E. Chesshire, one of the surgeons to the Wolverhampton Eye Infirmary, has been presented by about seventy of his patients with a testimonial, consisting of a silver-mounted spirit-flask, a surgical basket, and a silver sandwich-case.

ANTISEPTIC INCISION AND DRAINAGE IN EMPYEMA.

By F. RICHARDSON CROSS, M.B., F.R.C.S.,

Surgeon to the Bristol Royal Infirmary.

AN effusion into the pleura, which by its amount and by the rapidity of its increase is threatening the life of the patient, should be at once tapped. The displacement of organs, to which the serious symptoms are due, must be relieved by removal of the displacing fluid. Even hydrothorax dependent on cardiac or renal disease demands interference, although the dropsy of the pleura is almost certain to reaccumulate. Goldammer, of the Bethany Hospital, Berlin, has by puncture given relief in fifteen cases of secondary effusion without ill result; and even hæmothorax must not be always left alone.

A rapidly increasing pleurisy may cause fatal syncope by interference with the circulation. Bartels has found, in cases of left-side exudation, the inferior cava, where it passes through the quadrate hole of the diaphragm into the thorax, bent at right angles by displacement of the heart. This would be followed by stasis of blood in the lower half of the body, and consequent anæmia of the heart or brain. Fraentzel adds that he has never seen fatal syncope with right-side effusion. Leichtenstern, analysing fifty-two cases of sudden death with pleurisy, finds thirty-one to be in right-side exudations. He attributes death to pressure on the right heart, with thrombus here or in the superior cava, and embolism of the pulmonary artery.

Other pleural effusions, which do not *per se* threaten the life of the patient, should be treated medicinally; but, if absorption through the natural channels do not follow within a reasonable time, the chest should be tapped to relieve the bruised and compressed lung, and to allow its early and complete re-expansion. In pleuritis, the withdrawal of only a few ounces of fluid lessens the intrapleural pressure, reopens the blocked lymph-channels, and is rapidly followed by absorption of the remaining excessive secretion. Besides, removal of irritation from the pleura lessens the tendency to chronic inflammation and hyperplasia in the tissues of the membrane itself, or its consequent hypertrophy, and the formation of adhesions, which bind down the compressed lung, and render it liable to phthisical degeneration and fibroid change. Every day that the effusion continues, the full re-expansion of the lung—without which, no case can be looked upon as cured—is rendered less probable, and its permanent incarceration by the thickened pleura more certain. If the fluid is to be removed by puncture through the chest-wall, the diagnosis may be rendered more certain, and the character of the fluid be demonstrated, by the use of the hypodermic syringe.

Although no harm seems to follow the admission of air to an acute or dropsical serous effusion, suppuration would thus be induced in the subinflammatory exudation of strumous individuals; whilst, if the fluid be pus, its contact will cause foetid decomposition. Most of the methods for paracentesis thoracis, therefore, prevent any entrance of air into the chest; and, whilst excluding it and other putrefactive agents from the more or less putrescible pleural effusion, they encourage expansion of the lung by tending to reduce the intrapleural pressure below that of the atmosphere within the air-cells of the lung. A trocar and cannula with air-tight valves, or subaqueous drainage, effect the purpose; and the aspirator is still more powerful as exerting considerable suction. Whatever instrument is used must be *surgically clean*, especially where it lies within the chest; and it must be *air-tight* here, as well as in its own valves. Its reliability is most tested towards the end of the operation, as the expansion of the lung and the compression of the structures bounding the thoracic cavity reach their limit.

In *rapid tapping* for sero-fibrinous exudation and dropsy, no attempt need be made to empty the pleura of fluid; nor could this often be effected; for, besides the fear of wounding the lung, cough and pain usually occur before its full re-expansion; and partial removal of fluid is thoroughly effective. If the fluid be pus, clinical experience abundantly proves that no method of rapid tapping will effect a cure, and that the pleura must be continuously and thoroughly drained. Exception to this statement must be made in the case of children; here, an abnormal pleural effusion is usually pus; often it is small in quantity; very rarely it may be absorbed; and not unfrequently it will disappear under one or more rapid tapplings. If not so, the child as well as the adult must be treated by *continuous drainage*, at an opening of the chest made with every consideration to conveniently and effectively empty the pleura. For, whether an empyema be repeatedly treated by rapid air-tight tapping or left entirely to nature, in process of time—during which the lung is being permanently compressed, the pleura irritated by its contents, and the patient worn out by dyspnoea and

LABOUR IN A PRIMIPARA COMPLICATED BY A LARGE URETHRAL CYST AND BY PROLAPSUS UTERI:

DELIVERY BY CEPHALOTRIPSY: SUBSEQUENT OPERATION AND
RECOVERY.

By J. HICKINBOTHAM, M.D., M.R.C.P., F.R.C.S.ED.,
Physician to the Birmingham and Midland Hospital for Women.

ON November 12th, 1880, in consultation with Dr. Young of Erdington, I saw Mrs. S., aged 21, who was daily expecting her first confinement. An examination revealed a huge mass protruding from the vulva, which consisted of a greatly hypertrophied cervix; and in front of it a large soft tumour, which I took for a cystocele. Behind the prolapsed mass, and lying in a flaccid condition against the posterior vaginal wall, was a perfect hymen of the typical sickle shape. The pelvis seemed of average size, and there was nothing in the general state of the patient to cause anxiety. The os uteri easily admitted a finger; and with some trouble (from the extreme length of the cervix) I was able to recognise the head presenting. The membranes were entire. After consideration, it was determined to wait and watch until labour should come on, in the hope that gradual dilatation would occur, and the delivery end naturally. Labour began on the evening of the 21st, and, although the pains were strong and regular, no advance was made; therefore Dr. Young asked me to see her again at 11 a.m. the next day.

At this time the os was but little larger than above described, and presented a very peculiar appearance, being perfectly annular, and surrounded by a ring of white, shining, gristly-looking fibres. Immediately above this, the cervix was encircled by large veins, with dilations almost hæmorrhoidal in their character. The membranes had ruptured some hours previously, and the head could be felt at the brim, but was not affected by the pains, which were of moderate length and force.

As the patient showed signs of exhaustion, it was decided to attempt delivery without further delay; she was, therefore, chloroformed, the bladder emptied, and with great caution I endeavoured to overcome the rigidly contracted os. After considerable effort, I was able to get in three fingers, when a smart gush of blood warned us that the vascularity of the cervix had not been over-estimated.

Two courses were now open to us: the first and easiest was to make two or three small incisions, and then deliver by forceps; the second was to treat the constriction as being insusceptible of dilatation, and to deliver by lessening the volume of the foetal head. After earnest consideration, we decided upon the latter alternative; because, although in ordinary cases the incisions through the os contract so much as to be unimportant, and the risk from hæmorrhage is, therefore, small, yet in the present instance, from the altered condition of the tissues, and especially on account of the great vascular turgescence, we felt that the danger would be very considerable. The cranium was, therefore, perforated and crushed by a small cephalotribe, after which there was no difficulty. She went on well; but the tumour anterior to the cervix began to increase, and there was some pain. On the tenth day it ruptured, and there was a free discharge of puriform fluid, after which convalescence was uninterrupted. Neither during pregnancy nor after labour was there any incontinence of urine, or other trouble connected with the bladder.

The prolapse of the uterus had occurred quite gradually, so gradually, indeed, as to push aside the hymen without rupturing it, and so entirely without inconvenience that the poor woman did not know until her marriage that "she was different from other women." Her menstruation was always regular, and her health had always been robust. The cause of the procidentia was, no doubt, lifting and carrying heavy weights whilst very young. Six weeks after her confinement she called upon me, at Dr. Young's request. I found the womb still prolapsed, but the condition of the os and cervix was nearly natural. The tumour which I have described lay in a flaccid state upon the anterior vaginal wall, or rather hung from it, and a large hole, admitting my finger, still remained. A sound passed into the bladder showed nothing abnormal, and she could hold her urine from morning to night.

When the cyst was itself examined, by the finger or sound, I could merely make out a large empty cavity between the bladder and uterus, and apparently communicating with nothing.

She was afterwards admitted into the Women's Hospital, under my colleague, Mr. Lawson Tait, who has kindly given me the following report of her then condition, and the treatment adopted.

"On examining the patient, there appeared, protruding from the vulva, what looked exactly like a cystocele, but which had the singularity of having a hole, about the size of a shilling, punched (as it were) into its most prominent part. The finger was admitted into a large pear-shaped cavity, having its apex directed up towards the urethra; and it was ascertained that it opened into this canal by a small aperture, not larger than a hemp-seed. When the bladder was injected full of milk, and the external meatus forcibly closed, some of the milk found its way into the sac. The cyst ran backwards as far as the cervix uteri, and seemed to double up on each side of this structure into small pockets. I laid the whole cavity open from the urethra to the cervix, dissected out the mucous membrane over the whole surface, and shortened the remaining flaps of the vaginal surface, so that they met correctly in the middle line, when united by suture.

"The removal of the cyst-wall from the cervix was difficult, and the hæmorrhage was profuse and troublesome. The patient made a perfectly uninterrupted recovery, and all traces of the abnormal cyst have disappeared, and the protrusion is cured.

"I have no doubt this case is an illustration of the rare form of congenital malformation, which, I believe, I was the first to describe in the *Lancet* of January 9th, 1875. I have seen three such cases, and in two of them the distress of the patients was very great, on account of the decomposition of the urine escaping into the sac, and there becoming ammoniacal and purulent. In the present instance, this was obviated by the hole in the depending part of the cyst; but it is perfectly certain that urine in considerable quantity must have passed through the cyst.

"The size of the sac in this case was probably as great as that of the bladder, and it was probably five times as large as in either of the other cases upon which I have operated. In all three cases I dissected the cyst out, and found the aperture into the urethra to be very small, being, as I have said, about the size of a hemp-seed.

"I think the relations of the cyst, in Dr. Hickinbotham's case, prove its origin to have been congenital, as it is perfectly impossible to imagine that a cyst could develop itself from any structure lying between the urethra and the cervix uteri, so as to have relations so intimate with both, as existed in this case. In all three cases the cure by operation has been complete."

I may just remark, upon this note of Mr. Lawson Tait, that his hypothesis that the absence of symptoms was due to the hole in the cyst, could only be correct after the labour, since before that there was no hole. I think a more likely explanation is, that the opening into the urethra was protected in some way by a valvular fold of the mucous membrane, which was sufficient, until there was obstruction in front, and more pressure than usual from the bladder. These conditions no doubt obtained during the labour, and then for the first time urine found its way into the cyst, whose contents had previously been unirritating and harmless.

Since the above was written, the patient presented herself at the hospital, complaining of a "lump in her stomach which gave her great pain." Her temperature was 102°, and pulse quick. She was therefore admitted, and examination showed a tender tumour above and to the right of the umbilicus, which I believed to be a movable kidney. A day or two of entire rest in bed seemed to set matters right; the tenderness and fever disappeared, and she was again sent home.

A CASE OF LABIO-GLOSSO-LARYNGEAL PARALYSIS.

By J. M. HOESON, M.D., Croydon.

IN the JOURNAL for December 3rd, 1881, a case of "Brain-Disease simulating Bulbar Paralysis" is reported as brought before the Manchester Medical Society by Dr. Ross of that city. The primary disease does not appear to have been in the medulla oblongata, but in the central ganglia, and on the left side, "a streak of secondary degeneration" was traced from the diseased corpus striatum (the right was also affected), "through the crus, pons, and anterior pyramid of the medulla oblongata." Moreover, "these degenerated fibres occupied the internal margin of the anterior pyramid of the medulla, and appeared to bend back in the median raphe to reach the bulbar nuclei of the opposite side." It is to be noted that this man had an attack of hemiplegia and aphasia eighteen months previously.

This striking and, as far as I know, unique case, set me thinking whether one which came under my observation in the early part of last year, and which till now I have associated in my mind with those cases described by Dr. Wilks (*Diseases of the Nervous System*), some of which had hæmorrhage into the medulla oblongata, ought, perhaps, after all,

to pass unnoticed by a casual observer, and in which the patient himself would be conscious of only a momentary feeling of giddiness. But, although the manifestations of these two different classes are so widely divergent, clinical observation establishes their close affinity beyond doubt. Very frequently the milder variety is merely the preliminary stage of what may ultimately prove to be the most severe and invariable form of the disease; in which case the one is simply the gradual and natural development of the other. This points to the conclusion, that the same specific pathological condition underlies both, the only difference being one of degree.

But the widening of the meaning of the term epilepsy has lately proceeded in another direction than that of degree. If it be taken for granted, as it undoubtedly must, that there is some pathological condition, be it circulatory or otherwise, affecting the cerebral motor area in such a manner as to produce the phenomena observed in sensorimotor epilepsy, it will not be a stretch of the imagination to suppose that the other cerebral centres are liable to become deranged in a precisely similar fashion. The manifestations of these perversions of function of different areas would, of course, vary according to that part of the system over which the area affected might preside. It would be as illogical to suppose that similar pathological conditions of different areas should be manifested by the same effects, as it would be to expect that irritation of the optic nerve should affect the sense of sound. Dr. Maudsley and other recent authorities insist that, in cases of "masked epilepsy", a transitory attack of furious mania may take the place of muscular convulsions. It is fair to attribute these convulsive seizures of ungovernable impulse to a condition of the highest centres, analogous to that which obtains in the motor area during an attack of ordinary epilepsy, so that this variety might rightly be designated epilepsy of volition. If, then, both the motor and volitional centres are liable to become affected in this way, it may be assumed that the centres presiding over the nutrition of the body are subject, wholly or in part, to similar pathological changes.

The following notes of cases are recorded with the object of attempting to show that clinical observation tends to corroborate this theorising from analogy, and that there exists a morbid state which may be described as epilepsy of the centres which govern the nutrition of the body.

A. is now twenty-seven years of age, and has been an inmate of this asylum for nine years. In order to understand her condition, it will be better to begin by describing her as she appears under the most favourable circumstances, when her general *physique* is very good, and her appearance somewhat prepossessing, with a florid complexion, but rather "epileptic" expression. Her mental condition is at all times weak, but when in the state just described she is not inclined to be violent, understands most of what is said to her, and gives fairly rational answers when questioned. This comparatively satisfactory state lasts for some time, when suddenly a marked change, more especially physically, takes place, and within twenty-four hours a decided deterioration is observable. This degeneration progresses very rapidly, but not uniformly, as, during the course of the attack, she frequently exhibits apparent signs of improvement, or at least of arrest of the attack. Any hopes, however, of a permanent change for the better are soon dissipated by a relapse into a worse state than formerly; and at the end of a fortnight her general appearance has so much altered that she would not be recognised as the same person, unless special attention with that object were directed towards her. Although she may be thus reduced to a kind of living skeleton, and may appear to be literally dying from starvation, her appetite remains unimpaired, and she takes her food well, and with no abatement of relish. Concurrently with this alteration in her physical condition, her mental state gradually becomes more unsatisfactory, until at last she is restless and troublesome, incapable of understanding any conversation, or of herself speaking otherwise than in the most incoherent manner. This condition continues until she seems to approach a state of collapse, when an improvement as rapid as the original degeneration sets in, and in a very short time she regains her former satisfactory state. This, however, again proves to be of only temporary duration, and the same sequence of events follows. The quiescent period which elapses between any two seizures is very variable, and does not bear any relation to the menstrual function.

REMARKS.—The periodicity of the attacks in this case, together with the course they run, presents many points of analogy to those cases of epilepsy in which there are considerable intervals of entire immunity from fits, followed by periods during which the seizures are so frequent and severe as to leave the subject of them quite prostrate for a time, until they gradually pass off and another interval of repose ensues. The resemblance is still more marked by considering what might be called the convulsive character of the physical degeneration, as shown

by the temporary intervals of improvement or arrest in severity of the attacks. The intense degree of malnutrition cannot be owing to a defective supply of nutritious matter, because the appetite is, as stated above, always very good, and there are never any signs of gastric or intestinal disturbance. The entire course of events may fairly be accounted for by supposing that the cerebral centres which govern the nutrition of the body may be acted upon by the same conditions as those which affect the motor centres, occasioning ordinary epilepsy.

B. is a congenital imbecile, twenty-four years of age. About a year ago, a patch of alopecia areata, about three inches long by about two inches broad, appeared just above the left temple; but the baldness disappeared in a short time, and a good crop of hair again covered the affected spot. Both the falling off and the subsequent growth of the hair seemed to take place in an irregular and spasmodic manner. Shortly after this, a patch of about the same size appeared immediately posterior to, and joining, that which had been first affected, ran a similar course, and was followed by a like spot immediately posteriorly. The same succession of occurrences has taken place on several occasions, until now a tract of the scalp extending from the temple to the occiput has been affected from time to time.

REMARKS.—If the maintenance of the general well-being of the body be liable to interference by an "epileptic" condition of the centres governing general nutrition, it may be inferred that a part may be affected in a manner similar to the whole, and consequently that these periodic attacks of alopecia may be due to a like pathological condition of that small part of the nervous system which is concerned in the nutrition of the affected spot. This case might also be looked upon as favouring the view, that alopecia areata is of neurotic origin in most instances.

Cases are frequently observed in asylums in which patients who have never been subject to epilepsy, though presenting the peculiar physiognomy incidental to that disease, often complain at frequent and irregular intervals of a general feeling of being ill, without any cause to assign for it, as they may still have an excellent appetite, and may show no signs whatever of a disordered state of any portion of the digestive tract. In such cases, all medicines may be tried without affording any relief; but, if left to themselves, they completely recover. After an uncertain interval, the same symptoms again present themselves; and it is a noteworthy fact that, during these slight indispositions, the mental state always becomes more unsatisfactory.

REMARKS.—These cases might be considered as a mild variety of the class which would include Case A., towards which they stand in the same relation as *petit mal* to *grand mal*.

It is not proposed now to enter upon any discussion as to what may be the exact nature of the morbid change which produces these effects, and which may be either circulatory or nervous in character. In favour of the idea that the blood-supply of the nervous centres is at fault, it may be urged that, considering the extreme vascularity of nervous tissue everywhere, a slight derangement either of the supply or of the quality of the blood would be likely to seriously interfere with the proper fulfilment of the functions of any part of the nervous system. On the other hand, when it is remembered what an important part the *vasa vasorum* play in the nourishment of the larger blood-vessels, and that these *vasa vasorum* are ultimately in great measure controlled by branches of the sympathetic, it is open to supposition that the small *nervi nervorum* have a considerable share in the regulation of the nutrition of the nervous centres, and that the morbid phenomena described above may be due to their nervous force periodically acquiring, as it were, a state of unstable equilibrium. Why such a condition of things should occur, and be manifested in such a manner, is as inexplicable as why miasma should affect the body in the periodic manner witnessed in ague.

SURGICAL MEMORANDA.

INJURY PECULIAR TO CHILDREN.

The "injury peculiar to children," which Dr. Sneddon describes in the BRITISH MEDICAL JOURNAL, April 8th, though so trifling as to escape insertion in many of the standard text-books on surgery, is yet sufficiently great to cause the young practitioner considerable perplexity, and possibly annoyance, when first brought under his notice.

I have had seven cases in less than four years, to all of which Dr. Sneddon's description applies accurately, with the exception that, in my cases, the arm was considerably less than semi-flexed. I did not recognise the nature of the injury in my first case until, in the course of a very protracted examination, a slight click occurred at the elbow, with complete restoration of use of the forearm and cessation of pain.

In my case the injury was at the elbow, and, I believe, consisted of slight anterior displacement of the head of the radius.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

LONDON HOSPITAL.

(Under the care of Dr. STEPHEN MACKENZIE).

LEUCOCYTHÆMIA.

DURING a recent visit to Dr. Mackenzie's wards in the above hospital, we had an opportunity of seeing many highly interesting cases, and we propose to give accounts of a few which seemed of special importance. Our readers may recall a case of leucocythæmia, in which the propriety of excising the spleen was seriously entertained by Dr. Stephen Mackenzie and Mr. Reeves. The case was referred to in a recent discussion on splenectomy at the Clinical Society. This patient, a Jew named Isaac C., aged 25, a cigar maker, was admitted on January 21st, complaining of a swelling of the abdomen and of some pain in the left flank and back. He had noticed the swelling for about twelve months, but had attributed it to increasing "stoutness". With the exception of a "fever" when eight months old, he had previously enjoyed very good health, and had been a steady, regular man. There was, on admission, no very extreme degree of anæmia; the spleen was very much enlarged; it reached from the sixth rib (in the mammary line) to the groin on the left side, and from about three inches behind the axillary line to a point two inches to the right of the umbilicus; the surface was hard and smooth; in the epigastric region it was overlapped by the liver, and a little below this point a notch could be distinctly felt in its anterior border. The abdomen then measured thirty-three inches in circumference. The ophthalmoscope revealed no changes; nothing else of importance was noticed beyond some œdema of both feet; and this disappeared after resting in bed. On January 25th, he had a slight attack of peritonitis over the enlarged spleen, but this passed off in a few days; and, on January 31st, Dr. Mackenzie observed that there was nothing in his appearance which would lead to the opinion that he had any important blood-disease; he was wasted, his complexion was somewhat dark, but there was no perceptible anæmia. On February 1st, he had an attack of epistaxis. On February 5th, the circumference of the abdomen had increased by two inches and a half; on February 7th, Dr. Mackenzie observed a few small hæmorrhages in the fundus oculi on both sides; and, on February 18th, these had somewhat increased in number. From this date, they gradually disappeared; and, on March 20th, it was noted that there were no obvious hæmorrhages in the fundi. The general symptoms at first improved under treatment, and this was accompanied by an alteration for the better in the blood, as shown by the table. The enlargement of

22.75 inches. The distension of the abdomen was, on March 29th, when we saw him, extremely marked; he then presented an emaciated but not extremely anæmic appearance; he was perspiring freely, and there was some œdema of the feet.

The reasons at first for entertaining and for subsequently abandoning the operation of splenectomy were so fully given in the discussion at the Clinical Society, reported in our columns on April 1st, 1882, p. 462, that it is unnecessary to repeat them here.

DOUBLE NEURO-RETINITIS: TOTAL LOSS OF VISION.

THOMAS S., aged 24, an agricultural labourer residing in Hampshire, was sent to Dr. S. Mackenzie by Mr. Stanford Morton. The history he gave was that he had never suffered from any illness, so far as he could recollect, until September 7th, 1878. On that day, while he was mowing barley, a rabbit jumped up; he pursued the rabbit, caught it, but a few minutes after resuming his work he fell. He did not recover consciousness for about thirty-six hours; at first he kicked and struggled violently, so that the bystanders told him that he had twenty fits. He suffered severely from headache for some time, especially on exertion, but was able to go back to his work in ten weeks. He still suffered from headache at times. In the early part of the spring of 1879, while loading a cart with pea-sticks, he had another "fit", after which he was unconscious for four or five hours; after this "fit" he was laid up for a fortnight. About three months later he had another fit of a much slighter kind. Since this period he had had fits at more frequent intervals; every four, five, or six weeks. The last fit occurred six weeks ago, while he was in Winchester Hospital. In November 1881 he found that he could not see with the right eye, and experienced severe darting pain in the head, chiefly towards the back; this pain was severe enough to prevent his going to work for a fortnight. The sight of the left eye began to get worse, and about Christmas 1881 he had to give up work, and on January 24th, 1882, he was admitted into Winchester Hospital; at this time he had quite lost vision in the right eye and from that time the left eye grew rapidly worse, until, about three weeks before he was admitted to the London Hospital, all perception of light was, he says, quite lost. No history of syphilis could be obtained, and he stated that he had given up all alcoholic drinks about a year before the first fit occurred. He generally vomited when he had the fits, and occasionally independently of the fits, and this for some years. The only symptom of which he complained, when we saw him, was the total loss of vision, which amounted to absolute loss, even of perception of light; in other respects he appeared perfectly strong and well. The excursions of both globes were normal; there was no strabismus. The pupils were equal, dilated, but acting to light (atropine had been used at another hospital). The media were transparent. Ophthalmoscopic examination showed a similar condition of both discs. The margins of the discs were blurred and indistinct, their surfaces faintly striated; exudation was present to a large extent, the arteries were very small, the veins dark and prominent. These changes were not quite so marked in the left eye; no hæmorrhage was seen.

Dr. Mackenzie pointed out the difficulty of making a diagnosis in this case. The symptoms, taken along with the marked changes in the optic discs, rendered the existence of a tumour not improbable, but there was no direct evidence; neither was there anything which definitely pointed to syphilis; the man gave no history in the remotest degree suggesting that disease, and there was no paralysis of any cranial nerve. As to the practical point of the best means of treating such a case, he had no hesitation in recommending mercurials and iodide of potassium. A mixture, containing 10 grains of iodide of potassium, and an inunction of mercurial ointment, had therefore been prescribed. This line of treatment he adopted, not merely because—in the oft-heard phrase—it gave the patient "the benefit of the doubt"; that is, he did not prescribe this merely because the neuritis might be due in some way to syphilis, but because he believed that the treatment was also the best at our disposal, if the man were suffering from some cerebral new growth. The paralysis and other familiar symptoms of tumour of the brain were, he pointed out, due not to the direct pressure or action of the new growth, but to the changes (of an inflammatory kind) which it set up in the cerebral tissue adjacent to it. It could not be hoped to affect the tumour itself by any remedies which could be administered, but there was some probability that the secondary changes in the cerebral substance might be held in check. Mercury was an old-fashioned antiphlogistic remedy, and its efficacy was probably increased by giving iodide of potassium at the same time. He had been much impressed by the usefulness of this line of treatment in cerebral tumour, by a case reported recently by Dr. Hughlings Jackson and himself, of a man who had, under its use, survived for twelve years after the first onset of symptoms. Dr. Mac-

Date.	Red Corpuscular Richness.	White Corpuscular Richness.	Proportion of Red to White.	Temperature.
Feb. 3	73.5 per cent.	8 per cent.	9.1 to 1	98.4 ... 99
" 11	Uncertain	Uncertain	8.2 "	100 ... 99
" 12	66.2 per cent.	9.5 per cent.	7.04 "	99 ... 99
" 16	67 "	9.8 "	—	99 ... 100
" 18	68.5 "	—	7.8 "	101 ... 100
" 20	70 "	—	8.1 "	99 ... 99
" 22	71 "	—	8.1 "	101 ... 100
" 23	73 "	8.62 "	8.5 "	99 ... 99
" 27	73.75 "	8.25 "	8.9 "	101.4 ... 100
" 28	73.5 "	8.2 "	9 "	100 ... 101
March 3	75.5 "	4.6 "	16.5 "	100 ... 100
" 4	76 "	4.33 "	17.48 "	101 ... 100
" 7	70.4 "	4.1 "	17.3 "	101 ... 102
" 8	72.8 "	3.8 "	18.8 "	100 ... 101
" 10	71.15 "	4.4 "	16.7 "	99 ... 102
" 11	70 "	4.2 "	16.5 "	100 ... 100
" 13	66 "	4 "	16.3 "	102 ... 102
" 14	66.56 "	3.56 "	18.4 "	101 ... 102
" 16	71.4 "	3.8 "	19.2 "	101 ... 100
" 20	65.4 "	3.18 "	20.3 "	102 ... 102
" 21	63.8 "	3.3 "	19.4 "	101 ... 103
" 27	57.8 "	2.9 "	19.8 "	100 ... 101
" 28	54 "	2.85 "	20.2 "	100.8 ... 102
" 29	52.7 "	2.6 "	20.8 "	99.8 ... —

the abdomen, however, steadily continued. On March 7th, the circumference of the abdomen was five inches greater than on admission, and the measurement from the extreme right limit of the spleen to the mid-spine was 20 5 inches; and, on March 25th, this had increased to

Cast of Child's Head.—Dr. W. L. REID showed a cast from a child's head, taken after delivery with turning and forceps, and which was moulded by a contracted pelvis. After three confinements of extreme difficulty, Dr. Reid resorted in the fourth to the induction of premature labour at the eighth month. The head never engaged at the brim, but an arm and funis presented. Turning was employed, and, to complete the labour, the head had to be delivered by forceps. The child was dead. The pelvis was universally contracted, with a conjugate diameter of 3½ inches. The following were the chief measurements of the moulded head: occipito-frontal, 4½ inches; biparietal, 3½ inches; occipito-mental, 5¼ inches; suboccipito-vertical, 3½ inches; suboccipito-bregmatic, 4 inches; suboccipito-frontal, 4¾ inches.

Abdominal Tumour.—Dr. NEWMAN showed a tumour from a female, admitted to the Royal Infirmary in a dying state, and whose symptoms were those of ascites. The tumour was very large, and adherent to the abdominal wall. It contained about 350 ounces of milky fluid, and two large solid masses like diseased ovaries. No ovaries could be found elsewhere. The bladder and uterus were both adherent to the cyst. The fluid contained albumen, cholesterine, and large granular corpuscles; while the solid masses consisted of large round cells, with a slight fibrous stroma. The cyst appeared to have been formed by the union of two originally separate ovarian cysts.

Hepatic Abscess.—Dr. NEWMAN also showed the liver from a case of jaundice, which had lasted some months. There was a large abscess in the right lobe of the liver, containing 20 ounces of pus and a large number of calculi. There was no gall-bladder, but a communication existed between the duodenum and the cavity of the abscess. This condition Dr. Newman believed to be due to suppuration of the gall-bladder and its rupture into the liver, the bladder-structure being afterwards obliterated. There had been a history of jaundice and ascites, but of no other symptoms bearing on the case.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, MARCH 10TH, 1882.

JOHN K. BARTON, M.D., Vice-President, in the Chair.

Excision of Knee.—Mr. CROLY exhibited the end of the femur, tibia, and patella of a boy aged 7, whose knee he had resected three days previously, in the City of Dublin Hospital, for strumous disease of the joint. Tenotomy with forcible extension had, two years previously, been tried, but without permanent success. There was pulpy thickening of the head of the tibia, and of its synovial membrane. The semilunar cartilages were destroyed, as also were the soft structures about the patella.

Tumour of Side.—Mr. WHEELER exhibited a tumour, probably fibrous, which he had very recently removed from the side of a gentleman. It grew in the region of the seventh, eighth, and ninth costal cartilages; and, in excising it, part of the ribs had to be removed also. The history given was that, when hunting in 1878, he hurt himself in the side; a small tumour appeared in the place, but gave no pain. In 1880, it had grown to the size of half a small orange, but was still painless. In February 1882, it began to soften, and became red and hot. When Mr. Wheeler cut into it, about an ounce and a half of fluid escaped. The exact nature of the tumour had not yet been determined.

Thyroid Tumour.—Mr. STOKER exhibited part of a large thyroid tumour, which he had removed from a boy aged 14, partly cretinous, and badly developed, who had been goitrous since his birth. Latterly, the tumour had been growing rapidly, and was giving laryngeal trouble. The tumour, which measured 7½ inches transversely, consisted of three lobes, corresponding to the isthmus and two lateral lobes of the gland. The operation was tedious and bloody, owing to the large size and number of the vessels supplying the tumour. The tumour was solid, with a central cartilaginous mass.

Diseased Ovaries.—Mr. ABRAHAM showed the diseased ovaries and distended Fallopian tubes of a woman, on whom Mr. Lawson Tait had operated. The specimens were presented by Mr. Tait to the College Museum.

Fibro-Adenoma of Anus.—Mr. SWAN showed a fibro-adenomatous tumour, of the size of a hen's egg, which he had removed from the verge of the anus of a middle-aged woman. It was similar to those not unfrequently found growing from the labia.

Spinal Caries: its most Common Results, and their Treatment.—Mr. SWAN read a paper on this subject, in which the paralysis of Pott's disease was considered. Statistics and cases, collected by the author, showed that paraplegia, as a sequence, followed almost exclusively disease of the cervical and six upper dorsal vertebrae. This might be readily estimated by considering the small size of the vertebral bodies, and their free motion in the cervical region; and, in the upper dorsal, the tendency to a rapid assumption of an acute angle from the weight

of the head, while in the erect posture, being transmitted through those bones. The anterior portion of the spinal cord was held in close relation with the posterior surface of the vertebral bodies by the spinal roots, while the posterior portion was five or six lines distant from the corresponding part of the canal. The theory of the direct extension of the morbid process producing a perimeningitis, a meningitis, and subsequently a localised myelitis, seemed thus feasible, and accounted for the frequency of interference with the motorial functions. The factors of the paralyses of Pott's disease were three: 1, direct pressure of the bony angle on the cord; 2, deprivation of blood-supply, inducing a reflex paraplegia; 3, a series of changes, commencing by an extrameningeal lesion, involving secondarily the meninges, and terminating in a descending sclerosis of the cord. The author demonstrated the subject by pathological illustrations, and detailed some clinical phenomena in support of his observations. A review of the more unusual varieties of paraplegia was read. Complications with spasm, or paresis of the upper extremities, and their diagnostic value, were referred to. The value of the reflex phenomena was considered as a diagnostic agent in sclerosis. The occurrence of abscess, as a visible and internal sign, only indicated that pus was present in a greater degree. According to the writer, it was present in every case of true vertebral caries. This he showed by specimens, which displayed cavities containing the elements of pus in a state of caseous degeneration. The periods for treatment were separated into two: 1, that in which the disease was either actively progressing or stationary; 2, when repair was being established. The value of any apparatus, extending to the axilla, was held by the writer only to apply to disease very low down—not above the third or fourth lower dorsal. He advocated the jury-masts as a preventive, and showed some elegantly finished spinal supports, made by Mr. Corcoran of Bachelor's Walk, Dublin. The general observations on the subject of the treatment of congestive abscess from spinal caries, made by the author, led him to believe that the safest treatment was allowing a spontaneous opening to occur. He had not seen good results from Lister's dressing in those cases, though holding himself a strong predilection for that method; and quoted Billroth, Pirogoff, and others, on this subject.—Mr. THORNLEY STOKER strongly protested against Mr. Swan's opinion of the uselessness of opening spinal abscesses under Lister's spray. In his practice, the use of Listerism in such cases had been attended with excellent results.—Mr. ELLIOTT advocated opening spinal abscesses by a valvular incision.—Dr. H. KENNEDY advised the use of quantities of animal food in caries of the spine, as in all other forms of struma.—Mr. CROLY obtained good results by allowing psoas abscesses to open spontaneously. The reason why the valvular incision recommended by Abernethy gave good results was, because it was the nearest approach to the natural method, the essential point being to allow a slow and gradual, and, at first, only partial evacuation of the contents of the sac; so that contraction might occur gradually.—Mr. WHEELER agreed with Mr. Swan that bad results were to be anticipated from all methods of opening psoas abscess.—Mr. SWAN, in reply to the President, thought that the common history of accident, as the starting-point of spinal caries, was unreliable. He thought that it was the blood which became effused into psoas abscesses which set up decomposition. The sac of a psoas abscess differed from that of other abscesses in being harder and less contractile, and liable to crack and bleed; and hence the danger of rapid evacuation.

FRIDAY, MARCH 24TH, 1882.

Disease of Wrist-Joint.—Mr. BAXTER exhibited the hand and part of the forearm of a female, aged 30, which he had removed by amputation for disease of the wrist-joint. The synovial membrane was thickened, and the cartilages were eroded.

Fracture of Skull.—Mr. ORMSBY showed some pieces of bone which he had removed from the skull of a man two days before. While working in a mill, the man had received an injury from a circular saw, which knocked him senseless. No depressed bone could be felt, nor were there any symptoms of compression. Being worse next day, a crucial incision was made over the seat of the injury at the inferior portion of the left parietal bone; the skull was then found to be fractured. Trephining was performed, and the depressed pieces of bone were elevated. The patient was doing well.

Stricture of the Oesophagus.—Mr. KENDAL FRANKS read a paper on organic stricture of the oesophagus. This might result from hypertrophy of one or more of the oesophageal coats, or from cicatricial contraction. In the latter form, there were two distinct stages of dysphagia, the first coming on immediately after the injury was received, and due to the inflammatory swelling of the parts. As this subsided, the patient experienced relief, to be followed sooner or later by the extreme dysphagia symptomatic of the contraction of the cicatrices.

examination, the vagina was found completely filled by the mass. A wire *doublet* was passed round it, and the pedicle cut through with great difficulty; whereupon, for the first time in his experience, copious hæmorrhage followed, so excessive as to resemble *post partum* bleeding. Examination showed the source of this blood to be the cut pedicle of the tumour. Plugging with perchloride of iron, etc., restrained the hæmorrhage, and the woman made a good recovery, with, however, a temperature running up to 104° Fahr.

Small Vascular Tumour of the Uterus.—Dr. ATTHILL showed a small tumour which he had removed from the fundus uteri of a woman in the Rotunda Hospital. There had been very little hæmorrhage from the tumour; but he removed it as a prophylactic measure, having, in a similar case, formerly under his care, been obliged to operate, in consequence of the persistent profuse hæmorrhage.

Blighted Ovary.—Dr. HORNE showed a specimen which had been expelled from the uterus of a woman, aged 40, two days previously. Her last child had been born seven years ago. She had menstruated regularly since until August last; she believed herself to be in the sixth month of pregnancy. Three days ago, she got a fright, and hæmorrhage came on; when examined, the os was about the size of a shilling, through which a soft mass like the placenta was felt. The uterus was about half the size of that organ at full time, and the pain was severe. The uterus was injected with hot water, and the mass removed.—Dr. MACAN thought the curious part of the history was the small size of the specimen after so long a time. He regarded it as a specimen of fleshy mole.—Dr. NEVILLE regarded the specimen as one of so-called cystic degeneration of the chorionic villi seen in an unusually early stage.—Dr. ATTHILL, Dr. KIDD, and the PRESIDENT also spoke.

A Case of Concealed Hæmorrhage.—Dr. HORNE read the notes of a case of concealed hæmorrhage occurring in a woman, Mrs. B., aged 34, pregnant with her seventh child, otherwise healthy. Previous labours had been easy and uncomplicated. On November 11th, 1881, she went to the Rotunda Hospital; she was then weak and pale, with a moist skin, and was complaining of a feeling of extreme faintness, and of pain shooting down to the groins. She stated that on the previous day she had been exercising rather unduly. Examination showed the external os uteri to be patulous, the internal being closed. No presentation could be made out. Dr. Horne tried to rupture the membranes, but got no liquor amnii, nor could the fetus be felt. There was the abdominal tumour, and the woman's history that she was far on in pregnancy; but palpation and the stethoscopic examination gave only negative results. The vagina was therefore plugged; and on the second day the fetus, still-born, was found in the vagina, covered with the unbroken membranes, and the placenta attached. A large clot of blood was subsequently expelled from the uterus, and the woman made a good recovery. Dr. Horne had found records of thirty-seven cases; in 23, the mother died; in all, the child was still-born. Out of 110 cases compiled by German authors, 56 mothers died; whilst 7 children were saved. The cases were to be recognised by the presence of all the symptoms of hæmorrhage without visible bleeding, a tense uterus with pain over it, but at no time true labour-pains. The first question that suggested itself was, Was the woman pregnant or not, for no fetus could be felt? The question of treatment was an important one, and one on which some difference of opinion existed. Was it better to treat it like a case of ordinary accidental hæmorrhage, or procrastinate in order to conserve the patient's strength? The latter was the line adopted in the present case, and with the favourable result recorded.—Dr. KIDD thought that the great difficulty was the diagnosis. He saw a case of a lady who, when eight or nine months pregnant, fell downstairs; pain set in, soon followed by collapse, which passed off in a few hours. He found the uterus enlarged and doughy; the os was closed; there was no hæmorrhage in the vagina. He introduced a Barnes's bag, dilated the os, and delivered as quickly as possible; but the woman died. The best practice in such cases was to dilate the os and deliver as quickly as possible, unless the woman were actually collapsed and pulseless.—Dr. DENHAM related a case which had occurred in Dr. Johnston's practice. A lady, between eight and nine months pregnant, was suddenly seized with a fainting fit, and all the symptoms of hæmorrhage except external bleeding, not a single drop appearing externally; she died, and the *post mortem* examination showed the placenta to be adherent all round its margin, but detached on its flat surface completely, and a large hæmorrhage separating it from the uterine wall. He agreed with Dr. Kidd, that dilatation of the os and rapid delivery was the best treatment in such cases, but preferred to use his fingers instead of Barnes's bag.—Dr. ATTHILL said that in the 14,000 cases which had been delivered during his mastership of the Rotunda Hospital, this was the only case of concealed hæmorrhage, showing how rare it was. In

all the recorded cases in which the membranes were ruptured, the patients died; he did not, therefore, think the practice a good one; and, considering the sudden emptying which occurred under such circumstances, there was every reason to believe that it would tend to produce fresh hæmorrhage. He therefore advised that, unless the woman were dying or sinking, the membranes should not be ruptured, or delivery rapidly effected, unless uterine action could be first induced.—Dr. MACAN said that the rule on the Continent was not to rupture the membranes unless the uterus were acting, for, by doing so, the only thing which restrained the hæmorrhage—namely, the intra-uterine tension—was relieved. Pain he regarded as an important diagnostic. Women died from shock, which was quite out of proportion to the amount of blood lost. He did not advise rupturing the membranes, but dilated the os by means of Hegar's dilators, as they were more easy of application than Barnes's bag. The utter want of uterine action in such cases made him think there must be something radically wrong with the uterus itself.—Dr. DILL had long been impressed with the belief that the collapse was due to the shock of the hæmorrhage, and not to the amount. He thought that a diagnosis could generally be made by the (1) history, (2) local pain, and (3) collapse. He advised an expectant line of treatment, sustaining the patient's strength, and giving ergot, and encouraging uterine action.—The PRESIDENT, Drs. DOYLE, HENRY, and CRANNY also took part in the discussion, and Dr. HORNE replied.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, MARCH 1st, 1882.

THOMAS FITZPATRICK, M.D., Vice-President, in the Chair.

Ascaris Lumbricoides.—Dr. J. W. MOORE exhibited a large specimen of the common round worm passed by a girl, aged 16, who was under treatment by oil of turpentine for a severe attack of catarrhal pneumonia consequent upon measles. In a fit of coughing, the worm came up without the least trouble.

Temperature-Charts in Fever.—Dr. J. W. MOORE submitted a series of charts illustrative of clinical observations in continued fever. The first case detailed was that of a young man, subject to asthma, who fell ill of typhus. On the seventh day of the fever, there was an attempt at crisis; but the temperature rose again, until, on the thirteenth day, there was a second definite attempt at crisis. Almost immediately the phenomena of typhoid fever appeared, and the illness ran on to the sixtieth day, terminating at last by lysis. The history of this case showed that the two continued fevers might coincide, or at all events follow one another very closely. A second chart illustrated the important clinical fact that hæmorrhage from the bowels at an early period of typhoid fever was sometimes of advantage to the patient, perhaps by causing depletion and relieving that hyperæmia of the intestinal mucous membrane which often precedes the development of typhoid ulceration of the ileum. A young man, aged 20, had considerable bleeding from the bowels on the twelfth day of his fever. Hardly had it ceased, when there was a rapid amelioration in his symptoms, and he was completely apyrexial by the eighteenth day. A third chart showed an unusually slow pulse in convalescence from typhus maculatus of sixteen days' duration. During the fever, the pulse was weak and rapid. On the fourteenth day, it fell to 86. On the seventeenth day of his illness, he was completely apyrexial, his pulse being only 40 in the minute; and during four days afterwards it never exceeded 46. Then it began to rise again, reaching on the twenty-fourth day 72, and on the twenty-fifth day 86, in the minute. That comparatively quick pulse coincided with a completely apyrexial state, his temperature on the twenty-fourth and twenty-fifth days being only 98.4° and 97.2° respectively.—Dr. NIXON said he had experience of the reduction of temperature on or about the seventh day of typhus. Liebermeister also had called attention to its prognostic value.—Dr. WALTER SMITH had also observed a similar depression of temperature on the seventh or ninth day. This remission was even of diagnostic importance.—Dr. HENRY KENNEDY endorsed the observations of the previous speakers. In his experience, intestinal hæmorrhage in fever was frequently beneficial. He had recorded cases in which the pulse fell to an extraordinarily low rate even during the fever. The symptom was, as a rule, not of moment.—Dr. J. W. MOORE replied.

Apparent Recovery from Morbus Addisonii.—Dr. J. MAGEE FINNY detailed the case of a widow, aged 50, who was admitted to the City of Dublin Hospital, under his care, on May 17th, 1880, suffering from great debility and discoloration of the skin. Since Christmas 1879, she had been daily becoming weaker and losing flesh. Dr. Finny based his diagnosis on the constitutional and local symptoms which

REVIEWS AND NOTICES.

THE BRAIN AND ITS FUNCTIONS. By J. LUYs. London: Kegan Paul, Trench, and Co. 1881.

THE present volume, one of the well known International Scientific Series, is, the author tells us in his preface, an abstract of his personal experience, and of most of the ideas on this subject which he has been endeavouring to popularise in his public lectures at the Asylum of La Salpêtrière. The repute of the author compels our attention, and the intricacy and difficulty of the subject upon which he discourses stimulate our interest. Perhaps it may not be altogether inopportune to say that our first impression of the book is one of disappointment, and others will no doubt feel likewise: but, after further perusal, we are now able to say that this is owing to the plan of the book, and is inevitable, but that it is not persistent. The volume is divided into two parts: the one anatomical and dry, the other physiological and juicy. But, as the author says, the anatomical part serves as the foundation of the work, and therefore could not be dispensed with. M. LUYs has, as is well known, attempted to elucidate the difficult question of the minute structure of the brain by means of photography; and if we feel inclined to doubt whether, like a traveller, as he says, returned from distant lands, he has been able to bring back correct views of certain territories of which our predecessors caught scarcely a glimpse, we do not any the less appreciate the value of his physiological disquisitions. Nay, we feel sure that any solid work of this kind gives the worker a truer insight into the physiology of the organ investigated, even if the conclusions arrived at be indefinite, or even supposing that some of them are erroneous, than any amount of speculation or reasoning, apart from such previous work, could do.

It is interesting to note that M. LUYs carries the homology, which many others have endeavoured to trace between brain and spinal cord, to the very cortex of the brain, and finds there, in the superficial small cells and the deeper layers of large nerve-cells, parts analogous to the anterior and posterior tissues of the spinal cord; and further, that his anatomical studies have led him independently to the conclusion—at which Fritsch and Hitzig and Ferrier have arrived by other means—that the different functions of the brain are localised. And by the way, as additional evidence of the same fact, certain special pathological researches still unpublished are alluded to, by which he has been able to demonstrate that those who have long been deprived of one or other of these extremities suffer a distinct localised atrophy of the cortex of the brain, and further, that the atrophied region is not the same for the leg as for the arm. M. LUYs is, of course, not now singular in such facts and conclusions; but recorded cases of this kind are not too numerous, and it would be well if these observations were put into some shape more available for reference.

The second part takes up first the general properties of the nervous elements, epitomised under three heads—sensibility, organic phosphorescence, and automatism. The section on sensibility need not detain us; it is a somewhat studied production, but not uninteresting, though less so than the subsequent chapters on the second and third heads. The remarks upon the organic phosphorescence of the nervous elements are strikingly original and instructive. The author illuminates a very obscure subject, by gathering together what appear to him to be analogous reactions in other elements. He cites, for instance, the persistent reaction of phosphorescent bodies set in motion by luminous undulations; the latent storage of luminous vibrations, if one may so speak, that is daily witnessed in the collodion of the photographic plate. Here is a property possessed by inorganic substances of preserving the impressions which have first set them in motion, and which is essentially a property—and the same property—of the nervous elements. This M. LUYs proposes to call organic phosphorescence; and we think it must be allowed that the analogy, whether it be strictly correct or not, is one which is suggestive, and promises to throw some light upon the phenomena of nervous action.

Having adopted it, the author not unnaturally makes it the fundamental doctrine of the phenomena of memory, many of the difficulties of which are much simplified by invoking the aid of some such hypothesis. We have chapters on the genesis and evolution of memory, the memory in exercise, the development of the phenomena of memory, and its functional disturbance; and the author is particularly happy in the more practical aspects of his subject, and when drawing illustrations from his wide experience or reading. Thus he treats of and explains the localisation and the association of memories; and, having touched on the physiological side, a chapter is devoted to the morbid conditions—the functional disturbances of memory—in which this property which the nervous elements possess, of retaining a record of ex-

ternal excitations, perpetuates itself, and becomes a species of unsubduable erethism. But even this section, worthy as it is, and abounding as it does in illustrations which are apt and teaching, both to the lay and the professional mind, is hardly so valuable as that which follows, upon the automatic activity of the brain. This is a subject which is of the highest importance, and, we feel assured, is one with which the public need greatly to be more intimately acquainted. For instance, we commonly talk of, and have no words too severe for, what we are pleased to call “red tapeism”. Now red tape is only routine, and routine is only another name for automatism; but, in inveighing against automatism, we are warring against our very nature, for it is a law of central function that what is done habitually is ultimately done automatically. There are no minds which entirely resist the influence of automatism; but those who resist it most are the best intellects of the sphere in which they move. The doctrine of automatism is, indeed, a most absorbing one; for example, in it may be found a rational basis, if we be so minded, for a belief in one of the main teachings of various religious codes, the doctrine of eternal punishment. At least from it, it follows that, given an original choice between right and wrong modes of action, the perpetual indulgence in either tends to become automatic; and the wrong-doer is ultimately incapable of acting rightly, for he is no longer a voluntary agent. His nervous energy discharges itself automatically in wrong lines, and, after a time, never can do otherwise. Much, too, of insanity is comprehended in automatism. This is illustrated abundantly all through this part of the author's work; thus, at one time we come upon a quotation from Baillarger, to the effect that he is convinced that the delirium of lunatics consists in the involuntary exercise of the faculties. A little further on, we read that there are professors who, speaking volubly, repeat annually the same phrases and the same words, at the same periods, and all this involuntarily; or, to take a homelier illustration, we are all acquainted with the man who, in assenting to an observation, answers “quite so”, and reiterates the same over and over again quite automatically, though with an *empressement* which gives it an appearance of volition. What is that but delirium of the “quite so” centre? Or again, everyone knows, as the author says, that it is enough to set loquacious individuals going at a favourite subject to make them unfold all their ideas. What is that but a species of insanity? Dreaming and delirium are, again, closely associated, and are in the main dependent upon automatic action of the nervous centres in states of undue erethism or excitement.

Here we must stop, not because we have exhausted the many questions discussed, for we have not so much as noticed very many; but what we have said will, we hope, suffice to show that the volume before us has an interest for a large number of readers. It is certainly an instructive one for anyone who pursues the medical calling, but not alone for him; it is of value and interest to all who have attempted, and who shall hereafter attempt, to fathom the depths of their own minds, to analyse their springs of action, and the routes along which their mental faculties travel.

NOTES ON BOOKS.

Du Traitement des Fractures des Membres; Nouvelle Méthode. Par V. RAOULT-DESLONGCHAMPS. Paris: J. B. Baillière et Fils. 1882. In this monograph, rendered bulky by the details of seventy-six cases, the author describes a plan of treating various fractures by means of splints composed of laminated zinc, cut according to a paper pattern, and moulded to the broken limb. The fractured extremity is first protected by cotton wadding and bandages, and the splints are maintained in position by means of circle fastenings with buckles. In addition, the author advocates a swing for the fracture, suspended from a rod fixed to the arm-chair in which the patient sits, thus obviating the necessity of remaining in bed. The advantages claimed for this plan of treatment are, that it allows the patient to move from the horizontal posture; that the splints are cheap, are readily applied in time of war or other emergency, and are light and comfortable to wear. That the method possesses any advantages over pasteboard splints and common starch, especially in leg-fractures, is not clearly made out. Woodcuts, depicting the apparatus applied to various parts of the body, are interspersed throughout the book. Judging from the cases published, Dr. Raoult-Deslongchamps seems to have been eminently successful in actual practice; the literary style he employs is, according to his own suggestion, somewhat “chatty”.

At the eighty-third annual commencement of Jefferson College, Philadelphia, the honorary degree of Doctor of Laws was conferred on Dr. Thomas Addis Emmet, of New York.

without risk of contamination. Also, if in any material there be two sorts of organisms, they can be separated from each other by making the gelatine liquid, and shaking it well. In a few days, small opaque spots will be observed throughout the gelatine, and these will be found to consist often of one or other form of organism alone. Fresh gelatine may be inoculated from one of these spots, and the organisms obtained pure. Thus, water, milk, etc., may be investigated, and the pathogenic properties of the various forms of organisms which are found may be ascertained by experiments on animals. By exposing a vessel containing gelatine to the air for a given time, the various forms present in that specimen of air will grow at different points on the surface of the gelatine, and may be examined separately.

The importance of this method of cultivation is very great; and in some succeeding articles we shall find examples of its results. The chief objection to it is, that the gelatine becomes liquid at the temperature of the body, and thus the advantage of the solid substratum is lost when it is necessary to keep the cultivation at the temperature of the body. This difficulty has been recently to some extent overcome, as we shall see in our next article on tuberculosis.

LEGAL OBLIGATIONS OF THE MEDICAL PROFESSION.

CONTRACTS IN RESTRAINT OF MEDICAL AND SURGICAL PRACTICE.

A RECENT trial in the Chancery Division arising out of a case at Shrewsbury, has directed some attention to the law of medical partnerships, and agreements relating thereto. As contracts which prohibit individuals from exercising their professions are in many respects opposed to public policy unless they are reasonable, it has long been decided in the judicial tribunals of this country and other nations, that whatever restraint is greater than required for the necessary protection of the person with whom the agreement is made is unwarrantable, and therefore void.

In his judgment in the Court of Exchequer, in the case of "*Mallam v. May*", in 1843, Baron Parke (afterwards Lord Wensleydale) very properly stated that partial restraint not to practise a particular vocation, in many cases proves very beneficial, both to the public and the parties immediately affected by it, as, "in such a case, the public derives an advantage in the unrestrained choice which such a stipulation gives to the employer of able assistants, and the security that it affords that the master will not withhold from the servant.....communication of his own skill and experience, from the fear of his afterwards having a rival in the same business." Chief Justice Erle made a statement to the same effect in the case of "*Mumford v. Gething*", which was argued in the Court of Common Pleas in 1859.

Now, it appears to be the usual practice for assistants to medical men to enter into reasonable bonds not to practise physic or surgery on their own account, within a certain distance of the houses or towns within which their employers carry on their profession. An important case relating to this question was tried in the Chancery Division of the High Court of Justice, on the 15th and 16th March, before Mr. Justice Kay, viz., that of "*Andrew v. Lindsay*", and which was reported at great length in the *Shrewsbury Chronicle* on the 17th of the same month. The plaintiff, who was a legally qualified doctor of medicine, carried on a general medical practice in Shrewsbury and the surrounding neighbourhood, and had a large special practice as an aural and ophthalmic surgeon; and he was obliged to visit patients within a radius of more than forty miles from that town. In 1872, he engaged the services of the defendant as his assistant, but no written agreement was entered into between them, although, according to the evidence, there was a clear understanding that the latter should, when required by the plaintiff, execute a bond whereby he was to engage not to practise in Shrewsbury, or within a certain radius of it, for several years, though the precise terms of this agreement were not specified. For about six years, no such bond was presented to the defendant, but, during that period,

his salary had three times been substantially increased, and the parties were on very amicable terms. In the latter part of 1878, the defendant was asked by the plaintiff to sign an agreement which the latter had prepared by his solicitor; and the defendant then executed such, which stated, among other things, that, in consideration of a certain salary to be paid to him, and being provided with board and lodgings, he would diligently serve his master in his professional practice for one year from the date of the contract, and continuously until it should be determined; and that he would not, either during the continuance nor for ten years after the end of the engagement, except by the plaintiff's written consent, practise as a physician or surgeon in Shrewsbury, or within twenty-five miles of that place; and there was a proviso for the payment of £100 as liquidated damages for each month that the defendant should practise in violation of the stipulations in the bond.

Soon after the agreement was signed, serious differences arose between Dr. Andrew and Mr. Lindsay; and on March 25th, 1879, the defendant left the employment of the plaintiff, in accordance with a notice which the latter had given him on the 26th of the preceding December. In May 1879, the defendant indicated an intention to practise in Shrewsbury, by putting up a brass plate; and the reason given by Dr. Andrew for not bringing the action previously for an injunction to restrain Mr. Lindsay from practising, in breach of his agreement, was that, while he endeavoured, he was unable to discover whether the defendant was actually practising until February 1881. In that month, Mr. Lindsay, contrary to the stipulations in his bond, advertised for the appointment of physician to the Salop Infirmary, and had, in fact, practised in Shrewsbury; and then this action was commenced. A motion for an interim injunction was brought before the Master of the Rolls immediately after the writ was issued; but, in this interlocutory application, his lordship refused to interfere, on account of the delay in bringing the action.

The defence raised to it was, that there was no consideration for the bond; that it was signed precipitately, under duress of the social and professional relations of the plaintiff to the defendant; that it was a fraudulent surprise; and that unconscionable sums were mentioned for liquidated damages. In delivering judgment upon the case, Mr. Justice Kay stated that the defendant, by his counter claim, asked to set the contract aside as it was a surprise amounting to fraud; but that, in his opinion, there was no ground for such an allegation. In his evidence, the defendant admitted that he was aware that such an agreement was almost always customary, and he, Mr. Justice Kay, believed the plaintiff's testimony that the bond was mentioned when the defendant was first engaged by the plaintiff, and was repeatedly referred to afterwards. He was, therefore, quite unable to see on what ground the contract could be set aside. He considered the agreement binding, and therefore granted an injunction in the terms in which it was asked, and dismissed the counter claim with costs, and ordered the costs of the original action to be paid by the defendant. This decision appears to be strictly in accordance with justice.

There are but few cases reported in which the validity of agreements of this kind have been contested; and we believe that the only important information to be derived from them is respecting the time and space to which they may legally extend in restraint of medical and surgical practice, a question which is determinable by the court according to the facts presented to it in each particular case. The following are examples. An agreement made by an assistant surgeon-dentist, upon the consideration that he should be instructed in the profession for four years, not to practise at any time at the end of this period in the city of London, was held to be valid and reasonable; but a similar bond not to practise within one hundred miles from the city of York, was decided to be excessive and illegal. Another contract by an assistant to a surgeon on account of this engagement not to practise on his own account in his profession for fourteen years within ten miles of a county town, was held to be reasonable and lawful; and an agreement under similar circumstances not to practise at any time within seven miles of such town, was also adjudged to be valid. Again, a stipulation in an

stration of modern medicine has been introduced a rational treatment by moral kindness, by therapeutics, and by general physical means, calculated to improve the bodily condition and to relieve and assuage mental distress. It is certain, also, that there is no gross abuse of any kind in the asylums in this country, either public or private, and that exceptional instances of misconduct on the part of the attendants are visited with the utmost severity, whether by the superintendents of public asylums or by the proprietors of private asylums. It is also certain that the proprietors and medical residents, as men of medical education, with thoroughly professional instincts, are bound by the tradition of the profession which regards the cure of the sick as the great object of its labours. All this, however, by no means proves that Mr. Leighton's resolution, more judiciously limited and more soberly supported, may not have a very considerable future before it, and it is not difficult to foresee that the whole tendency of future legislation must be considerably to increase the facilities for middle-class institutions for the insane on a public basis, and to substitute largely home residence in the houses of medical men for the multiplication of private asylums.

WE are glad to be able to state that Sir Erasmus Wilson continues to progress towards convalescence, although less rapidly than might be anticipated were the weather milder.

THE President and Council of the Medical Society of London have issued cards for a *conversazione* to be held at the Society's rooms, 11, Chandos Street, Cavendish Square, on Monday, May 1st, at 8.30 P.M., when the annual oration will be delivered by Dr. E. Symes Thompson.

PROFESSOR HÄCKEL of Jena, the celebrated Darwinist, has reached Egypt on his way home from India, where he has been making scientific observations for the last year or more. On returning to Germany after finishing his researches in Egypt, he will publish an account of his tour.

A NURSE of the Kent Nursing Institution, at West Malling, was, on Monday last, at Clarence House, presented by H.R.H. the Duchess of Edinburgh, who is a patron of this institution, with an honorary silver medal, which had been awarded to her in recognition of devoted service in nursing the poor.

G. TAYON, in a note presented to the Paris Academy of Sciences by M. Pasteur, asserts that African asses resist the infection of charbon. A series of experiments recently made by him lead him to believe that these animals do not present the conditions favourable for the development in their economy of the microphyte peculiar to "charbon".

THE Senatus Academicus of Aberdeen has conferred the degree of LL.D. on Dr. Grant Bey of Cairo, a graduate of the University, a member of our Association, and one of those accomplished, learned, and high-minded physicians who carry high in distant countries the honour and reputation of British medicine.

THE following members of the medical profession were present, by invitation, at the marriage of His Royal Highness Prince Leopold, Duke of Albany, to the Princess Helen of Waldeck, at Windsor, on Thursday: Sir W. Jenner, Bart., K.C.B., M.D.; Sir James Paget, Bart.; Dr. Acland, Dr. Wilson Fox, Dr. Wickham Legg, Dr. Poore, Dr. Laking, Dr. J. Ellison, Dr. Hoffmeister, Dr. W. Marshall, Mr. Profeit, and Dr. J. Reid.

AN official notice has been sent by the Secretary of the Royal College of Surgeons of England to the deans of the metropolitan and provincial medical schools, calling attention to the new regulations with reference to candidates rejected at the primary examination for the membership, and enclosing copies of the rules, together with the forms of certificate of additional study required.

M. FAUVEL, the eminent French sanitarian, who suggested the resolutions adopted at the National Conference held at Constantinople, in 1865, has defended before the Paris Academy of Sciences the results of that conference. M. Fauvel admits that the present system of quarantine requires improvement; but adds that, until another more in accordance with modern scientific progress is substituted, it is not advisable to abolish the one now existing. M. Lesseps notifies his intention to answer M. Fauvel when the commission sits.

THE first sheets of the new catalogue of the pathological collection in the Museum of the Royal College of Surgeons, Lincoln's Inn Fields, are already in type. Among the first series, illustrating general pathology, the large number of specimens taken from the vegetable kingdom are very conspicuous. Sir James Paget has already, in our pages, turned attention to the great value of the study of disease in plants as a means of solving some of the deeper but most elemental questions in pathology. His observations were suggested, to a great extent, by these vegetable specimens, which were mostly prepared by Mr. Shattock, curator of the Museum of University College Hospital.

DR. S. D. GROSS, the eminent American surgeon, has resigned, on account of advancing age, and a desire for comparative repose after a laborious professional life of fifty-four years, the professorship of Institutes and Practice of Surgery in the Jefferson Medical College, Philadelphia, to which he was appointed twenty-six years ago. On accepting his resignation, the Board of Trustees at once unanimously elected him Emeritus Professor of Surgery. Dr. Gross has been engaged during forty-eight years in the duties of a teacher in schools of medicine.

WE learn that notice of proceedings has been given by the School Board of London against the Strand Board of Works, to compel the latter body to take down their disinfecting chamber situated in Denzell Street, Clare Market, on the assumption that its continued existence will be prejudicial to the interests of the adjacent school and the health of the children attending it. We have carefully examined the premises and surroundings, together with the apparatus in which disinfection is carried on, and consider they are well adapted for the purpose. As, however, the points in dispute are about to be submitted to the arbitration of a court of law, we forbear for the present giving any opinion as to the policy of the action of the School Board.

THE practice of medical men taking a part in such local discussions as are now raised on the subject of experiments on animals is, we are glad to say, considerably extending. Recently, at Richmond, in a largely attended meeting, at which leading members of the Antivivisectionist Society took part, the arguments in favour of the use of experiments on animals as a method of research were ably advocated, and the feeling of the meeting was so completely against the antivivisectionists who had summoned it, that they did not venture to put any resolution. This week, again, we have received a report of a large meeting of the St. Paul's Mutual Improvement Association at Sheffield, in which Mr. R. J. Pye-Smith took part. On this occasion, upon a vote being taken, the antivivisectionists were beaten by a large majority.

ROYAL COLLEGE OF VETERINARY SURGEONS.

A HIGHLY influential deputation, on Wednesday last, waited on the Lord President of the Privy Council (Earl Spencer), who was accompanied by the Right Hon. A. J. Mundella, M.P., and Mr. Lennox Peel. Among those who formed the deputation were the Earl Fortescue, Major-General Sir Fred. Fitz-Wygram, Sir Trevor Lawrence, Mr. Dent Dent, Dr. Cameron, Dr. Quain, Dr. Acland, Dr. Sanderson, Dr. Wilkes, Professor Flower; whilst the veterinary department was represented by Mr. Fleming, Mr. Collins, Mr. Pritchard, Professor Robertson, and others. The object of the deputation was to press on the Lord President the great necessity that existed for providing a

THE BRITISH MEDICAL BENEVOLENT FUND.

DR. BROADBENT, Treasurer, writes to us: At the April meeting of the Committee of the British Medical Benevolent Fund, held on Tuesday, the 25th, grants were made to twenty-three applicants, the amount distributed being £307. Six of the recipients were over the age of seventy, and one had reached eighty-five. In the first four months of the year, no less than £997 has been voted in donations for the relief of urgent distress, nearly the whole of which is in course of distribution by weekly or monthly instalments.

ST. JOHN'S AMBULANCE ASSOCIATION.

DURING the last few days, a one-horse ambulance-carriage for use in streets and country districts has been on view in the Naval and Submarine Engineering Exhibition at the Agricultural Hall. This vehicle has been designed by Mr. John Furley, Honorary Director of Stores of the Association. Next to the comfort of the patients, simplicity and lightness have been the principal points aimed at in its construction. It is capable of great adaptability; and the interior may be used without seats, or as a wagonette. It can also be employed with one or two patients in a recumbent position, and three or four seated; or with four patients on stretchers, and two attendants seated. Seats for the driver and one attendant in front are so arranged that they can be drawn back over the front wheels, in order that the bearers may pass through the carriage without any obstruction. The stretchers are similar to those in general use by the Association, with the addition of India-rubber wheels under the head to facilitate their being put into position. The step at the back is of the width of the carriage, and, when closed, forms a door. A lamp is so placed over the driver's head, that its light can be turned outward upon the road or upon the interior. At the back and below the floor is a case of first aid appliances, which can be supplemented at the discretion of surgeons. The carriage is provided with a pedal brake with patent India-rubber blocks. This novel carriage has been visited by a great many surgeons and other gentlemen interested in ambulance work, and has received general commendation on account of its lightness and simplicity. It has now been placed at St. John's Gate, Clerkenwell, and is at the disposal of any doctor who wishes a case (not infectious) to be removed. Applications for the carriage may be made to the Honorary Director of Stores, St. John's Ambulance Association.

FASHIONABLE DEFORMITIES.

MR. NOBLE SMITH is taking up for the National Health Society the subject of fashionable deformities and the hygienic defects of modern dress of ladies, to which that Society has done so much to direct attention. A very healthy public feeling has been developed on this subject; and it is satisfactory to find that, on this occasion, a large audience assembled at Hampstead, under the presidency of Mr. Spencer Wells, to hear what Mr. Noble Smith had to say on the subject. The lecture was excellently illustrated by drawings, diagrams, and models; and Mr. Noble Smith laid down the proportions of the human figure according to the rules of proportion of Professor Marshall, viz., that the average height of English women was sixty-three inches, the width across the chest nearly nine and a half inches; at the waist, the width should be nine inches, or but half an inch less than under the arms; and on the hips about eleven and a quarter inches, while the circumference of the waist should be a little over twenty-five inches. Respiration and circulation were impeded by tight lacing, which also produced palpitation of the heart, torpidity of the liver, indigestion, and degeneration of the muscles covered by the corset. The lecturer pointed out that the chief purpose of clothing should be to maintain a uniform temperature for every part of the body. He also condemned the use of high-heeled, tight, or short boots, and contended that, in clothing generally, easy locomotion and the free movement of the limbs should be provided for. He commended a "divided hygienic skirt" costume, made under the auspices of the Society, and exhibited, the peculiarity of which appeared to be general ease, with an under skirt resembling

men's nether garments, loosely made, and giving freedom in walking and other movements. He advised ladies also to take more exercise than was their usual habit. The absurd notion that the human figure can be improved by artificial devices of compression and distortion, to suit the varying fancy of the modish dressmaker, is an idea which all sensible persons treat with mingled ridicule and amusement, but which still exists as an accepted dogma in the minds of ordinary Englishwomen; and if the National Health Society can succeed in fanning to a flame the present sparks of reason which are showing themselves with some promising brightness, and inducing Englishwomen to adopt rational principles as the guide to dress and personal decoration, in lieu of arbitrary follies, it will have rendered an acceptable service. For this purpose, however, as for any other social reform of the kind, much perseverance and continuous hammering will be needed.

COMPARATIVE ANATOMY.

A COURSE of thirteen demonstrations on the Comparative Osteology of the Vertebrata will be given during the months of May, June, and July, by Dr. Garson, in the Museum of the Royal College of Surgeons of England, on Tuesday afternoons at 4 o'clock, commencing the 2nd of May. All students and other visitors to the museum are invited to attend these demonstrations. The subjects treated of during the course will be the following: 1. The Vertebral Column; 2. The Sternum and Ribs; 3. The Shoulder-girdle; 4. The Pelvic Girdle; 5. The Long Bones of the Extremities; 6. The Hand; 7. The Foot; 8. The Homologies of Limbs; 9. The Skull of Man; 10. The Varieties of the Skull of Man; 11, 12, and 13. The Skull of other Vertebrates.

SUSPECTED POISONING.

AN inquest has recently been concluded at Wannwrydd, Newchurch, Carmarthenshire, which has created no little sensation in the district. The wife of one Evans, a working carpenter, died suddenly, and was, indeed, found dead in bed. A death-certificate was obtained, and the body was buried on the third day after death. The coroner, Mr. George Thomas, hearing that the deceased's life had been recently insured for £900, a sum apparently out of proportion to her husband's means, ordered the exhumation of the body, and a *post mortem* examination. This was accordingly done, fourteen days after the interment. No appearances of disease were met with, and the body was in a very good state of preservation; so much so, in fact, as to strengthen the suspicion that poison might have been administered. The coroner requested Dr. Stevenson, of Guy's Hospital, to make an analysis of the viscera, and he, in view of the recent resolution of the Home Secretary, applied to the Home Office for instructions. The presidents of the two colleges not having at that time made any nomination, Dr. Stevenson was instructed to make the analysis, in conjunction with Mr. A. W. Stokes, Public Analyst for Paddington, and formerly chief assistant to Dr. Stevenson. These gentlemen reported that the viscera and stomach contents had been subjected to an exhaustive chemical and microscopical analysis, and that no poison had been discovered. Two extracts from the viscera and contents of the stomach had been administered to mice, and the animals were unaffected. The jury returned a verdict of death from natural causes. The good state of preservation of the body in this case may be accounted for by the unusually early period at which the corpse was interred, before putrefaction had set in.

A REMARKABLE CASE OF WOUND OF THE STOMACH.

ON April 17th a man applied at University College Hospital, complaining that so terrible a stench came from ulceration of the stump of his leg (the limb had been amputated by Mr. Marshall five or six years earlier), that none could bear to come near him. On examination this was found to be a manifest delusion. On the following day, however, he was admitted, under the care of Mr. Beck, having made a most determined attempt to commit suicide. He had placed the butt-end of a sword-stick against the wall, and thrown himself upon

its point. The weapon had entered between the fifth and sixth rib, just below the left nipple, and had been driven in with such force that its point could be felt in the back between the tenth and eleventh. The blade was so firmly fixed, that all attempts to pull it out were at first unsuccessful, even a small vice failing to cause the least movement. At length it was rotated slightly, and then came away with ease. The man died five days later of pleurisy, without having at any time brought up any blood, or suffered from vomiting. At the *post mortem* it was found that the pericardium had not been wounded, but that the sword, after transfixing the lower edge of the left lung, had passed right across the stomach, its course being marked by two punctures, one in the anterior surface, and the other in the lesser curvature, had just missed the descending aorta, and had finally traversed the body of the twelfth dorsal vertebra from before backward; the left pleura was covered with recent lymph and its cavity contained a serous fluid, and the lower part of the left lung was consolidated; the heart appeared to be fatty. Death was no doubt determined by the pleurisy and pneumonia, aggravated by the weakened condition of heart. The total absence of vomiting and of peritonitis after a double wound of the stomach is not a little remarkable; the punctures were clean cut, and the absence of extravasation of food and of hæmorrhage was probably due to the mucous membrane pouting through the wound, and so closing the punctures. Another point of interest about the case was that certain of the convolutions of the parietal lobule on the right side, containing the centres, according to Ferrier, for the amputated limb, appeared to be atrophied, the intervening sulci being unusually deep and wide.

DEAFNESS.

THE question of the nature of the malady from which this distinguished author suffered for many years, and which ultimately terminated in his insanity, has been discussed by Dr. Bucknill in *Brain*. After citing numerous passages from his letters and journal, he arrives at the conclusion that, at the age of twenty years, Swift was beyond doubt the subject of auditory vertigo, or Ménière's disease, which subsequently gave place to dementia with aphasia. Dr. Bucknill considers that the labyrinthine vertigo had an indirect effect in the causation of the insanity, inasmuch as there was any extension of the local disease to the brain. The symptoms of this now well known form of insanity appear to have been well marked in the Dean's case; and Swift himself has aptly described his condition as "paranoia," "madness," "insanity," "dementia," "dumbness," "deafness," "deaf-madness." The article has attracted much notice, and has thrown a new light on the character of the Dean's insanity.

CHATHAM PRISON AND THE CHATHAM HOSPITAL.

It is proposed to build a general hospital in north London, and a prison hospital has been already formed for the purpose. The Chatham Prison Hospital, in the north-east district, has long been a well-known and frequently visited hospital, and has been the scene of many interesting cases. The hospital is situated in the town of Chatham, and is a well-known and frequently visited hospital, and has been the scene of many interesting cases. The hospital is situated in the town of Chatham, and is a well-known and frequently visited hospital, and has been the scene of many interesting cases.

The hospital is situated in the town of Chatham, and is a well-known and frequently visited hospital, and has been the scene of many interesting cases. The hospital is situated in the town of Chatham, and is a well-known and frequently visited hospital, and has been the scene of many interesting cases. The hospital is situated in the town of Chatham, and is a well-known and frequently visited hospital, and has been the scene of many interesting cases. The hospital is situated in the town of Chatham, and is a well-known and frequently visited hospital, and has been the scene of many interesting cases. The hospital is situated in the town of Chatham, and is a well-known and frequently visited hospital, and has been the scene of many interesting cases.

prisoners will be adequately represented. By adhering to these principles, it is believed that the affairs of the hospital will be administered with efficiency and economy; that the abuse of the institution by the prosperous classes will be prevented; and that the money of the charitable will be spent on those only for whom it is intended, viz., the really necessitous poor. The provisional council, which is headed with the names of Sir Andrew Lusk, Bart., M.P., Mr. McCullagh Torrens, M.P., it is intended, shall be largely increased. The honorary secretaries are George W. Potter, M.D., 12, Grosvenor Road, N.; T. P. Potter, 30, Victoria Street, E.C.; and James Clunes, 10, Highbury Terrace, N.; of whom all information may be obtained.

PHTHISIS AMONGST PRISONERS AT CHATHAM.

IN alluding to the high rate of sickness in the Chatham Prison during 1880-1, the medical officer, in his last annual report, states that the climate of the locality, owing to the vicissitudes of temperature, is ill-adapted for persons suffering from scrofula or diseases of the chest. According to his observations, the winter there is very trying to such cases, especially during the months of February and March, when keen frosts were prevalent at times, accompanied by rain, snow, or frost. This severity is severely felt by prisoners employed at out-door labour, particularly those working at the dockyard extension, where the positions are much exposed. Cases of phthisis occurring among the prisoners were removed to hospital at an early stage of the disease, and consequently sent to an invalid station, frequently run a rapidly fatal course.

ANALYSIS IN POISONING CASES.

THE recent decision of the Home Secretary to modify the present system of conducting analyses in poisoning cases, has elicited an important letter in the *Times* from Mr. J. H. Lamb, of Edinburgh. Speaking with authority, he thinks that there are certain considerations which outweigh all that can be said in favour of the step taken. The question whether a person is to be put upon trial in such cases always largely depends on the results of analysis; and this renders it necessary that the most impartial and expert analysts should be selected for the purpose. The Crown has, in the interest of the community and the accused alike, the whole responsibility of the proceedings, and must therefore select analysts—much better than an individual analyst could be. Since, however, the selection of the analyst is so important, it is necessary that the selection of the analyst should be made with the greatest knowledge of the subject than the Crown advisers, medical men, have been the authorities in making the selection of the analyst. It is impossible to predict that no undue influence would be brought to bear in order to secure a special nomination. It is at least reasonable that representatives of the Crown should have an opportunity of consulting with the analysts, and having nearly equalised places, and as a result of this, towards the selection of the analyst, there would be a considerable change. "I am," Mr. Lamb writes, "strongly in favour of the Crown having power of selecting the analyst, and of having an equal say in the selection of the analyst, the Crown having the right to select the analyst, and the analysts having the right to select the analyst." The Home Secretary has, in the interest of the community and the accused alike, the whole responsibility of the proceedings, and must therefore select analysts—much better than an individual analyst could be. Since, however, the selection of the analyst is so important, it is necessary that the selection of the analyst should be made with the greatest knowledge of the subject than the Crown advisers, medical men, have been the authorities in making the selection of the analyst. It is impossible to predict that no undue influence would be brought to bear in order to secure a special nomination. It is at least reasonable that representatives of the Crown should have an opportunity of consulting with the analysts, and having nearly equalised places, and as a result of this, towards the selection of the analyst, there would be a considerable change. "I am," Mr. Lamb writes, "strongly in favour of the Crown having power of selecting the analyst, and of having an equal say in the selection of the analyst, the Crown having the right to select the analyst, and the analysts having the right to select the analyst."

charge is pending, is a right one; that now adopted of having two analysts appointed by quasi-independent bodies is a questionable innovation. In the vast majority of cases of real or supposed poisoning, the analysis is required, without any definite suspicion of guilt having attached to anyone—cases of suicide, and the like. Is it intended, in all these cases, to appoint two analysts? This is a matter to which sufficient attention has not hitherto been directed.

CONVALESCENTS.

THE Convalescent Committee of the Charity Organisation Society, which was appointed in 1880, has just made its first report to the Council. Though the efforts of the Society have not been so successful as they had hoped, yet an excellent beginning has been made, and it seems probable that this department of the Society's work will gradually become a very important and beneficial one. The plan of registering information regarding vacancies has been carried on with only partial success, owing to the great pressure on the homes in the summer months. But the catalogue has indirectly led to a kind of organisation, by placing more complete information and particulars regarding a large number of homes at the disposal of the public. The Committee have communicated with the leading hospitals in the metropolis, with a view to their sending to the District Committees of the Society such cases of out-patients as might require, for their cure and proper medical treatment, change of air and good food rather than medicine. Some hospitals, such as Charing Cross and St. Mary's, and one or two others, have taken advantage of the offer of the Society; but, on the whole, the proposal has not been generally adopted. Two other departments of work have been opened out in the past year: that of lodging in the houses of respectable labourers and others in the country, children who required change of air owing to sickness. The supply of accommodation for these cases has exceeded the demand; and there is reason to believe that much might be done to give help in this form. Convalescent homes, however, will always be required where special care is wanted or diet has to be continued.

HOW DISEASE IS SPREAD.

AN almost incredible story comes from Bolton. At a recent meeting of the rural sanitary authority of that union, it was stated that a man, suffering from small-pox, was taken on foot from his house, nearly two miles distant from the workhouse, by one of the corporation inspectors. It appears that the inspector, having heard that the man was suffering from small-pox, called upon him on the Saturday. The man said he did not know whether he had small-pox or not, but he did not feel very well. The inspector asked him to call at his house the next morning, and he would then be able to say whether it was small-pox. The man, it is stated, walked to the inspector's house (a distance of half a mile), and he was then told that he was suffering from the disease, and must go back at once to his home. The inspector followed him, and finally walked him to the workhouse, much to the astonishment of the medical men there. It was further stated that, as the man was being taken through the town, children were coming out of two schools, and he passed through both groups of scholars. He was, in fact, quite surrounded; and one girl called out, "Eh! see, that chap's got small-pox". A somewhat similar incident is reported by the medical officer of Bristol, who states that a barmaid, suffering from small-pox, had been sent in a carriage and pair from a Wells hotel to Bristol, to the General Hospital, where she could not be received. She was admitted to the Sanitary Hospital, and the carriage was immediately disinfected. The medical officer added that, during his long experience, he had never known a more rash and reckless act than this, of sending such a patient to a populous city; and he hoped that the authorities would ascertain whether some persons had not made themselves liable to a prosecution. The patient told him the landlady of the hotel had ordered the coachman to leave her at the house of a relative. If such crass stupidity as is shown in these cases can be

manifested by persons presumably acquainted with the danger of exposing infected persons, and with the law on the subject, it can hardly be expected that the ignorant and reckless working-classes will manifest much anxiety about the prevention of the spread of disease.

PRIZES OF THE ROYAL BELGIAN ACADEMY OF MEDICINE.

THE list of the subjects for competitions for prizes is as follows. For 1880-1883: The function of animate germs in the etiology of disease, as ascertained by new experiments; prize, a medal worth £80 (2,000 francs); close of competition, January 1883. For 1881-1882: Determine by new experiments and new applications the degree to which spectrum-analysis is useful in forensic medicine and medical police; prize, £48 (1,200 francs); close of competition, December 31st, 1882. For 1881-1883: Determine, from precise observations, the effects of alcoholism, from the material and the psychical points of view, both on the individual and on his descendants. In treating of alcoholism from the psychical point of view, the competitors will be required to estimate, by means of the data of pathological anatomy and the best documents furnished by medico-legal experiments, the limit which separates drunkenness from insanity, as well as the responsibility of the drunkard for his acts. The prize is £60 sterling (1,500 francs). The competition will close on February 15th, 1883. Elucidate by clinical facts, and, if needed, by experiments, the pathogeny and therapeutics of the disease of the nerve-centres, and especially of epilepsy; prize, £320 (8,000 francs); close of competition, December 31st, 1883. Sums varying from £12 to £40 may be awarded to authors who have not merited the prize, but whose labours are thought to be worthy of reward. A sum of £1,000 (25,000 francs) may be given besides the prize of £320 to the writer who may have made real progress in the therapeutics of diseases of the nerve-centres, such as the discovery of a curative remedy for epilepsy. For 1882-1884: The history of hysterotomy and its applications; prize, £32 (800 francs); close of the competition, February 1st, 1884. A comparative study of tuberculosis in domestic animals, under the heads of causes, symptoms, lesions, and treatment; a denomination of the relations existing between tuberculosis and phthisis; and of the consequences which the consumption of the meat and milk of bovine animals attacked by tubercle (*perlsucht*) may have on the health of man. Answers to this question should be based, not only on existing data and experiments, but also on new researches. The prize is £32 (800 francs). The competition will close on February 1st, 1884.

A FASTING GIRL.

DR. DOUGAL of Strathavon, who reported, nearly twelve months ago, the more important features of the case of Christina Marshall in the BRITISH MEDICAL JOURNAL, now favours us with the following further report of this unhappy girl, who died recently, and the circumstances of whose death have attracted much attention.

At the time of the last report, Christina Marshall was about fourteen years of age, was reputed to be taking next to nothing in the way of nourishment, was in a very weak condition, and very much emaciated; and this state of matters had been in existence for eighteen weeks. She was free from any serious bodily ailment, her most suspicious symptom being a slight dullness over the apex of the left lung; but, as her mother and two sisters had succumbed to phthisis, it was feared that any pulmonary weakness, however slight, would, under the circumstances, become intensified, and hasten the end. In the course of last May, she was induced to take rather more nutriment, in the form of beef-tea, etc.; and while this was done, she improved a little. Her pulse was of greater volume, she was less silent, and took a little more interest in what occurred in the house. Unfortunately, this did not continue; she gradually relapsed into her former condition of expressed inability to take food, and consequently the little improvement was soon gone, and she returned exactly to her former state. This lasted all through the remaining portion of last year, in spite of the most varied and strenuous endeavours of everybody concerned to overcome the difficulty. Throughout all those months, she never left her room, and was in fact confined to bed, except when lifted out for a short time once a week. She took sweets and water and beef-tea at rare in-

Griffith. We are glad to be able to state that Professor Pirrie's health is gradually and steadily improving. The summer session commences on May 1st.

THE ST. ANDREW'S AMBULANCE ASSOCIATION.

THIS Association is actively engaged in Glasgow in carrying on its work, and it has just obtained from the municipal authorities a concession which should prove of great value. Permission has been given to it to use the various police-stations throughout the city for stretchers and other appliances necessary in cases of street or other accidents. This should materially aid the promptitude with which accidents can be dealt with. The Association has also provided itself with one of the improved Howard's ambulance-wagons, which is one of the most efficient of its kind; and it is kept in readiness for turning out at any moment for the conveyance of cases that require to be sent to hospital or conveyed to their own houses.

GLASGOW EAST PARK COTTAGE HOME.

FOR some years there has been in existence in Glasgow an association for aiding infirm children. This association really had its origin in the painful revelations that were brought to light by the operations of the School Board with regard to the numbers of children in an infirm and imbecile condition among the families of the poorer classes. With the object of aiding these, the association arranged house-visitation, and also established a cottage home for the most pressing cases. This East Park Cottage Home, which contains thirty beds, has recently been found too small, owing to the many infirm children waiting for admission; so its accommodation has now been extended to fifty beds by the purchase of an adjoining cottage and connecting the two buildings. This will help to meet the great demand for indoor accommodation; and it is to be hoped the directors will have no difficulty in raising the funds required for paying off the cost of the new building.

HEALTH LECTURES IN CUPAR FIFE.

DR. WHITELAW has just brought to a close a most successful course of five health lectures on "Food and Drink", "Digestion and Indigestion", "Circulation of the Blood", "Respiration and the Air we Breathe", concluding on the 21st instant with "What to do in Cases of Sudden Illness". This last was delivered to a very large audience, and the interest was increased by practical illustrations showing how to perform artificial respiration, and how to treat wounds, hæmorrhage, and fractures. The ambulance men performed their part to perfection, and were loudly cheered as they carried away, on an extemporised litter, their comrade, whose person could scarcely be seen for splints, bandages, and improvised tourniquets. Some additional illustrations, not in the programme, were afforded by the audience: two men fainting at an early stage, and several ladies retiring from the hall in dread that their turn would be next. At the close, the Rev. J. P. Mitchell, who occupied the chair, moved a vote of thanks to Dr. Whitelaw, and expressed the great pleasure and appreciative interest with which they had listened to these lectures. It was announced that, in deference to a widely expressed desire, it was intended to publish them shortly. The lectures were given in aid of the "Club for Supplying Nursing Appliances to the Sick Poor of Cupar."

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending April 15th, it appears that the death-rate in the eight principal towns was 24.8 per 1,000 of estimated population. This rate is 2.7 above that for the corresponding week of last year, and also 2.7 above that for the previous week of the present year. The lowest mortality was recorded in Leith, viz., 14.0 per 1,000; and the highest in Greenock, viz., 33.4 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.4 per 1,000, or 0.4 above the rate for last week. Whooping-cough was the most fatal epidemic, and the mortality therefrom was greatest in Glasgow, in which there was also a considerable increase in the number of deaths from diseases of the respiratory

system. Acute diseases of the chest caused 137 deaths, or 21 more than the number registered last week. The mean temperature was 40.8, being 3.3 below that of the week immediately preceding, and 3.6 below that of the corresponding week of last year.

THE EDINBURGH HOSPITALS AND INFECTIOUS DISEASES.

TWO important communications have this last week been made to the municipal authorities of Edinburgh on the subject of the justice of their providing from the public rates for the reception and treatment of cases of zymotic diseases when such are epidemic. One is from the managers of the Royal Infirmary; the other from the directors of the Sick Children's Hospital. The former point out that now they have completed their arrangements in the eastern portion of the old infirmary buildings for the reception of infectious diseases, that they now have 78 beds available for such disorders, and that they have allocated them as follow: typhus fever, 20 beds; typhoid fever, 20 beds; scarlet fever, 20 beds; erysipelas, 14 beds; for students and for the observation of doubtful cases, 4 beds. They direct attention to the fact that the number of cases requiring admission during an outbreak of some of these diseases far exceeds the accommodation at their disposal; and they urge the Town Council to take the necessary steps to provide for the maintenance of the Fever Hospital, as there is no obligation on the managers to provide and maintain a hospital for diseases which the authorities are empowered to provide. They also point out that the alteration and equipment already mentioned has cost £2,500, and that the annual cost of the Fever Hospital is between £3,000 and £4,000; and that in Edinburgh only £7,000 was collected last year in aid of the Infirmary, while the expenditure of all the departments of the Infirmary actually amounts to £30,000 annually. The second communication, from the Sick Children's Hospital, directs the attention of the Town Council to the fact that, during the last four years, the average daily number of scarlet fever cases in the Sick Children's Hospital has been twenty-four, and that they have occasioned an outlay of over £1,000 *per annum*, apart altogether from any charge for interest, on the cost of the hospital buildings, or of the expense of maintaining them. They direct attention to the fact that 6,580 of the sick poor have been treated at the hospital during the last year; and considering how serious a strain the fever patients are upon their income, they submit their statement in confident expectation that the municipal authorities will give it their careful consideration, and see it to be their duty, as constituting the local authority, to subscribe to the funds of the institution an annual sum to cover the expenditure on the fever patients, in the spirit, and as provided by, the Act. There is, doubtless, much to be said in support of both communications, as both the infirmary and the Sick Children's Hospital are largely supported by the contributors at a distance; and it is not fair that their generous support should be diverted from its legitimate channel, and, in fact, only go to relieve the taxpayers of Edinburgh.

SMALL-POX AND EMIGRATION.

DURING the past fortnight, four cases of small-pox have been observed in Glasgow; two were imported from Belfast, and the other two were in emigrants going to America. A good many emigrants land in Leith, and are then sent to Glasgow and transhipped to America; as many as two thousand having done so last month. The Board of Supervision has made a communication to the Leith Town Council, requesting it to cause its medical officer of health to inspect all emigrants arriving at Leith.

HEALTH OF THE PRINCIPAL SCOTCH TOWNS.

IN the eight principal Scotch towns, there were registered during the month of March the deaths of 1,164 males and 1,169 females; the total, 2,333, is under the average for the same month during the preceding ten years by 592, due allowance of course being made for increase of population. In the different towns, the respective mortalities per 1,000 of their population were: Leith, 17; Dundee, 19; Edin-

scientist," but for all his profound speculation and absorbing devotion to his work, preserved the modesty and freshness of the amateur, of the *amateur* in the best sense of the word, an attitude of which *Goethe* has pointed out the value, and one which has been essential to Mr. Darwin's popularity, as it was to that of a no less charming master of composition, *Paraday*. Though during all his life suffering from a condition of the nervous system reacting upon the digestive organs which necessitated the greatest care, Mr. Darwin enjoyed that occupation of time and energy which consists in a methodical distribution of the hours of the day: a fixed time being regularly assigned to study or writing. It is difficult to imagine a more beautiful picture of human happiness than that which he presented in his Kentish home, working at these great books which are acknowledged to have been a priceless gift to humanity, surrounded by a devoted family, amongst whom his sons, as they grew up, had the privilege and delight of aiding their father in his studies, whilst their mother continued to the last to bestow that loving attention upon the needful management of his delicate health which has, doubtless, preserved for so long to us this great and remarkable man. This is not the occasion on which to attempt a summary of his works or an estimate of their respective importance. Now we can only mourn for the man: his work is still with us, and will remain with ever-increasing fruitfulness in all generations to come. There are many to whom the first reading of the *Origin of Species* has been an intellectual birth—the entering on a new life of thought, and it is those who will feel most surely, if the personal attributes of its writer were also known to them, that an increased sanctity, a new cause for reverence, was given to Westminster Abbey when Charles Darwin was laid beneath its stones.

THE ADVANCEMENT OF MEDICAL SCIENCE BY RESEARCH.

THE Council of the Association having this object, which was formed on March 28th, at the influential representative meeting reported in these columns, held its first meeting at the Royal College of Physicians on Thursday, the 20th of this month. Besides the *ex officio* members representing the Scotch and Irish Universities and medical bodies, the English Universities, the British Medical Association, and the Medical Societies, the Council consists, by the third rule passed last month, of members specially nominated by the President of the College of Physicians and the President of the College of Surgeons. The list so nominated for the present year is as follows: Sir William Gull, Sir Risdon Bennett, Professor Burdon Sanderson; Drs. Quain, Andrew Clark, Lauder Brunton, Payne, Pye-Smith, W. Roberts (Manchester), Michael Foster (Cambridge), Balthazar Foster (Birmingham), and Dr. Farquharson, M.P.; Sir James Paget, Mr. Darwin, Sir Joseph Fayer, Mr. Bowman, Professor Huxley, Mr. Simon, Mr. Spencer Wells, Professor Gamgee (Manchester), Professor Gerald Yeo, Mr. Jonathan Hutchinson, Dr. McDonnell (Dublin), and Mr. Teale (Leeds).

The lamented death of Mr. Darwin occurred on the day before the first meeting of the Council. The great naturalist, himself the son, the grandson, and the father of physicians, took the warmest interest in the new Association from the first, and was a munificent subscriber to its funds. The vacancy on the Council caused by his decease was filled up on Thursday by the nomination of Sir Henry Thompson.

Sir William Jenner, the President of the Association, took the chair. The offices of Vice-Chairman of Council, Treasurer, and Secretary were filled up as follows: Vice-Chairman, Sir James Paget; Treasurer, Dr. Wilks; Secretary, Dr. Pye-Smith.

An Executive Committee was then chosen from the Council, to consist of the following members: Mr. Bowman, Dr. Brunton, Dr. Andrew Clark, Dr. Matthews Duncan, Dr. Farquharson, Professor Flower, Dr. Michael Foster, Sir William Gull, Professor Huxley, Professor Humphry, Mr. Lister, Mr. Marshall, Dr. Payne, Dr. Quain, Professor Sanderson, Mr. Spencer Wells, Professor Gerald Yeo.

The first duty assigned to this Committee was the appointment of corresponding members of Council in each of the most important cities and towns throughout the kingdom, so as to enlist the support of the whole profession in this endeavour "to promote those exact researches in physiology, pathology, and therapeutics which are essential to sound progress in the art of healing, and to remove any hindrances which obstruct these researches."

Before separating, the Council passed a cordial vote of thanks to Professor Gerald Yeo for the zealous services he has rendered as Provisional Secretary during the formation of the Association.

A first list of subscriptions will shortly be published.

Letters to the Treasurer should be addressed to Dr. Samuel Wilks, F.R.S., 72, Grosvenor Street, W.; and to the Honorary Secretary, Dr. Pye-Smith, 54, Harley Street, W.

PROPOSED HOSPITAL FOR NORTH LONDON.

A CONFERENCE of Members of Council and others interested in the establishment of a new general hospital for the North of London, was held at the Athenæum, Camden Road, on Wednesday evening, April 26th. Mr. Henry C. Burdett, late of the Seamen's Hospital, Greenwich, who is well known in connection with the question of hospital administration and reform, delivered an interesting address on the "Present State of Hospital Distribution and Management in the Metropolis, with especial reference to the condition of North London".

Mr. Burdett started by observing that out of a total of 4,579 hospital beds for the whole metropolis, the population of which could not be less than four and a half millions, about one-third of whom were annually relieved at the London hospitals, 3,486 were provided by the general hospitals situated within a radius of one and a half miles from Charing Cross. Omitting the 30 beds provided by the Great Northern Hospital, the remaining 1,080 beds were to be found in hospitals situated in East London (830 beds), and West London (280 beds). Taking the Highbury station on the North London Railway as a centre, and excepting the small Great Northern Hospital, the two nearest of the General hospitals, viz., University College and the Royal Free Hospitals, were some two miles from Islington, a mile from the nearest part of North London, and consequently between five and six miles from Highgate, Tottenham, and Hornsey, being further away still from some parts of the district. Putting the population of the North London District at 1,000,000, these made but one bed for every 33,000 of the inhabitants, and Mr. Burdett asked whether one hospital bed could be considered adequate to meet the requirements of a population of 33,000 human beings resident in one of the largest districts in a vast centre like London.

The situation of the workhouse infirmaries might be fairly taken as evidence of the localities where hospital accommodation for the poor was likely to be most needed. In North London there were two large Poor-law infirmaries, viz., the Holborn and Islington Infirmaries, which collectively contained 1,157 beds, both of which were situated in the district, and within a radius of a mile and a half of Islington station. If the Poor-law authorities found the poor population so numerous as to require one bed for every 900 of the population, Mr. Burdett inquired how it had come to pass that there was only one bed provided in the general hospitals for every 33,000 of the population of the district. The effect of this deficiency upon the sick and suffering in North London was seen in the accidents which occurred last year upon the North London railway. In one case, the German Hospital, though established, as its name implied, mainly for the relief of Germans, received a number of accident cases into its wards. The managers of the German Hospital had, however, not the means, even if it were within the scope of the scheme on which that hospital was founded, to provide accommodation for the whole of the population of North London. The greater number of the sufferers by these accidents had therefore to be taken miles away into central London, to some of the large general hospitals, entailing an amount of delay, suffering, and risk, which no doubt delayed recovery in some instances, and possibly caused death in others.

As to the probabilities of the financial success of a new general hospital or hospitals for North London, Mr. Burdett's opinion, formed after a visit to various parts of the district, was that if Manchester or Liverpool, or Birmingham, could not only support one but several hospitals, then North London—with its many wealthy and mostly thrifty inhabitants—could do, at any rate, as much, if not more, than this. It had been urged that there are already too many voluntary hospitals, and that a new hospital would interfere with the income of existing institutions. Mr. Burdett differed from this view for the following reasons.

1. Experience proved that the best and most economically managed hospitals were those situated in large towns or districts, where they constituted each a prominent and an interesting feature in the life of each locality. For this reason, if it were possible, Mr. Burdett believed it would be far better for the finances of the London hospitals, as well as for the welfare of the poor, if each district had its own general hospital in lieu of the present plan of building all the hospitals upon sites confined within a space so narrow that it constitutes less than a third of the whole area the inhabitants in which had perforce to use these charities. 2. The money subscribed at the present time to the various medical institutions was more than enough, if rightly applied, to meet all necessary expenditure. Thus the number of beds available in the general, special, and convalescent institutions throughout Great Britain approached 25,000, exclusive of Poor-law and cottage hospitals. The number of in-patients relieved every year at 200 institutions was nearly 190,000; the number of out-patients relieved at 250 general and special hospitals, and provident and general dispensaries, was nearly 2,000,000 annually. The average gross annual income from all sources

received by British hospitals, convalescent institutions, and dispensaries, amounted to £1,450,452, and the average gross annual expenditure to £1,177,000. These figures proved that if the income of the different medical charities were fairly distributed according to the requirements of each centre of population, the funds at present available would be equal to the demand. From a careful examination of the data on which his opinion was based, Mr. Burdett was led to conclude that North London was a new mine entirely, so far as hospitals were concerned, and that any well-considered scheme which provided for the present needs of the poor of this neighbourhood would be most handsomely supported.

Any scheme, to be approved by the meeting, whilst it provides for the free relief of the poor, must guard the recipients of its benefits against improvidence and loss of self-respect. The district of North London, which included Holloway, Barnsbury, Canonbury, Highbury, Stoke Newington, Highbury, Shoreditch, and possibly some others, contained a population of many hundreds of thousands for which there was practically no hospital in-patient provision. In most of these districts there were a large number of clerks, shopmen, and shopwomen who lived in lodgings, in addition to the artisan classes. As there were no endowments of any kind, and as the primary expenses attending the erection of buildings, etc., would be considerable, Mr. Burdett recommended a system of free beds, supplemented by paying wards and day beds on the American model, with the addition of a well-considered plan by which all the existing medical relief agencies in the district—voluntary and free dispensaries, hospitals for women and children (of which there are two, the North-West London and St. Saviour hospitals) and the Poor-law hospitals and dispensaries—could be brought into working relations. With regard to the out-patient department, Mr. Burdett was of opinion that the system, adopted successfully by several of the special hospitals in London, of taking a small sum from those patients who were able and willing to pay, had many things in its favour. He thought that a portion of the patients' payments should be set aside for the remuneration of the medical officers. This would be the more easy in the present instance, because all the medical agencies in the district would be brought into working relations, and the medical officers would, he hoped, be appointed mainly, if not entirely, from among the members of the profession who reside in North London.

As to the question of the class of hospital buildings to "fix" upon, he judged it to be undesirable to erect one huge hospital in the centre of the district, but to have a central hospital with a number of smaller centres, each situated in convenient and populous centres here and there throughout North London, but all under the same management. It would be more economical and advantageous to build the new hospital on the same principle, as at Berlin, where one of the most complete of modern fever hospitals, containing 1,000 beds had been erected for the small sum of £10 a bed.

At the conclusion of Mr. Burdett's address, which was listened to with great attention and interest, Professor Leone Levi moved a resolution pledging the meeting to use its best endeavours to secure the establishment of a new hospital for North London. The resolution was carried. Mr. A. R. Burdett-Coutts, in a speech that showed his deep knowledge of the subject, and was alive to the dangers of leaving the district to numerous unco-ordinated agencies of the nature of the present. He said that the Baroness Burdett-Coutts took a warm interest in the work which they had met to forward, and announced her intention of contributing to the cause. From personal experience he was aware of the merits of the pay-system, by which patients contributed at least something towards the expenses of their maintenance in hospital. Something was a great knowledge of the subject, and he was convinced that a number of other, and the time would be spent in the laboratory of charitable relief work.

He concluded his remarks upon the question not to rely upon the Government for the solution of the problem, but upon the small contributions of the individual members of the community, and the interest in the subject of the poor of the hospital.

THE MEDICAL TRIAL IN OUTPATIENT DEPARTMENTS.

It is a common-sense principle, and one which is becoming more and more generally accepted, that the medical trial should be conducted in the most efficient manner, with a view to the benefit of the patient, and not to the benefit of the medical profession. The medical trial should be conducted in the most efficient manner, with a view to the benefit of the patient, and not to the benefit of the medical profession. The medical trial should be conducted in the most efficient manner, with a view to the benefit of the patient, and not to the benefit of the medical profession.

THE TAX ON CARRIAGES.

MR. GLADSTONE'S proposal to increase the tax on carriages will fall very heavily upon medical practitioners, for whom the carriage is really an instrument of trade, as much, in many instances, as the conveyances employed in trades and agricultural pursuits, which are specially exempt from tax. Under these circumstances, an effort will be made by the Parliamentary Bills Committee to induce Mr. Gladstone to give an exemption to practitioners of medicine in respect to carriages employed in the prosecution of their calling. Meantime, those gentlemen who feel strongly on this matter—and we have no doubt that their number is very considerable—should, we think, communicate with their members in the House of Commons, and at once obtain for the Parliamentary Bills Committee as much assistance as possible in this matter, and, if possible, induce members to make separate and direct representation to the Chancellor of the Exchequer on the subject. The matter is one which requires early and immediate attention; and all communication on the subject should be at once addressed to the Chairman of the Parliamentary Bills Committee of the British Medical Association, 16A, Strand.

THE CASE OF THE MILITIA SURGEONS.

WE have already, on more than one occasion, referred to the peculiar hardship which recent regulations have inflicted, during the last few years, upon the older surgeons of militia. At the request of the representatives of this body, Mr. Ernest Hart, as chairman of the Parliamentary Bills Committee of the British Medical Association, undertook to bring the matter under the attention of the Secretary at War, and to make a report. With this view, an elaborate statement, setting forth the claims of the militia surgeons, was prepared and submitted.

After some delay, owing, it is stated, to the different parties involved, and their repeated consideration, the following reply has been received.

Financial Secretary's Department,
New Office, April 17th, 1882.

"SIR, I am directed by the Secretary of State for War to acknowledge the receipt of your letter of the 15th February last, enclosing a petition from the surgeons of militia regiments, relative to their claim to a retiring allowance, or pension, on being retired by reason of age or infirmity: and inquiring whether Mr. Childers will receive a deputation from the Parliamentary Bills Committee of the British Medical Association on this subject.

"The facts of the case are as follows.

"Up to the year 1829, militia surgeons belonged to the permanent staff of militia regiments, and, like other members of the permanent staff, were granted pensions on retirement under the annual 'Pay and Clothing Act.' The 5 Act, George IV. cap. 33, referred to in the petition, was one of these 'Pay and Clothing Acts'—all of which were in force a year only, and it expired on the 25th March 1830.

"The Act 31 and 32 Victoria, cap. 76, also referred to in the petition, merely secures to the militia surgeons employed before 1829, the pensions granted to them under former Acts.

"The Act of 1830, therefore, have the militia surgeons no pension any right to a retiring allowance, or pension on retirement, whether by reason of age or infirmity; and there is no other Act of Parliament which gives them such right.

"Nor have they any claim to a retiring allowance on the ground of age. The rule under which they are retired, at upwards of sixty years of age, was issued in 1832 (4th Geo. IV. of the Auxiliary and Local Militia Act of that year), four years before the Militia Medical Department was formed; and the officers of the Department cannot, therefore, make claim on that ground as their compulsory retirement is at the age of sixty-five. The only other ground on which they are entitled to the permanent staff, they are not allowed pensions on retirement.

"It is stated in the petition, that their pay is very insufficient, and compared with that of the medical officers of the regular army. Mr. Childers is desirous to correct this view. An officer of the Militia Medical Department receives pay, exclusive of allowances, of £1 a day as a private soldier, and at £1 8s. a day as a sergeant, when he attends to his regiment; and his other duties are paid according to the duty he performs. Anybody, he is continuously employed on his military duty for only about two months in the year, but his military pay is nearly sixteen times as much as the pay which he receives, and there is nothing to prevent him from continuing his private practice. An officer of the Army Medical Department, on the other hand, receives pay of from £1 to £1 7s. 6d. a day as a sergeant-major, and at £2 10s. a day as a captain, and he is continuously employed in his private practice. He has

to take his turn of foreign service throughout the whole of his military career, moving about at considerable expense for outfit, hire of furniture, etc.; and having to serve in India and other unhealthy countries, besides being exposed to the risks of the battlefield.

Under all the circumstances above pointed out, Mr. Childers regrets he can only arrive at the conclusion, that no useful purpose could be served by his receiving a deputation in support of the petition referred to.—I have the honour to be, sir, your obedient servant,

"H. CAMPBELL BANNERMAN."

THE SELECT COMMITTEE ON THE CONTAGIOUS DISEASES ACTS.

At the meeting of the Committee on March 31st, Mr. Wheeler, of Chatham, was again called in, and was invited to justify or withdraw, according to his promise, the paragraph in his "Leaflet D," wherein he stated that, "hundreds of terrified girls have signed the form of voluntary submission, under threat and terror of imprisonment." Although this was the third time Mr. Wheeler has been questioned on this matter, he was still unable to give any further facts in support of his sweeping charge, and he could only refer to certain evidence given by Mr. Sloggett, before the Select Committee in 1869, and by Mr. Williams before the Royal Commission in 1871. These answers, he said, together with the Admiralty instructions to the police, confirmed him in the belief he had stated, and justified his expression of opinion that numbers of girls had been driven by terror into signing the voluntary submission. It was a matter of inference, and as such might be right or wrong, but he had published the statement *bonâ fide* for the public benefit, and must decline to withdraw it.

The next witness called was Mr. J. P. Kingston, of Cork, who was examined by Mr. Stansfeld. Mr. Kingston is a gentleman of independent means, who for many years past has been engaged in "Rescue" work. He is a strong opponent of the Acts, and much of his evidence is at variance with that given last year by the Rev. Henry Reed, the Roman Catholic chaplain to the Lock Hospital. Mr. Kingston admitted that the number of registered prostitutes had much diminished, but was of opinion that there had been a considerable increase in clandestine prostitution of late. He considered that public order in the streets of Cork had greatly improved, and this he attributed, firstly to the closure of a large number of disorderly houses in 1876, and secondly to the great increase in the police force, whereby a regular system of patrols was maintained. But on the outskirts of the city a great deal of out-door prostitution was carried on, and most indecent scenes were witnessed every night. He did not think that the operation of the Contagious Diseases Act had any specially deterrent effect on the minds of young girls. However, in the course of his evidence, Mr. Kingston mentioned the case of a girl, whom he had succeeded in reclaiming by putting before her mind the wretched life of a registered prostitute, thus showing that sometimes the dread of the Acts was a very powerful deterrent. He thought that the system of periodical examination had a "hardening" effect on the women subjected to it; and in proof of this he mentioned the great difficulty he found in obtaining any good moral results with the registered women, and also the great falling off in the number of the inmates of the Protestant home shortly after the Acts came into force. But he was subsequently reminded that, just about this time, a large Roman Catholic refuge was opened, to which a great number of women were admitted. Mr. Kingston owned that the administration of the Acts was, on the whole, judicious. The work was very difficult, but the police did their best; they were well acquainted with the city, so that there was little fear of their making any mistake.

The Reverend Flavel Cook, D.D., Chaplain to the London Lock Hospital, was called in and examined by Mr. Osborne Morgan. His attention was drawn to a return, put in by a previous witness, showing the number of patients admitted to the Lock Hospital during the past year, with the number reclaimed; and he was invited to make any observations upon it that seemed to him necessary. In the first place, objection had been raised to the use of the term "Government patients," which was applied in the return to those women who were sent into the hospital under the Acts. Mr. Cook explained that, by the use of this phrase, no imputation whatever was made. The women so designated were kept in wards maintained by Government; and the expression "Government patients" was simply employed for convenience and brevity in the hospital books, instead of calling them "Patients admitted under the operation of the Contagious Diseases Acts." He next referred to a point which has been already mentioned, viz., that the figures 485, given as the number of patients sent in under the Acts during the year, did not represent that number of individual women,

because every patient admitted again and again in the course of the year was treated on the books as a distinct case. As a matter of fact, there were only 224 separate persons. Out of this number, only 121 were admitted for the first time, and those only could be fairly compared with the voluntary patients, who by the rules of the hospital were only admitted once. It was not fair to compare, in regard to their chance of reclamation, the voluntary patients with those sent in under the Acts. The latter were all on one dead level, and were brutalised beyond description in appearance and manner; to call them professional prostitutes, was to designate them as mildly as possible. The voluntary patients, on the other hand, were very mixed, and many of them possessed a fair amount of education. Moreover, out of a total of 502 voluntary patients in one year, there were 24 who were married women living with their husbands. There was, no doubt, a large proportion of regular prostitutes, but there were others who were at least comparatively respectable. In fact, they shaded off gradually into the class of those who, if their own statements were to be believed, had only just fallen. Naturally, therefore, the voluntary patients presented a far more promising field for the chaplain's efforts than those sent in under the Acts, and the ratio of reclaimed women among them was much larger. But although these registered women were so hard to deal with, and so little open to remonstrance or entreaty, he did not attribute their hardened condition to the operation of the Contagious Diseases Acts. He was convinced that, if these Acts were abolished tomorrow, this class of women would remain just the same. His opinion, founded on many years' experience, moreover was, that, if these Acts were repealed, the worst class of prostitutes would not come voluntarily to the hospital when attacked by disease. And further, it was an absolute certainty that, if they did apply, they would not, after admission, remain in hospital until they were thoroughly cured, unless they were compulsorily detained. Thus it was a necessary inference that, by the agency of these Acts, a number of prostitutes was brought to the Lock Hospital and subjected to good moral and religious influences, who, but for the Acts, would have remained in a deplorable condition of mind and body. Though in the Lock Hospital itself the patients were classified and separated, when they entered the "home" attached to the hospital, they were all merged in one body. There they were prepared for domestic service or other suitable employment; and Mr. Cook mentioned, as an encouraging fact, that, contrary to natural expectation, there was never the least difficulty in procuring good situations for them. The hospital was greatly in want of funds, and he believed the subscription-list suffered on account of the antipathy many people felt to the Contagious Diseases Acts. With regard to his own views of the operation, beneficial or otherwise, of these Acts, he wished to say that his position was at present one of reserve and observation. The duties of his office did not require him to have any definite opinion on the matter, and he had not yet gathered sufficient facts to make him decide strongly one way or the other.

INDIAN BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.

The *Indian Medical Gazette* of March 1 publishes a report of a recent meeting of the profession at Allahabad, from which we extract the following. We have now a considerable and growing number of members and subscribers to the *JOURNAL* in India, and we trust that they will heartily second the effort now made under agreeably spontaneous conditions at Allahabad.

On Thursday, February 2nd, a meeting of members of the medical profession was held at Allahabad, at the house of Deputy Surgeon-General J. Hendley, who invited to luncheon all the gentlemen who could attend. The following were present, and letters were received from many others expressing regret at their inability to come:—Messrs. W. Ashton, G. Sherman Bigg, F. A. Davy, K. M. Downie, Shirley Deakin (all of Allahabad), P. J. Freyer (Ghaziपुर), F. W. Hall, Geoffrey Hall, Lees Hall (all of Allahabad), J. Hendley (Deputy Surgeon-General, Allahabad Circle), D. M. Jack (Rae Bareilly), T. R. MacDonald (Lucknow), B. O'Brien (Bara Banki), A. P. O'Connor, J. L. Peyton, J. Shearer, H. S. Smith, L. M. Thorburn, J. Watts (all of Allahabad), F. W. Wright (Bahraich), and Temple Wright (Nagpur). The chair was taken by Deputy Surgeon-General HENDLEY.

The following resolutions were carried:

1. Proposed by Mr. WATTS, seconded by Mr. SHIRLEY DEAKIN: "That an endeavour be made to establish a Branch of the British Medical Association in the North-West Provinces and Oudh."
2. Proposed by Dr. MACREDDIE, seconded by Dr. DAVY: "That a report of this meeting be published in the papers." It was intimated that this was merely to let other medical officers know what was being done in the North-West Provinces, so as to encourage them to form

on the nomination of an ordinary or corresponding member of the Council."

Where is the representation? Where is the constituent body? If the Council be, as it certainly is declared to be, the executive body, it ought, on all constitutional principles, to be an elected body; but here we see the executive, in whom is vested all power, electing its own constituency. A strange theory of inverted representation. It will surely provoke the dangerous imputation that the first exercise of the Council's "discretion" is governed by distrust of the profession which they assume to represent.

That the association so remarkably constituted may do good work, I am willing to believe; but that an association founded on true representative principles would do infinitely better work, and influence public opinion more effectively, few can doubt. It can hardly be expected that the great mass of the profession, entertaining, as it does, earnest convictions upon the great question of freedom of scientific research, will be satisfied to be "represented" by an association in which it has absolutely no voice.—I am, etc.,

ROBERT BARNES.

15, Harley Street, April 24th, 1882.

INCISIONS FOR NEPHRECTOMY.

SIR,—Will you allow me to correct a slight error which occurs in the two recent reports of the Clinical Society, owing to the confusion of the name of Langenbeck with that of Langenbuch?

The former surgeon, so far as I am aware, has never performed the operation of nephrectomy; but Langenbuch has on three occasions excised a kidney. In his second and third operations, he used an abdominal incision external to the rectus muscle, and was thus enabled to reach the kidney, on the outer side of the colon, by dividing the outer layer of meso-colon. It was this incision to which I referred as the best, when an operation through the peritoneum has been determined upon; but I maintain that the extraperitoneal operation, in the loin, must always prove the safer for kidneys of such a size as to be capable of being extracted through the limited space there at disposal.

I rose chiefly to point out that an inverted L-shaped incision—the vertical limb running on the outer edge of the quadratus lumborum, and the other extending forwards and downwards near the margin of the ribs—gave the greatest space in this region. It is the incision I found myself compelled to adopt, and it has been employed by several operators who have followed, among whom I may mention Mr. Morant Baker, Mr. Barwell, and Mr. Golding-Bird.—I am, your obedient servant,

R. CLEMENT LUCAS, B.S.

Finsbury Square, April 21st, 1882.

SPECIAL CORRESPONDENCE.

VIENNA.

[FROM OUR OWN CORRESPONDENT.]

The General Hospital.—Dr. Chiari as a Necroscopist.—A Disadvantage of Specialism.—The Water-Supply and the Health of Vienna.—The proposed Hungarian University.—University News.

THE Hospital is just now very quiet; most of the special courses are still going on, but all the university lectures have stopped; the foreign students are one by one disappearing, and new ones (chiefly American and French) are gradually taking their place. Vienna has certainly reason to be proud of the number of students that attend the university; for, in the last winter session, it rose to the very high number of 4,823. These were divided among the various faculties as follows: theology, 226; law, 2,240; medicine, 1,412; philosophy, 769; and pharmacy, 176. Since the session 1877-78, the number of medical students has risen from 712 to 1,412.

The following rather good finish to a speech was made by a student, at a social meeting, which was convened to show the regard in which the students held Dr. H. Chiari. "In many here will the unspoken wish arise, that, should fate lead any one of us to the marble table, it may be granted him to have the *post mortem* examination performed by Dr. Chiari's hand." This was not mere flattery: for his rapidity and dexterity in performing necropsies is something remarkable. Out of curiosity I timed several, and found the average for an examination—including brain, larynx, stomach, three or four feet of intestines, and bladder—to be seven minutes.

Vienna is just now beginning to feel one of the evils of carrying specialism to its extreme; for it seems that there is no man of note in Austria who can be elected to fill the chair of medicine, vacant by the death of Professor Duchek. Of specialists, there are plenty; but no

one who has devoted his time to general medicine. At present, Dr. Kretschy (for several years Duchek's assistant) is taking the duty, and a committee of the professors has been formed to consider the subject. According to the *Medicinische Presse*, it is probable that a successor will be called from Germany; and that the choice will rest between Professors Erb of Leipzig, Eulenberg of Greifswald, and Nothnagel of Jena. All of these, however, but more especially the first, are specialists.

At a meeting of the "Gesellschaft der Aerzte", held lately, Professor Arlt read a paper on the influence of the "Hochquellen" water-supply on the health of Vienna. This supply was introduced in November 1873, and is derived from the mountains, about fifteen miles out of the town. Since this date, more and more houses have been supplied from it. A fall in the mortality from typhoid fever began in 1851, but the most important was in 1874. In 1855, it averaged 2.3 per 1,000; at present, it is 0.2. In 1874, in the houses supplied from this source, the mortality was 1.7 in every 100 cases of fever; in those supplied from other sources, 3.1. In 1877, the former had declined to 1 per cent., while the latter had risen to 10 per cent. This shows very clearly what an important effect the water-supply can have on a town. If the sanitary authorities would now devote a little time to the drainage, especially the closets, many of which are unpleasantly odorous, it might be possible to get Vienna into a still more healthy condition.

From Buda-Pesth, we learn that the report of the Committee of Professors, which was recently formed to consider the suitabilities of Szegedin, as the site of the third Hungarian University, has been adverse to that town. According to the report, this town, which is situated in southern Hungary, possesses a hospital; but it is so small, and its hygienic conditions are so unsatisfactory, that it would require to be rebuilt. A meeting also took place concerning Pressburg, which was rather more favourable, as its special qualifications are not inferior, and it has the advantage of being a more cultured town. Students might well be envied who had to study at so prettily situated a town as Pressburg.

Professor Eppinger of Graz has been appointed to the chair of Pathology in Prague; Dr. Chiari is spoken of as the probable Prosector here; and Dr. Weichselbaum as Kundrat's successor in Graz. Professor Kundrat has already commenced duties here.

MILITARY AND NAVAL MEDICAL SERVICES.

THE death of Surgeon-Major Pollard occurred on Sunday, April 25th, a few days after he had attained his fifty-first birthday. For six years he had been subject to locomotor ataxy.

MR. BARRAUD, of Gloucester Place, London, has published a large-sized and handsomely mounted portrait of Sir William Muir, A.M.D. It is a striking likeness, and an admirable example of artistic photography.

THE NURSING STAFF OF H.M. FLEET.

SIR,—Naval medical officers in general must have been surprised at learning, from the letter of a "Medical Officer", that such a staff existed. When "nurses" are required on board ships of war, they are selected by the principal medical officer, and approved of by the captain, generally from among the patient's messmates. The duties of the sick-berth staff are not those of nurses; and your correspondent will find, in Par. 1053 of the Queen's Regulations and Admiralty Instructions, that "the sick-berth steward, attendants, and nurses, are to be entirely under his direction". This shows that nurses are provided independent of, and in addition to, the sick-berth staff.—Yours obediently,

SENEX.

EXAMINATIONS OF VOLUNTEER SURGEONS.

SIR,—May I ask some of your military readers to inform me whether this examination is limited to surgeons holding commissions, or if any civil medical man having the desire to pass can do so? I presume the necessary arrangements for such examinations are made by the Army Medical Department through the regiment to which the officer belongs, or are they held at certain fixed times and places?—I am, yours truly,

IGNORAMUS.

PROFESSOR VON ARLT.—The seventieth birthday of this well-known ophthalmic surgeon was celebrated in Vienna on April 18th.

PRESENTATION.—A large number of the friends of Mr. James Irvine waited on him last week at his residence in Belfast, for the purpose of presenting him with an address accompanied by a purse of sovereigns, as a mark of their esteem, and in order to testify their appreciation of the able manner in which he had discharged the duties of medical officer of Castlereagh district for the past thirteen years. The purse of sovereigns was intended for Mr. Irvine to purchase for himself a horse and vehicle.

the College; and twenty-one candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 28th, 1882.

Davies, John Charles, Rhoslanerchrugog, Ruabon.
 Thomas, John Kenaz, Burton Joyce, Nottingham.
 Thomas, Thomas Ernest, Harman Road, Brixton, E.C.
 Williams, John Henry, Llanidloes, Montgomeryshire.

The following gentlemen also on the same day passed their Primary Professional Examination.

Cree, Howard Eustace, Middlesex Hospital.
 Leslie, George Herbert, Liverpool Royal Infirmary.

MEDICAL VACANCIES.

The following vacancies are announced:—

ALNWICK INFIRMARY—House-Surgeon. Salary, £100 per annum. Applications by May 6th.
BRISTOL GENERAL HOSPITAL—Assistant House-Surgeon. Salary, £50 per annum. Applications by May 4th.
BRITISH HOSPITAL, Buenos Ayres, South America.—Resident Medical Officer. Salary, £200 per annum. Applications by May 1st.
CHARING CROSS HOSPITAL, West Strand, W.C.—Assistant Surgeon. Applications by 15th May.
CITY DISPENSARY, 46, Watling Street.—Surgeon. Applications by May 5th.
CLINICAL HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Park Place, Manchester.—House-Surgeon. Salary, £80 per annum. Applications to Mr. Edwin Marshall, Secretary, 38, Barton Arcade, Manchester, by 29th instant.
CLONAKILTY UNION—Medical Officer for Rosscarbery Dispensary District. Salary, £100 per annum, with £20 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 3rd May.
CORK DISTRICT LUNATIC ASYLUM—Assistant Resident Medical Superintendent. Applications by May 1st.
COTTAGE HOSPITAL, Scotland.—House-Surgeon. Salary, £30 per annum. Applications to No. 161A, BRITISH MEDICAL JOURNAL Office, 161A, Strand.
EBBW VALE WORKS.—Surgeon to attend the workmen and their families. Applications to Mr. W. Dayson, Ebbw Vale Works, Mon.
ENNIS UNION—Second Medical Officer and Apothecary to the Workhouse, at a salary of £75 per annum.
EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E.—Registrar and Chloroformist. Salary, £30 per annum. Applications by the 15th May.
HANTS COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by May 6th.
HARTLEPOOL UNION—Medical Officer for the District. Salary, £50 per annum. Applications to the Clerk by May 17th.
HARTLEPOOL UNION—Medical Officer for the Workhouse. Salary, £65 per annum. Applications to the Clerk by May 17th.
MEDICAL MISSION TO CENTRAL AFRICA—Fully qualified Practitioner. Salary, £200 per annum. Applications to M. Smale, Esq., Secretary, G. S. L., 89, Seymour Street, Connaught Square, W.
MONAGHAN UNION—Medical Officer for Scotstown Dispensary District. Salary, £120 per annum, with £15 yearly as Medical Officer of Health, registration and vaccination fees. Medical Officer must reside in dispensary house, Scotstown, let at nominal rent of £10 per annum. Election on the 2nd May.
ROYAL HANTS COUNTY HOSPITAL—House-Surgeon. Salary, £100 per annum. Applications by May 6th.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL, St. George's Circus Southwark.—Clinical Assistant, three days per week. Salary, £25 per annum. Applications by May 6th.
SOUTH YORKSHIRE COUNTY LUNATIC ASYLUM, Wadsley, near Sheffield.—Third Assistant Medical Officer. Salary, £100 per annum. Applications to Dr. Mitchell by the 8th May.
ST. GEORGE'S HOSPITAL.—Physician. Applications by the 11th May.
ST. GEORGE'S HOSPITAL.—Assistant-Physician. Applications by the 11th May.
SURREY COUNTY LUNATIC ASYLUM, Brookwood.—Junior Assistant Medical Officer. Applications by May 1st.
TORBAY HOSPITAL AND PROVIDENT DISPENSARY, Torquay.—Junior House-Surgeon and Dispenser. Salary, £90 per annum. Applications by May 22nd.
UNIVERSITY COLLEGE, W.C.—Jodrell Professorship of Zoology. Salary, £288 per annum. Applications by the 8th May.
WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon. Salary, £80 per annum. Applications by May 6th.
WEST RIDING LUNATIC ASYLUM, Wakefield.—Resident Clinical Assistant. Applications to Dr. Herbert Major, Medical Superintendent.
WILTS COUNTY ASYLUM—Assistant Medical Officer. Salary, £120 per annum. Applications by 17th May.

MEDICAL APPOINTMENTS.

BURNE, J. McW., M.B., appointed Surgeon to the Chelsea, Brompton, and Beigrave Dispensary, *vice* H. Mackintosh, M.D., resigned.
 CHAFFEY, W. C., M.B., appointed Junior Resident Medical Officer to the General Hospital for Sick Children, Pendeley, Manchester, *vice* A. F. Street, M.B., resigned.
 COX, L. F., M.R.C.S., appointed Medical Superintendent to the North Wales Counties Lunatic Asylum, Denbigh, *vice* W. Williams, M.B., resigned.

CULLINGWORTH, Charles J., M.D., M.R.C.P.L., appointed Physician to St. Mary's Hospital for Women and Children, Manchester.
 DAVIES, David, M.R.C.S.Eng., reappointed Medical Officer of Health for the Stapleton Urban Sanitary District, Gloucestershire.
 DINEY, H. E., M.D., appointed Surgeon to the Malvern Rural Hospital, *vice* W. Tyrrell, M.R.C.S., resigned.
 FLEMMER, H. B., L.S.A., appointed Junior Assistant House-Surgeon to the Sheffield Public Hospital and Dispensary.
 HADDER, W. B., M.D., appointed Medical Officer to the Emperor Life Assurance Society, *vice* R. C. Croft, L.R.C.P., deceased.
 HOVELL, T. Mark, F.R.C.S.Eng., appointed Assistant Aural Surgeon to the London Hospital.
 HUGHES, John, F.R.C.S.Eng., reappointed Medical Officer of Health for the Carmarthen Urban Sanitary District for three years.
 KERSWILL, John B., M.R.C.P.Eng., appointed Medical Officer of Health for the St. German's Rural Sanitary District.
 LONG, H. P., M.R.C.S., appointed Medical Officer for the Workhouse to the Mere Union, *vice* J. Chilcot, M.R.C.S., resigned.
 LYDEN, M. A., L.R.C.S., appointed Medical Officer for Castlebar Dispensary District, *vice* G. A. O'Connor, L.R.C.P., resigned.
 MACSWINEY, C. H., L.K.Q.C.P.I., appointed Medical Officer for Gorteen Dispensary District to the Boyle Union, *vice* A. D. Peyton, L.K.Q.C.P.I., resigned.
 PHILLIPS, E., L.R.C.P., appointed Assistant Resident Medical Officer to the Children's Hospital, Birmingham.
 RANSOME, A., M.D., appointed Honorary Physician to the Hospital for Consumption and Diseases of the Throat, Manchester, *vice* J. S. Fletcher, M.D., resigned.
 SILK, J. F. W., M.B., appointed House-Physician to the General Infirmary, Leeds, *vice* A. G. Barrs, M.B.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

BLENKARNE.—On April 20th, at West Street, Buckingham, the wife of W. l'Heureux Blenkarne, M.R.C.S., L.S.A., a daughter (Blanche Annie).

MARRIAGE.

ADAMS—VEVERS.—April 20th, at St. James's Church, Piccadilly, by the Provost of Worcester College, Oxford, assisted by the Rev. Dacre Craven, brother-in-law of the bridegroom, the Rev. Edward Charles Adams, M.A., Fellow of Worcester College, of "The Lindens," St. Leonard's, to Jane Elizabeth, second daughter of Henry Vevers, Esq., of Hereford, President of the Worcester and Herefordshire Branch of the British Medical Association.

THE jubilee of Professor Henle's graduation as doctor of medicine was celebrated in Göttingen on April 4th. A bust of the eminent professor was unveiled in the anatomical department of the university.

MR. ARTHUR FLINT, L.R.C.P., of Westgate-on-Sea, has been unanimously elected to the Rural Sanitary Authority and Joint Hospital Committee of the Board of Guardians of the Isle of Thanet Union.

SOCIETY OF APOTHECARIES.—At a Court of Assistants of the Society of Apothecaries of London, held at their Hall, Blackfriars, on the 21st March 1882, it was resolved unanimously: "That this Society desire humbly to express to Her Most Gracious Majesty the Queen their feelings of deep indignation at the recent attempt upon her valuable life, and their hearty thanks to Almighty God for her providential deliverance from so great a danger."

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.—A meeting was held at the Mansion House on the 26th instant, under the presidency of the Lord Mayor, to support the efforts of the Metropolitan Provident Medical Association to extend self-supporting and self-governing provident dispensaries throughout the metropolis. The Right Hon. James Stansfeld, M.P., the Chairman of the Association, moved the first resolution: "That, in the opinion of this meeting, the formation of self-supporting and self-governing provident dispensaries in co-operation with hospitals will conduce to beneficial relations between the medical profession and the working classes, by securing due attention to the medical needs of the latter on reasonably paying and non-pauperising terms, and by relieving the overcrowded out-patient departments of the hospitals." Referring to the great existing out-patients' departments at our hospitals, with their vast system of indiscriminate relief, he said they were not only a heavy weight to those institutions, but injurious to the community at large, as they tended to pauperise and to demoralise the habits of the inhabitants of this metropolis. It had been found that many were desirous to give substantial help to a provident dispensary who would not take shares in the company that had been first formed. It had therefore been determined to open "The Dispensaries Preliminary Expenses Fund". The resolution was seconded by Mr. Timothy Holmes, and carried unanimously. Another resolution, pledging the meeting to support the association, was also carried.

During some of the cases of A. *serpens* NATHAN, as a recent finding at the Faxon Laboratory at Madison, Mr. Faxon gave the history of a patient whose leg treated for this disease was again attacked, was without pain in the late stages of the disease, without any suppuration, the leg gradually been treated by a hot-water current and massage; also by mechanical massage, continuous electricity, to which and a course of potassium, the patient recovered. Mr. Faxon observed the absence of suppuration, and, for three times after the operation, the patient appeared to be cured, but eventually the pain returned, and her leg had to come again to the right side. Mr. Faxon, having the patient in his hands, the operation is still, and apparently, showed to him the usual outcome of the disease. The pain was made less without other any suppuration, and the leg was only slightly drawn to the right side. This improvement was followed by a further course of treatment, the usual necessary course to give an important part in the treatment of the case. If the patient, this treatment was not abandoned.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.20 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—West London, 2.30 P.M.

FRIDAY..... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MARSH CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin,
M. Th., Dental, M. W. F., 9.30.
GUY'S.—Medical and Surgical, daily, exc. Tu., 1.50; Obstetric, M. W. F., 1.30; Eye,
M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu.
Th., 1.12.
KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.20; Obstetric, Tu. Th., S.,
2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear,
Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.
LONDON.—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M.
Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 0; Ear, S., 9.30; Skin, W., 9; Dental,
Tu., 9.
MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S.,
1.30; Eye, W. S., 8.30; Ear and Throat, Tu. F., 1.40; Dental, Tu. F., 9.
NORTH DITCHHAMPTON.—Medical and Surgical, daily, except Sat., 1; Obstetrics, Tu. Th. S., 9;
o.p., W. S., 1.15; Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 7.20; Larynx
W., 6.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.
PENINSULAR HOSPITAL.—Medical and Surgical, M. Th. F. S., 1; Obstetric, Tu. S., 1.30;
o.p., Tu. W., 2; Ear, Tu., 1.30; Skin, Tu., 1.30; Throat, M., 2; Orthopaedic,
W., 2; Dental, Tu. S., 9; Th., 1.
ST. MARK'S.—Medical and Surgical, daily, 1.15; o.p., Tu. F., 2.30; o.p., Tu.
F., 2.30; Ear, M. Th., 2; Skin, Tu. In., 1.30; Throat, M. Th., 1;
Dental, W. S., 9.30.
ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2;
o.p., Tu. F., 1.15; Eye, M. Th. F., 1.15; o.p., Tu. F., 1.15; o.p., Tu. F., 1.15;
Ear, Tu., 1.15; Dental, Tu., 1.15; Otolaryngeal, Tu., 1.15; Skin, Tu., 1.15;
Orthopaedic, Tu., 1.15; Dental, Tu. F., 9.
VICTORIA HOSPITAL FOR CHILDREN.—Medical and Surgical, daily, 1.15; Obstetric, M. Th. T.
F., 1.15; Ear, M. Th. Tu. F., 1.15; Eye, S., 1.15; Skin, W., 1.15; S., 1.15;
Larynx, Tu., 1.15; Dental, M., 1.15.
WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; M.
Th., 2.30; Ear, Tu. F., 0; Skin, Th., 1; Dental, W. S., 9.15.

Figure 4. A. A schematic diagram of the experimental setup. The subject is seated in a chair, viewing a video screen. The video screen displays a target (a red dot) and a starting point (a green dot). The subject is instructed to move the hand from the starting point to the target. B. A graph showing the relationship between the distance from the starting point to the target (X-axis) and the time taken to reach the target (Y-axis). The graph shows a linear relationship, indicating that the time taken to reach the target increases linearly with the distance from the starting point to the target.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE ATTRACTION TO EDINBURGH.

SIR,—Referring to the letter under this heading in the JOURNAL of April 1st, I beg leave to make the following remarks. 1. I take it for granted that Scottish universities and medical schools do not exist solely for the use of Scotchmen, any more than English or Irish universities and medical schools exist solely for the use of English or Irishmen. All universities and medical schools must be considered as the common property of the United Kingdom; and this has become more especially the case, so far as medicine is concerned, by the passing of the Medical Act, which extended the qualifications granted by these bodies to the whole empire, whereas before they were limited to their respective countries. 2. In choosing a medical school, students or their guardians are usually actuated by such considerations as: first, the quality of the teaching and the facilities for study; second, the possibility of getting, at the place of study, a legal qualification to practise; third, the entire cost. 3. Now, I think there can be no doubt of the excellence of the Edinburgh teaching, whether it be conducted by the professors of the university or by the large and complete staffs of the other two flourishing medical schools. The facilities for study are ample, and the student for the licences of the Colleges of Physicians and Surgeons can pick his teachers from any one or all three of the schools. The town itself does not offer in so large a degree the temptations which assail and distract the London student; and the atmosphere is decidedly academical and professional.

Again, by the happy agreement of the College of Physicians with the College of Surgeons, a conjoint examination is held by representatives of both Colleges, so that students may obtain at once the diplomas of both Colleges—an arrangement which, although much desired, the two London Colleges have not yet been able to effect. By this conjoint scheme, the unnecessary expense of both time and money is saved by the Colleges and the students—a matter of much consideration to the latter, who thus escapes the expense and absurdity of a second similar examination.

Finally, the cost of living and the class-fees being smaller than in England, the student effects a considerable saving in his four years' curriculum.

These, sir, are, I believe, the true causes of "the attraction to Edinburgh." As for the other reasons which your correspondent implies to exist, they may be left to those who wish to believe them, and to work out their own eradication. Comparisons between different examinations and qualifications are invidious; and I think your correspondent should have rested content with his belief in the pre-eminence of his university, and trusted to her children, by their professional ability and otherwise, to maintain her good name. On the other hand, so far as those are concerned who prefer to take their physicians' and surgeons' licences from the two Colleges, your correspondent may set his mind at rest. They will never reflect anything but credit on the Edinburgh School; and I know, from personal experience, that they ably hold their own amongst the profession generally. Altogether, I feel much inclined to remark upon your correspondent's letter—"trop de zèle," "trop de zèle."—I am, sir, yours faithfully, M.B. ST. AND.

SIR,—I shall feel obliged if you will kindly allow me space for a few words in reply to the letter of "Civis Acad. Edinensis." The writer of that letter has seized on a very slender pretext to draw an invidious distinction between the Royal Colleges of Physicians and Surgeons of Edinburgh, and the university of which he claims to be a graduate. His remarks are as uncalled for as they are offensive to the colleges named, and to the great mass of Edinburgh licentiates, not to speak of the class of gentlemen whom he designates the "plucked ones." Could anything be more gratuitously offensive than the statement that "there is a widespread idea among the unsuccessful that the Edinburgh colleges are a haven to which they can stretch their poor plucked wings, and find a certain rest"? Again: "If it (the examination) be not inferior, it is cruel not to advertise these plucked ones, and also injurious to the reputation of the Edinburgh Medical School." What a burst of sympathy and pity is here expressed for the poor "plucked ones," and for the welfare of the Edinburgh medical schools! Had the writer known anything of the requirements for the double qualification, and how the examinations are conducted at Edinburgh, he might have paused before making such an insinuation. He would have learned, had he inquired, that an avowal of the standard of these examinations is made, and he would also have learned that an idea which at one time gained some belief, that Edinburgh opened its doors to students who were unsuccessful elsewhere, has years since been exploded; and that, if ever there was anything to justify it, things are greatly changed, and now the examinations for the double qualification are as extensive and as strict as they can well be made. Indeed, there are no other examining boards who give a more thoroughly searching, practical examination. I have known several gentlemen, some of them prizemen and gold medallists of the Queen's University, who went to Edinburgh for the double qualification, and were rejected. I mention the late Queen's University, because the very high standard of its examinations is so well known and acknowledged, that no one will venture to question it. The assertion about the Edinburgh qualification is entirely at variance with fact. Englishmen everywhere, no matter where they have graduated, value it as much as any other, provided the holder can claim their respect; while, in America and the colonies, it is very highly appreciated. I state this from personal knowledge.

A short time ago, I had a promise of a very good post in Australia, when ready,

and the Edinburgh qualification was almost made a *sine qua non* to obtaining it, or going there at all. The attraction to Edinburgh is undoubtedly great, and deservedly so, not because diplomas are more easily procured there than elsewhere, but that it affords a good qualification in any part of the civilised world. Considering the large numbers who go for the diploma, many of whom are doubly qualified beforehand, there is nothing wonderful that, out of the small number who passed at the last examination, only three were Scotchmen. There is nothing to warrant the assumption that this is an average proportion, or that Scotchmen do not avail themselves to the fullest extent of their own examining board.

"Civis Acad. Edinensis" need, therefore, have no fear that he will be considered as having entered the profession by the "back door," or that the university for whose reputation he is so much concerned will be considered inferior to any other, so long as it maintains its present high standing. But he has taken the surest means of depreciating it by the want of confidence he has shown in asking for the republication of a meaningless paragraph from a local newspaper, which he uses as a lever to raise a discussion on the supposed "pre-eminence" of the one, and the imaginary demerits of the other. A war of schools can only end in jealousy and bad feeling, which should not be allowed to creep in amongst us. If any change be needed in the medical schools, it is to make their teaching less theoretical and more practical. I do not undervalue extensive reading; it is what I contend for; but I know it is quite possible to make an advanced study of a specified set of text-books so compulsory, that the future student of medicine will be obliged to "cram" incessantly in order to satisfy the examiners at the end of his four years; and after he is qualified, he must set about learning his practical work. The Edinburgh Colleges have, with commendable judgment, made their examinations so practical, while they demand a thorough knowledge of every subject usually required from candidates, that they can well afford to bear a shot from a masked battery, especially when one looks over the list of eminent men who have qualified there, and so long as their diplomas are held in such favour as they are at the present day. I trust they may continue to send as good men into the profession as they have hitherto done, without either fear or favour from without.—I am, sir, yours faithfully, EDIN.

SIR,—It seems strange to me that the *Edinburgh Evening News* and "Civis Acad. Edinensis" should want to be enlightened upon a subject which, I should think, was very clear to anyone who had lived in Scotland, or knew about medical education in Scotland. After I had lived in Scotland a few weeks, I could scarcely understand how any Scotchmen ever thought of going up for the L.R.C.P. or L.R.C.S. Scotland possesses three sterling universities, where a student who takes up medicine can obtain a sound medical education for the medical degrees the university confers, at about the same expense as if he took the double qualification, and only a little more studying; for he is taught up to the standard of the examinations of the university at which he is. Is it very likely he will go in for ordinary diplomas when he can obtain the M.B., C.M., so easily?

The English student cannot obtain a degree unless he keeps residence at some university, and perhaps he does not think of that until he has spent his four years at some London hospital; and being, perhaps, without money, or not having time to go in for four or three examinations, he gladly avails himself of the double qualification where he is examined only twice, and can get the two diplomas for £20. If the College of Physicians and the College of Surgeons or the Societies of Apothecaries were to combine together and give two sensible examinations, and charge about twenty-one guineas for the two diplomas, I do not think your correspondent need have asked the question.

I will not enter into the merit of the examination of the two combined colleges, for I think the silent contempt with which the authorities at Edinburgh have treated uncomplimentary remarks that have from time to time appeared in the JOURNAL sufficient answer to any remarks on them.—I am, your obedient servant, M.B.

SIR,—Had "A. T." passed an examination on the last "Students' Number" of your JOURNAL, as well as in Hindustani, he would probably have been able to give an explanation to "Civis Acad. Edinensis," which would have been more consistent with facts than is the case in his letter to you this week. The laity in England have, as a rule, very hazy notions concerning medical degrees and qualifications, especially Scotch ones; but it is a little surprising that a medical practitioner—as I take "A. T." to be—should be ignorant of the distinctions between the University and the Colleges of Physicians and Surgeons of Edinburgh. The L.R.C.P.Ed. is certainly not a very difficult degree to obtain, but that is not due to the absence of chemistry in the examinations, as the regulations state that candidates are examined in that subject.

The facility with which the Edinburgh University degree can be obtained, exists only in the minds of such as "A. T.," as it is well known that the M.B.Ed. is a guarantee of thorough training for at least four years (two of which must be at an university); and is to be obtained only after a searching examination in all the branches in which a medical man ought to be proficient, as well as in chemistry, botany, and natural history.—I am, yours truly, R. O. L.

London, April 15th, 1882.

PERCUSSION AS A THERAPEUTIC AGENT IN NERVOUS DISEASES.

SIR,—With reference to Dr. Granville's article in the JOURNAL of March 11th, on the above subject, I should like to state that, some time ago, I was informed, by an officer who had been a good deal in Japan, and knew something of the habits and customs of the Japanese, that light percussion (immediate) by the fingers or knuckles of both hands, is a very common remedy there for any sort of pain. Percussion with them is generally accompanied by kneading and rubbing of the part affected.

The force applied during percussion varies according to the part affected, and my informant was operated on by the stretched out fingers for severe headache, and derived much benefit from it. He had also seen a case of constipation, which was attempted to be relieved by "circular" percussion around the umbilicus; but the treatment did not succeed, and the intestine was consequently opened through the abdominal wall, and the patient's life saved. "Percussion" with them means also "patience," for a Japanese operator thinks nothing of continuing the process for one or more hours. It is much recommended by the native doctors, and frequently practised by the blind.—Yours faithfully, J. H. ANDERSON.

H. M. S. Salamis, April 10th, 1882.

INFANTILE PARALYSIS.

SIR,—In reply to Dr. Francis's query in the JOURNAL of the 15th instant, I would recommend him to apply for the appliance he requires to Mr. Bigg, 56, Wimpole Street, Cavendish Square, whose inventive genius is well known in such matters. Faithfully yours, ANDREW SPEARING.

Shaw, Oldham, April 17th, 1882.

CROONIAN LECTURES ON THE CLIMATE AND FEVERS OF INDIA.

Delivered before the Royal College of Physicians of London.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.,
Physician to the Secretary of State for India in Council.

LECTURE III. PART II.—*Concluded.*

Enteric Fever.—It was not until the year 1853, when attention was called to certain pathological changes in the intestines of persons dying of fever in India, that it began to be suspected that protracted and fatal cases were identical with the typhoid of England. Careful observation of the morbid appearances after death, and the symptoms and progress of the disease during life, led observers to believe that the diseases were one and the same, modified, it might be, by climate and the influence of malaria; and in a few years typhoid fever became fully recognised as a prevalent and fatal form of disease, especially among young and susceptible Europeans, a class notably represented by the young soldiers of our army in India. Annesley had left it on record that he had never remarked any appearance of fever from a specific or contagious source in India, and that, although believing in the influence of infection as regards the continued adynamic fever of temperate climates, he had never, during an experience of thirty-seven years in India, observed fever to proceed from contagion in that part of the world. The fevers, therefore, in India, and he believed of warm climates generally, are the effects of exhalations from the soil, and of vicissitudes of season. But great advances have been made in our knowledge of the nature of fevers since he wrote, and it has been fully established that relapsing typhus and typhoid fevers are Indian diseases. Within the period of my service in India, attention was first directed to the existence of typhoid fever of India; it now appears in the sanitary report as the chief fever death-cause among our young soldiers. It would, however, be as reasonable to say that it had not existed in England before Zincke and others defined it as a specifically distinct disease, as that it did not exist in India before Scriven, of the Bengal Medical Service, pointed out its presence in that country, and separated it from remittents in India, as in England it was separated from typhus. The honour of this important step in fever pathology is clearly due to Scriven, and his views were confirmed by Dr. J. Ewart, a Fellow of our College, and the late Dr. E. Goodeve, who published a clinical lecture on the subject in the *Indian Annals of Medical Science* of January 1859. But these gentlemen made no discovery of a new disease; their merit consisted in pointing out one, but which had hitherto been overlooked as distinct from other diseases with which it had been associated and confounded. Annesley, Twining, Martin, and others had pointed out the diarrhoea, enteric ulceration, and other phenomena characteristic of adynamic types of fever. Annesley says*: "The fevers of warm climates, especially as observed in the Eastern hemisphere, seldom go through their entire course without evincing a predominance of morbid action in some viscus or texture. Marks of disease of the small and large intestines are generally confined to their internal tunics. The duodenum, jejunum, and ileum, especially the duodenum and termination of the ileum, very frequently are diseased in their mucous surface, which is inflamed in patches, sometimes covered with a muco-purulent secretion, and studded with small ulcerations, particularly the termination of the ileum. In several cases the ulcerations, which sometimes are large and far apart, at other times small and agglomerated, especially the former, have nearly penetrated the tunics of the intestines, and in a very few cases I have observed this occurrence actually to have supervened, the contents of the bowels being partly effused into the peritoneal cavity, and having produced peritonitis. Marks of inflammatory action are occasionally met with in the peritoneum, omentum, and mesentery, in all the forms of fever; and in protracted cases of the remittent and intermittent types, especially those in which the liver and spleen have been obstructed or otherwise diseased, considerable effusions of a serous fluid into the cavity of the abdomen are not uncommon. In these cases the peritoneum presents either a sodden appearance or congestion of the veins. In many of those cases, also, the mesenteric glands are enlarged, of a

light colour, and hard consistence. Diseased appearances of the mesenteric glands are not associated alone with the dropsical effusions, as they are frequently observed when no such effusion is present, and when the mucous surface of the bowels is diseased, and the liver and spleen enlarged, and otherwise changed in structure." Sir R. Martin, speaking of the congestive continued fever of Bengal, says: "In neglected cases we find hepatic abscess and sometimes ulceration of the mucous digestive surface. The latter I found to be very prevalent among the labouring classes of natives whom I had to treat at the Native Hospital of Calcutta, on account of neglected fevers of from fifteen to twenty days' duration, and a large proportion recovered." Twining, in 1842, describing what he called congestive fever, says: "There is often much congestion at the root of the mesentery, and in the fat and cellular structure surrounding the duodenum, where it is bound down across the spine. In a few rare instances, where patients have died after a protracted fever of this sort, superficial ulcerations of the mucous membrane of the small intestines were found. I will not venture to assert that the ulcerations above alluded to ought to be considered as causes of the fever of the cold season; and my reason for not deeming that pathological condition a primary affection existing at an early period of the disease is, that active purgatives may be repeated daily for a long time at the commencement of this fever without producing irritation—in fact, they almost always afford relief. Should extended observations prove that these ulcerations of the small intestine exist generally in the cases which terminate fatally, and that such a pathological condition is rarely met with in the inspection of subjects that have died of other descriptions of fevers in Bengal, I should be inclined to adopt the opinion that a peculiarity of the disease would be thus ascertained, which might establish a resemblance to some modifications of European typhus, although the resemblance be not strictly correct in all its details." Dr. Morehead remarks that the observation of a case, together with the reports of Scriven, Ewart, and Goodeve, removed the doubts he had previously entertained as to the existence of typhoid in India, and says: "The investigation will require to be prosecuted with much care, in order that the tendency so common in medical research to exaggerate the importance of new subjects of inquiry, to the neglect of established truths, may be sufficiently controlled; it is to be recollected that disease of Peyer's glands, either in the stage of turgescence or ulceration, is not peculiar to typhoid fever only. About 1851, Assistant-Surgeon Lee made several *post mortem* examinations at the General Hospital of cases of fever of the hot weather, occurring chiefly among European seamen, and was surprised to observe ulceration of Peyer's patches, and was reminded of cases of dothenteritis which he had just been seeing in Edinburgh. Dr. Macpherson had not been in the habit of examining the small intestines minutely in fever cases, it being the received doctrine that they were not much affected in tropical fevers. The fevers in which the ulceration was discovered did not appear to him to differ from fevers which he had been treating for many years, except in so far as he was accustomed to see the types of fever vary considerably in different seasons. In or about 1853 my attention was arrested by a case of fever at Lucknow in the person of a young Frenchman, aged 28, who died after a fever of more than three weeks' duration, attended with diarrhoea, hæmorrhage from the bowels, iliac gurgling, tympanites, stupor, sordes, and, finally, death; a collapse evidently supervening on perforation. He had been exposed to malarial influences; the fever was regarded as climatic, for there was no reason to suppose that he had been exposed to the influence of fecal poisoning. I then thought of the possibility of malarial fever assuming the enteric form. Dr. Maclean, C.B., says: "So far back as 1838 I treated fevers in Secunderabad, in the Deccan, and in China as far north as Nankin, extending over more than twenty days, with bowel complications. The mortality exceeded that of fevers distinctly malarial, and they were not amenable to quinine; death from hæmorrhage from the bowels was frequent, and the intestinal lesions were those we now recognise as characteristic of enteric fever."* Dr. Gordon, C.B., says: "In fevers as I saw them in British soldiers, enteric complications, including ulcerations precisely like what occurs in specific fever in this country, occurs in fevers (in India) that cannot be traced to anything pythogenic or otherwise specific. If a non-specific fever in the tropics occurs in a young delicate lad, it will almost to a certainty become complicated sooner or later in its course by diarrhoea or dysentery, and ulceration will occur in small or large intestines, Peyer's glands included." I do not gather from Dr. Gordon's reports and papers that he denies the existence of specific typhoid fever in India, but rather that he insists on the necessity of sifting all cases, with the view of ascertaining if cases recorded as specific fecal enteric fever may not

* *Diseases of India*, p. 535.

* I refer to Dr. Maclean's observations as proof that fever with enteric ulceration existed previously to 1851, not in reference to etiology.

cause of enteric fever. Dr. Parkes (*Practical Hygiene*, ed. 1866, p. 455) also entertains doubts that the generally accepted cause is the only one to which enteric fever is to be referred. No one has more persistently and ably affirmed that enteric fever is generated in India by other causes than fecal emanations than Dr. Bryden. In 1872 he wrote: "Eight years since, from the facts then at my disposal, I made the generalisation, that the typhoid fever of the British soldier in India is primarily due to climatic influences. The belief that defective conservancy will be found in every case when typhoid fever shows itself is very apt to lead to the conclusion that any statement to the contrary must be erroneous. This is a narrow view, and it is not warranted by any feature in the aspect of typhoid as we meet with it among our soldiers." (*Appendix to the ninth Report of the Sanitary Commissioner with the Government of India*, 1872.) Dr. Wise's remarks on malarial pneumonia with enteric symptoms are interesting and valuable: "The disease with which paludal enteric fever is most frequently and easily mistaken is asthenic, or typhoid, pneumonia. This is a most common disease in Bengal, either appearing idiopathically, or secondarily, to other diseases. Among the natives it generally assumes the type called bilious, in which gastric and enteric symptoms are most conspicuous. In thirteen cases I made careful examination of the small intestines after death from this disease. In ten, congestion, more or less intense, and varying from a pink to a port-wine colour, with patches of extravasation, were found in the mucous membrane of the ileum; in one an ulcer of the duodenum with extravasated spots in the ileum existed; in one Peyer's glands were congested and pitted, while the mucous membrane around was deeply injected; and in one Peyer's patches were singularly distinct, their surfaces being humid and reticulated, the solitary glands were swollen and mammillated, and the mesenteric glands were enlarged, containing a milky fluid like chyle. But pneumonia with typhoid symptoms is no less common as a complication of intermittent or remittent fever—the febrile pneumonia of Morehead. As cases are seldom seen among natives until at least a week has elapsed it is often difficult to distinguish the primary disease. If the patient is intelligent, and is seen early, a correct conclusion may generally be arrived at; but when he is delirious, with a black furred tongue, has twitching of the muscles, and diarrhoea, it is often impossible to decide. Pneumonia with enteric symptoms is often, I believe, confounded with pneumonia secondary to paludal enteric fever. In my experience, inflammation of the lungs rarely appears in the course of any of the malarious group of fevers before the end of a week, while in enteric fever it is generally during the third week. In all cases of doubt, twenty-grain doses of quinine given twice a day, or five-grain doses with antimony every four hours, as recommended by Morehead, will decide the question whether the disease is secondary or not. There is nothing more certain in medicine than this. A few doses of quinine given to a patient prostrate with febrile pneumonia work a wondrous change; they check the fever, and the patient passes in a few hours from a state of misery into one of comparative ease and health. Of all the practical benefits conferred by Dr. Morehead on the people of India, none probably will be more enduring than this one, which he was the first to recognise." Surgeon-Major A. Clark informs me that typhoid fever has prevailed very extensively in Natal and Zululand during the war. Since January 1, 1879, to May 31, no less than 267 admissions for enteric fever have been recorded. Many of these occurred in healthy camps on ground previously unoccupied (virgin soil), and in bodies of picked men. The water supply, as a rule, good; no sewers or drains; conservancy, dry earth or trench, and carefully attended to. Surgeon-General Woolfrey describes this fever as "typho-malarial". He says: "I am of opinion that it is climatic, the true autumnal fever. It, as a rule, commences with sore throat, a peculiarity; the rose-spots are invariably present, and in fatal cases the lesion of Peyer's patches are well marked." At the time that enteric was reported so common in the first division, jaundice also prevailed very extensively, but was unknown in the second division. Enteric has also been reported as causing much sickness amongst the troops in Afghanistan. Here, again, camps were often pitched on virgin soil, though the water supply was far from satisfactory, and dead camels so constantly polluted the streams. It prevailed with cholera and severe remittent fevers. Altitude made no difference, cases being admitted in camps several thousand feet above sea-level. Enteric cases are reported from nearly every station in the Bengal Presidency, some such as Cambellpore, in the Punjab, where the cases of enteric fever have occurred from time to time, without any discoverable connection with each other, and in the great majority of cases in the persons of new comers. In every instance the disease was closely marked by the usual characters, and could not possibly be mistaken for any other. If enteric fever, according to the commonly accepted theory of its origin, is always

associated with defective sanitary arrangements, then Ascension, of all places with which I am acquainted, ought to be exempt from it. There is no such thing as a sewage drain or cesspool in the island, all sewage and other filth being removed daily and thrown into the sea, to leeward of all dwelling-houses. The water (partly collected from the roofs of buildings during rain, and partly condensed) is stored in iron and cemented stone tanks removed from all possible source of contamination, with the exception of the summit of Green Mountain, where there is a soil resulting from the decomposition of grey trachyte. The island is a mass of volcanic rock and ashes, incapable of supporting any vegetable life whatever. My investigations have utterly failed to connect the fever with any of the conditions commonly believed to be essential to its production. Dr. Don, of the Medical Department, says: "The early symptoms of these fevers are usually so much alike, that it is often quite impossible on admission to determine what form may ultimately supervene. Many times have I seen cases admitted under febricula, then changed to simple continued, and finally to enteric, as the fever developed. This was forced on us by the supervision of phenomena which it was quite impossible to anticipate. They occur simultaneously, concurrently, and mixed up at the same time and place, in the same regiment or community. From the same barrack or company room one man may be admitted into hospital with febricula, a second with simple continued, and a third with enteric, all on the same day. All these fevers have the same seasonal period of prevalence. During winter and spring they are at a minimum, or wholly absent; from June to October is the season of their prevalence north of the line, with a corresponding reverse period in the southern hemisphere. I think they can be better explained by a study of the internal or predisposing causes: "1. Constitutional, hereditary, or acquired predisposition. 2. Age. 3. Want of acclimatisation. I cannot help thinking that enteric lesion is to be found in several forms of a closely allied fever; at the same time this bowel lesion does not necessarily imply a specific causation under every circumstance and in all parts of the world. In short, there can be no doubt that enteric fever cases constantly crop up in hot climates, the causation of which is inexplicable, either by a theory of propagation or of pure pythogenesis." I am indebted to Dr. Kynsey, P.M.O. of Ceylon, for an interesting memorandum on the fevers of that island, which seem to be of a milder type than those of India. It singularly illustrates the confusion which still obtains about the nosology of tropical fevers, and attests the existence of a form of climatic continued fever which resembles the specific enteric. There can be no doubt as to the existence in Ceylon of genuine enteric fever, but there is a strong tendency to call all protracted fevers by this name; but I am convinced there is a form of fever in the tropics indistinguishable during life from this fever, and without the characteristic lesions of Peyer's glands after death.

Anomalous Fever in China and elsewhere.—Dr. P. Manson, of Amoy, China, has sent an account of an epidemic of continued fever in China. It was of a circumscribed prevalence and presented anomalous characters (*China Imperial Maritime Customs Report*, II Special Cases, No. 2, 1881). In some respects it resembled enteric, in others malarial fever. Quinine in some cases was of benefit, in others it failed. The fever was of a continued type, with high temperature, up to 105° or 106°, diarrhoea, delirium, and some rose-coloured spots. In some of the cases, he says: "The symptoms of typhoid were present; in others they were not, beyond the fact that the fever was continued and was uncontrolled by quinine. In one case that did intermit, quinine had no effect." Dr. Grabham, a Fellow of our College, writes from Madeira, November 16, 1879: "In Madeira, where I have had much experience during the last eighteen years, there are present from time to time cases of typhoid whose origin is precisely that pointed out as referable to general and climatic causes. I have long ago convinced myself that it is vain to seek to trace many well-marked cases of pure typhoid to sources of filth contamination. I have again and again seen such cases arise in situations many hundreds of feet above Funchal, far away from all dwellings, and in regions where the cold drinking water springs from beneath basaltic columns of rock. It is quite certain that however they acquire it, nevertheless such patients, equally with those who have imbibed their disease from polluted water, are able to spread their infection to others." Dr. Johnston Ferguson, Surgeon-Major, writes: "I, too, have long been of opinion that typhoid fever may have origin in other causes than the filth to which in most cases it is rightly assigned, and this more especially in tropical and sub-tropical climates. During a service of twenty-seven years I have treated typhoid fever in the Mauritius, Barbadoes, and Bermudas, and the conviction has gained strength as my experience has extended." Surgeon-General Irvine informs me that an outbreak of enteric fever has taken place among our troops in South Africa. The P.M.O.

The ordinary duration is three weeks, often more; in severe cases, it may terminate fatally much earlier, probably before the intestinal ulceration has taken place by the intense action of the poison on the nerve-centres; but, in milder cases, it may terminate earlier. About the fourteenth day, the symptoms sometimes improve, the temperature begins to fall, the general symptoms abate, the diarrhoea decreases, and the appetite and sleep improve.

I have already referred to its great fatality among our young soldiers during the early part of their service; and a certain amount occurs in the civil population, and generally, though not always, among young people. Every year I had cases of enteric fever, with all the characteristic phenomena. The worst, and a fatal case, that recurs to me, was one of a gentleman nearer fifty than forty years of age, in whose case it would be difficult to trace a specific origin of the disease. I regarded the case generally as an ordinary example of the enteric fever, but I never could feel satisfied that the origin was quite the same, unless, indeed, organic miasmata be allowed a wider extension than that depending on faecal matter; were this admitted, causation would not be so far to seek.

The diagnosis between specific enteric and climatic enteric is often very difficult. The close resemblance between some remittents and the specific forms is very great. It is by observation of the earlier symptoms and study of the previous history that the distinction will be practicable. In the specific form, the invasion is gradual, and it is not for some days, during which the temperature rises in the evening, until about the fourth evening, that it attains to 104° . In the climatic or malarial forms, the premonitory symptoms are more sudden. There is more marked chill or rigor, the *malaise* is greater, the temperature rising to 104° or 106° as early as the evening of the first or second day, though these distinctions are not always well marked. There is diarrhoea in both, and, all the other symptoms of ulceration being established, the phenomena become identical. The rose-coloured spots are by some regarded as pathognomonic, but they are often observed in cases of specific enteric, and it is very difficult to detect them, or to distinguish them on the dark skins of natives; it is quite possible that they may, standing in relation to the bowel-ulceration, occur, however that condition is established.

There is, as in all fevers of malarial origin, a disagreeable sensation of chill from contact of air, even when the body-temperature is very high. Dr. Wise has observed that the stools are always acid; to this he has paid much attention, and he thinks it a point of considerable importance. He further remarks that the anxiety depicted on the countenance of the specific typhoid patient is wanting. When it occurs in the course of simple ardent or paroxysmal fevers, when the rise of temperature at the outset is more abrupt and sudden, and when the thermograph is irregular, I believe that the origin is more general than a specific pythogenic source. I admit the extreme difficulty of diagnosis after a certain stage, and when intestinal ulceration has taken place, and can well imagine that septic absorption from these ulcerations may so modify the symptoms that there is practically no real distinction. In short, I believe, as I have before said, that, in India, enteric lesions are apt to supervene in the course of miasmatic fever, and that in this condition they become identical with specific enteric fever. If asked, Why seek for any other explanation than that accepted in this country? I reply, that there is more evidence that ordinary climatic fever may assume the typhoid, *i.e.*, enteric condition, than that all enteric fever is caused by faecal contamination.

It has been said that an important means of diagnosing these diseases is the treatment by quinine. In remittent fever, if large doses of quinine be given, the fever will in most cases be cut short, which is not the case in typhoid. Quite true; but there is not much danger of confounding a remittent, with well pronounced remissions, with typhoid. The cases in which there is difficulty are the continued or continuous remittents, and there quinine will not cut short the fever, though it will reduce the temperature, and for this reason is a most valuable remedy. In fever with enteric ulceration, however caused, it is not to be expected that it could be cut short, and therefore quinine cannot be regarded as the crucial test; though in the earlier stages, before ulceration has set in, it certainly may prove so.

It is on points of detail of this kind that further observation is required; and I would ask our colleagues in India and the tropics to consider this among other desiderata, for it is in the study and careful observation and comparison of these special features that the main issues will be determined. General descriptions abound; what is wanted is further investigation, with the absence of all bias in favour of this or that theory, of the facts bearing on etiological and pathological relations of these fevers.

Treatment of Enteric Fever in India.—It would unduly prolong the subject to enter into further details; nor is it necessary that I should

say much on the subject of treatment, for in fact it is exactly that which is adopted here, and consists mainly in the careful administration of fluid nutrients, avoiding all that could excite or irritate the disordered bowel. Diarrhoea should be controlled, not unduly checked; temperature should be reduced by pyretics or diaphoretics; and the use of quinine in moderate doses is useful in pyrexia, however caused; whilst as to the mode and extent of its administration, the circumstances of each particular case will be the proper guide. As regards wine or other forms of alcohol, I have administered it according to the effect it produced. As to nourishment, animal broths and milk—perhaps diluted with some alkaline water—have been the most appropriate; avoiding any possible source of gastro-intestinal irritation, even after convalescence was well established. Relapses occasionally occur; and a nearly fatal one in an officer of long service, who, in the fourth or fifth week, suffered from a recurrence of dangerous symptoms, simply as the result of eating a few raisins given him by the nurse, left a strong impression on my mind as to the importance of caution as to diet. The temperature-charts will show the varied character of the pyrexia, and how little there is that can be said to draw a distinct line of demarcation between the different forms of fever. I regret that I am unable to analyse them at length; but will only ask you to look at them and the specimens which represent enteric ulceration from fever patients in India, for which I am indebted to Professor Aitken, of Netley, to whom, as to many of my brother officers in India and at home, I am so much indebted.

I am reluctantly compelled to bring this lecture to a conclusion. I knew the subject was extensive; but it was only in attempting to compress it into the short space allowed to three lectures that I realised the magnitude of the work I had undertaken. I am sensible I have omitted much that should have been said, and that I have but imperfectly availed myself of the time at my disposal. I had hoped to have considered the subjects of typhus, relapsing, dengue, and Indian plague; but these for the present must be deferred. It only remains for me to thank you for the attention with which you have listened to my imperfect endeavour to add something to the story of Indian fever.

ABSTRACT OF LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND ZOOLOGY OF THE EDENTATA.

Delivered at the Royal College of Surgeons of England.

By W. H. FLOWER, F.R.S., LL.D.,
Hunterian Professor of Comparative Anatomy.

LECTURE I.

THE name assigned by Cuvier to this group, which some naturalists think ought to be regarded rather as a subclass than an order, is often objected to as inappropriate; for, though some of its members are edentulous, others have very numerous teeth. It is, however, now so generally adopted, and its meaning so well understood, that it would be very undesirable to change it. In fact, similar reasons might be assigned for ceasing to use nearly all the other current ordinal designations; for it might be equally well objected that all the Carnivora are not flesh-eaters, many of the Marsupialia have not pouches, and so forth. On this subject, it is well to bear in mind two aphorisms of two most eminent former occupants of the Hunterian Chair. It has been written by Owen, that "the sooner a term becomes an arbitrary sign, the better;" and by Huxley, that "it is better for science to accept a faulty name, which has the merit of existence, than to burden it with a faultless newly invented one."

Accepting the word, then, some limitation must be placed upon the group as understood by Cuvier, as the Australian Monotremes, the *Ornithorhynchus* and *Echidna*, the structure of which was at that time imperfectly known, were formerly included in it, but are now, by almost universal consent, removed to an altogether different section of the class.

If the teeth are not always absent, they invariably present, as compared with those of the more highly developed mammals, certain imperfections, which are, indeed, almost the only common characters which bind the animals of the group together. They always belong to the kind called *homodont*; that is, are not separated into distinct groups, as incisors, canines, premolars, and molars. They never have more than

cation: as little children, few of us, I suppose, could afford the doctor a thorough inspection of the tongue, without at the same time widely spreading out the fingers; nor, at the first attempt, could we call into solitary contraction an orbicularis oculi. But, in all such matters, Warren has left us far behind; he can throw into energetic contraction the biceps alone, the supinator longus, the radial extensors, the platysma myoides, and I know not how many other muscles; and when he "strings" (as he calls it) the sartorius, he makes that riband muscle start up from its groove, and show itself as a tightened cord, from the front of the iliac spine to the inner side of the knee.



Fig. A.

Another and more "showy" feat of his is to leave flaccid that part of the serratus magnus which is attached to the inferior angle of the scapula, whilst he rouses into energetic contraction the rhomboids and certain other muscles, until the shoulder-blades are so displaced, and their lower angles made so prominent, that a condition like that which Liston described as "luxation of the scapula" is produced. But all this is effected with a considerable *coup de théâtre*; and though, no

doubt, it was considered an effective part of his old performances, still it is so utterly devoid of grace and artistic merit, that its discontinuance might have been advised.—"O, it offends me to the soul, to hear a robustious periwig-pated fellow tear a passion to tatters, to very rags, to split the ears of the groundlings."

That accomplishment of his in which the "judicious" are most interested is the power of producing, by muscular contraction, a dislocation at each hip-joint, which, with less local commotion, is as quickly



Fig. B.

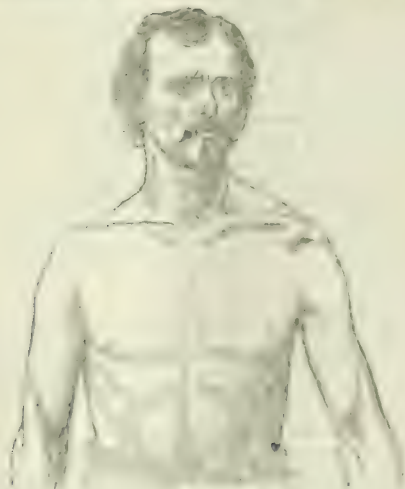
reduced. These changes of position of the upper end of the femur are, however, accomplished with so sudden a jerk, that it is impossible to work out in detail either the muscular movements by which they are effected, or the course which the head of the bone is made to take. But this much is certain; first, that after the disturbance the top of the great trochanter is brought an inch and a half, or more, above the line which runs from the anterior superior spine of the ilium to the prominence of the ischial tuberosity; and, secondly, that the head of the femur has come out of the acetabulum, and has travelled in a direction backwards as well as upwards. The accompanying illustration shows the knee advanced, the thigh inverted, and the outline of the hip disfigured. The first time that I saw Warren stand with his femur dislocated, I accused him of having arranged the limb after Sir Astley Cooper's drawing; this he denied; but he confessed that the toes on the dislocated side did not necessarily abut on the opposite instep. Nevertheless, in posing him for Mr. Jerrard, I placed the toes upon the opposite tarsus; and, in this way, steadied the trembling limb, showed the amount of its shortening, and bowed to a conventionality which every reader of and writer upon the subject of dislocations of the hip, is justified in expecting. (I put the word "reader" first in order, for I apprehend that every modern writer on the hip first reads Sir Astley Cooper's work; and certain it is that the closer he keeps to the master's lines, the more clear and practical will his description be.) Perhaps one may express regret, however, that Sir Astley depicted his patient as cheerful and erect; for, with this sketch in his mind, the student winds up his account of the signs of the dislocation with the statement that, when the man stands up, his great toe points across the opposite tarsus. The assurance that such patients are invariably found in the horizontal posture comes to him as a shock which should have been avoided.

Like every practical surgeon, Warren is fully alive to the value of Nélaton's line in the diagnosis of dislocation of the femur; but he states—and I give the assertion for what it is worth—that comparatively few of the surgeons who examine him draw the line with accuracy. I am inclined to think that the student is not, as a rule, made sufficiently appreciative of the practical bearing of this diagonal. Its importance in the late stages of hip-joint disease can hardly be overestimated. A child, for instance, has been suffering from suppurative in the articulation, and the ligamentum teres having been destroyed, the upper end of the femur makes its way with the escaping matter through the thin posterior part of the capsule into the dorsum of the

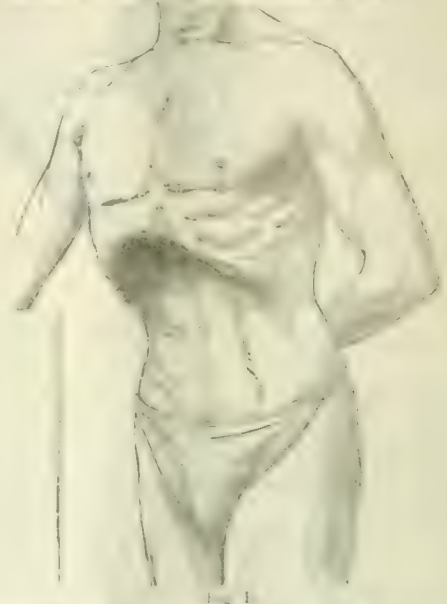
ilium; and because from that time the local and general disturbance diminishes, it is but natural that the parents of the little sufferer should consider themselves relieved, and that the cessation of pain denoted the advent of the long looked-for convalescence. If the surgeon should now have recourse to Nélaton's line, he will at once appreciate the relaxation of the ligaments, and, recalling vain hopes, may at once consider the possibility of uniting the diseased parts, and so save much valuable time. Illustration B shows the line represented by a dark cord, which,



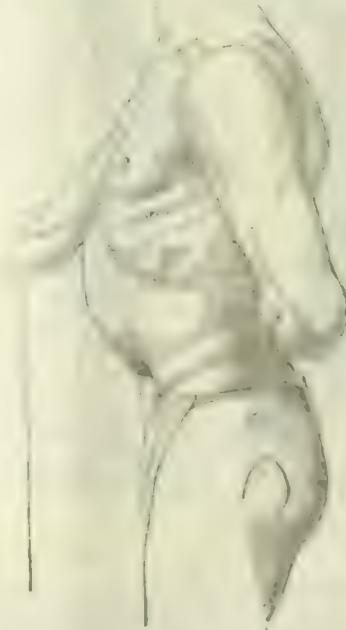
crossing over the femur, passes to the lowermost parts of the anterior superior iliac spine, and then, following the curve of the femur, it just reaches the level of the greater trochanter of the femur when in the normal position. In the case of the patient in the accompanying illustration (C), the free borders of the greater trochanter were at least an inch below the level of such a line.



probably it is not far from the upper border of the notch. The luxation, whatever its exact nature may be, differs from that which the surgeon is now and then called upon to treat, in this, that the head of the femur is still inclosed within the capsule. In all probability both the capsule and the ligamentum teres are entire, though stretched, as it were, far beyond the limits of anatomical possibility. Warren has, apparently, regarded a condition of congenital relaxation of various ligaments as his "talent"; certainly he has not wrapped it in a napkin. On the contrary, he has employed it so profitably that he can now produce at will many subluxations and distortions. Of these I have neither the space nor the inclination to say much, though I considered the partial dislocation of the left humerus worthy of being photographed and permanently represented (fig. 10).



(C) and (D) are illustrations, E represents the abdomen rendered



and showing that the contour of the torso may be accurately made out by the fingers a little above the umbilicus and slightly to the left

of the median line. In this performance he has "crowded" most of the abdominal contents beneath the diaphragm. In F, on the other hand, he has produced a "phantom tumour" by driving coils of intestine within the weird and peculiar grasp of the rectus and oblique muscles. The "growth" is rounded, and dull on percussion, and, as he remarks, looks as if it wanted an exploratory puncture. Certainly it is most suggestive, and well worth an inspection.

In conclusion, I would tender my best thanks to Mr. Jerrard of 107, Regent Street, for the time and skill which he placed at my disposal in the preparation of the excellent photographs from which the woodcuts have been prepared by which these notes are illustrated.

TRAUMATIC MALIGNANCY.

By W. HARRISON CRIPPS, F.R.C.S. Eng.,

Assistant-Surgeon to St. Bartholomew's Hospital.

THE communications of Mr. Barwell and Mr. Butlin, in recent numbers of the JOURNAL, are of great interest and value in again directing attention to the connection occasionally existing between injuries and malignant growths. All who have had opportunities of recording the history of patients suffering from malignant disease, must remember cases in which traumatism has been the starting-point of malignancy. During my period of office, as registrar of St. Bartholomew's Hospital, several cases came under observation, in which malignant growth more or less rapidly supervened upon injury. I select the following as examples of malignant growth following blood-extravasation.

CASE I.—A woman, aged 40, admitted under the care of Mr. Willett, stated that she was quite healthy a year previously to her admission. At that time, after a walk in a new pair of boots, she noticed a blood-blisther (of the size of a sixpence) on the sole of her right foot. She was very certain that, previously to the blister, her foot was sound. After a while, the blister broke, leaving a raw surface, which never healed, and gradually increased in size. On admission into the hospital, a growth (of the size of a florin) was seen on the foot, in the site of the blister. It was moderately hard, and covered with a thin bluish cuticle. The growth was removed, with a narrow margin of healthy skin round it; and a flap of skin, cut on the near side of the foot, was turned downward, so as to cover the wound on the sole. The wound healed satisfactorily, and the patient was discharged from the hospital in fair health; there was, however, a slight enlargement of one of the femoral glands. In six months, she was readmitted. At the margins of the cicatrix on the foot were several little nodules of recurrent disease; but the portion of skin brought down to cover the wound was healthy. In the groin, the femoral glands formed a mass of disease of the size of a small orange, and about the upper part of the body were a few small subcutaneous nodules. She was greatly emaciated. During the next few weeks, hundreds of small nodules appeared beneath the skin of the trunk, the limbs remaining free. Symptoms of internal complication rapidly supervened, and she died, nine months after the original operation.

At the *post mortem* examination, the subcutaneous nodules described were found to be little masses of sarcomatous material, lying beneath the skin. The surface of both lungs were found studded with nodules as large as peas. These nodules were just beneath the pleure, and apparently growing in the course of the lymphatic vessels. Similar nodules were found growing beneath the pericardium and the endocardium. The right femoral and inguinal glands, and the lumbar glands of both sides, were converted into masses of disease. Secondary growths were thickly studded in the kidneys, pancreas, and liver. The intestines presented an extraordinary appearance, looking as if they had been thickly covered with boiled sago, caused by thousands of nodules in the peritoneal coat. The mesenteries were similarly affected, and the great omentum was converted into a white nodular mass, weighing four pounds.

Portions of the disease, from the sole of the foot close to the cutaneous margin, presented (under the microscope) an appearance closely resembling alveolar cancer—that is to say, a series of spaces, formed by fairly well-marked fibrous tissue, filled with cells approximating an epithelial type. If, however, the slide were moved, so as to obtain a view of a deeper portion of the tumour, the alveolar structure was lost, and it presented the structure of a round-celled sarcoma—that is to say, a collection of small-round-cells, without definite arrangement, and only here and there divided by fibrous trabeculae. These cells, both in their shape and staining, closely resembled the nuclei of the epithelial-looking cells towards the surface of the tumour, and, I believe, were derived from them. Sections of the secondary deposits had a similar structure, or rather want of structure, to that seen in the deeper parts of the pri-

mary growth. They consisted, in fact, of a collection of small round-cells, described pathologically as sarcoma. These sarcomatous masses, when examined under the microscope, often present appearances exactly similar to the collection of lymphoid cells normally found in the sub-mucous tissue of the healthy intestinal tract.

CASE II.—E. M., a police constable, was kicked in the left breast whilst arresting a prisoner; the blow was not severe, nor did it prevent his continuing his duty. On the following day, there was a bruise of small size surrounding the nipple. The dark mark of the bruise remained for some weeks. A little more than two months later, he noticed a lump, of the size of a marble, on a portion of the site previously occupied by the bruise. He was perfectly certain that there had been no hard swelling of any kind at the time of the injury; for he had carefully examined the part during the first few days after the blow. The swelling steadily increased; and, when admitted to the hospital a year after the accident, there was a large sarcomatous tumour, of the size of a foetal head, with two large lumps in the axilla.

Notwithstanding the undoubted connection, in these two cases, between the injury and tumour-formation, yet it is exceptional to trace the starting-point of malignant disease from a local injury. Such a connection cannot be traced in more than 7 or 8 per cent. of cases. Small as this percentage is, it is sufficient for our present purpose, as showing conclusively that an injury may be the starting point of malignancy. The question immediately arises, seeing that malignancy may be the sequel to an injury, how it comes to pass that thousands of injuries are inflicted without being followed by such an untoward result? Mr. Butlin and Mr. Barwell answer such a question, by assuming that an injury, which in an ordinary person would be followed by no ill consequence, is, if it fall on a patient with a "constitutional cancerous diathesis", likely to produce a malignant growth. Mr. Butlin, in his paper, thus expresses this belief: "That there is probably a strong predisposition to the development of tumours in persons who thus break out in tumour-growth on the application of a violence." He further states: "The evidence in favour of this theory is as strong as that which supports a like belief in a strumous or rheumatic diathesis."

This theory has long been held, and often advocated, among others, by Sir William Jenner, who, at the discussion at the Pathological Society in 1873, called this constitutional state "a disposition, under irritation, to form cancer."

From the manner in which this diathesis is spoken of, and its being compared with gout and rheumatism, it is clear that those who believe in its existence must regard it as something that belongs to the body generally—a so-called constitutional state. In the two cases I have recorded, constitutionalists would see evidence of a specific diathesis, called into activity by the injury; for they would truly say, that a thousand such injuries might fall on as many individuals without producing cancer; and from this they would argue, that there must be a second factor, besides the blow, to produce such an exceptional result. All would acknowledge that some such second factor does exist; but the point I wish to raise is, What is the evidence to show that this resides in some peculiar diathesis affecting the body generally, rather than in some specific influence started in the site of the injured part?

So long as the doctrine of an inherited cancerous tendency was taught and universally accepted, it afforded strong support to the view that a peculiar constitutional condition was required, fit for the growth of cancer. In the fourteenth volume of *St. Bartholomew's Hospital Reports*, I criticised at some length the evidence upon which this doctrine of inheritance was founded; and, by comparing the various tables published on this subject with the records of cases in the hospital registration volumes, concluded that the disease was not inherited; the offspring of cancerous parents being no more liable to suffer from the disease than the children of other people.

If this tumour-forming constitutional condition really existed, it would seem that any blow struck on the patient with such a diathesis should be followed by tumour-growth; but this is not the case, for wounds, contusions, inflammations, and suppurations have frequently occurred in persons actually suffering from cancer, yet, save in the rarest instances, no second cancerous growth has resulted in the injured part, unless the injury have occurred in the immediate neighbourhood of the primary disease. It might be assumed, that when the morbid constitutional state has found expression so to speak in the primary tumour, that the diathesis vanishes, and that the body "under irritation ceases to produce further tumour formation". Such a view is entirely contradicted by fact; for secondary growths flourish and develop coincidentally with the increase of the original tumour, which could not be the case if the primary growth monopolised the diathesis. These secondary growths are certainly not independent outbreaks, and are clearly derived by infection from the primary tumour. They first show themselves at exactly the points where we should expect foreign particles

blood, which induces a weakened condition of the muscular fibre of the body. This may be due to visceral unsoundness, or to malassimilation and defective nutrition. It is now well known that very frequently, during pregnancy, the blood undergoes chemical and physical changes which alter its vital relations. These changes vary in degree and kind in different cases; and if they are associated with defective secretion and excretion, a pathological state of a dangerous character may be established. In former days, these changes were always regarded as being of a plethoric order. Now we know, from an analysis of the blood, that during pregnancy it contains an excess of water; that the serum is deficient in albumen; that the red corpuscles are diminished in number; and that the fibrine and extractive matters are in excess. This is a condition which, in other words, is one of anæmia—a state which, according to my experience, is comparatively common in pregnancy, and one which is associated with those severe floodings which arise from imperfect and insufficient contraction of the womb after delivery. It is well known that in anæmia and chlorosis the muscular fibre of the body is in an incompetent condition, that the action of the heart is most irregular, either from its fibres being weak, or from the blood not imparting its natural physiological stimulus to the walls. It has been shown by Dr. Goodhart, in a paper read before the Hunterian Society, that anæmia may be a cause of heart-disease, and that it produces fatty striation of the muscular fibres. I have met with three or four cases in which heart-disease has been established during a pregnancy which has been associated with anæmia; and I doubt not that, when the muscular fibres of the uterus come to be examined carefully and critically in those cases of hæmorrhage which prove fatal, they will be found to be imperfectly organised, from defective nutrition, and that this, with the altered vital properties of the blood, will be recognised as the principal factors in producing this form of uterine hæmorrhage.

The second issue raised in this paper is, whether cases of uterine hæmorrhage can be prevented? My reply to this is, that in very many instances they can: first, by avoiding unnecessary interference during the progress of the labour, by permitting the delivery to take place slowly, by following the uterus with the hand as it expels the nates, by using expression rather than traction for the removal of the placenta, and by the not too liberal use of the ergot of rye; secondly, in all those cases where, from previous knowledge, I have reason to expect flooding, or where, from a careful examination of the patient, I detect signs of imperfect nutrition and general debility, I adopt a tonic treatment, into which the administration of iron usually enters, with a carefully regulated diet, and suitable hygienic surroundings. By these means, the tone of the health is raised, the muscular fibre of the body is strengthened, and the nervous system is braced, so that nature is able to perform the task she has in hand in a satisfactory manner; in other words, I have for some years paid the strictest attention to the health of pregnant women, and have not the slightest hesitation in declaring that I have seen the greatest possible benefit result therefrom.

CLINICAL MEMORANDA.

SUDORIFIC TREATMENT OF TYPHOID FEVER.

HAVING for many years past effectually treated several incipient cases of typhoid fever, and stopped its ravages, by immediately resorting to active sudorific treatment, vigorously kept up till all abnormal temperature had subsided, I think it well to call the attention of the members of our Association to it, who may have a wider field for testing its efficacy than I have. The cases I have treated in this way came under my notice at the very early stages of the disorder, and were ushered in by rigors, headache, and abdominal tenderness, with acceleration of pulse, and abnormally high temperature. From the physical appearance of the patients, and from the defective sanitary condition of their homes, they left no doubt, in my mind, as to how the disease would eventually terminate if left to run its ordinary course.

I have kept no special notes of the cases I have successfully treated in this way, as they extend over a period of more than twelve years. But they may be summed up in a few words. In about eight or ten hours after commencing the treatment, I found the temperature fall to very nearly its normal standard, the headache and abdominal tenderness cease, and the patient, though suffering extreme weakness, appearing in every other way free from the disease. My usual mode of proceeding, is to wrap the patient well up in blankets, and to cover all with a mackintosh sheet or waterproof apron to prevent evaporation, and, if there be nausea or sickness, to freely administer draughts of soda-water. The action of the skin is then kept up till all febrile symptoms have subsided. Within the last few months I have treated a case in

this manner, with the addition of jaborandi, and feel convinced that it saved my patient many weeks of suffering. I believe that sufficient importance is not paid at the present time to the due action of the skin in the early stages of febrile disorders, when a little assistance on our part would enable nature to throw off the poisonous influence of the disease.

RICHARD RYDER.

SMALL-POX IN BIRDS.

APROPOS of "small-pox in birds", I may perhaps mention the fact that some years ago, a former steward of this hospital was in the habit of breeding a large number of canaries. As these arrived at maturity it was a common occurrence to find many of them dead, and presenting evidence of having suffered from some eruptive disease. It was further observed that, when the hospital contained a somewhat large number of patients, the mortality among the birds increased, and *vice versa*.—

WILLIAM GAYTON, M.D., Medical Superintendent,
Small-Pox Hospital, Homerton.

MALIGNANT DISEASE VERSUS SYPHILIS.

EVERY surgeon, I am sure, reads with pleasure and profit anything from the pen of Mr. Jonathan Hutchinson. In the JOURNAL of March 4th he refers to the clinical differences in character of malignant disease, according to its seat. Referring to certain cases of cancer of the skin of the trunk, it is stated that "In all, the ulceration progressed slowly during many years, caused but little pain, and produced no gland disease." Further on: "The disease of which I speak is most intractable, and, as far as I have observed, recurs immediately after removal." Reference is next made to an interesting case, in which Mr. Hutchinson twice removed the ulcer by the knife, and three or four times by caustic, but without benefit. "As soon as the sore was nearly healed, it recurred."

May a provincial surgeon be permitted to give a case in many respects parallel? Some years ago, a man aged 45, suffering from epithelial cancer of the scrotum, sent for an eminent surgeon, for the purpose of having it removed. The operation was well performed. No one who saw the case had the slightest misgiving regarding its nature, but, as a formal matter, the diseased structure was handed to a practised microscopist in the neighbourhood, who stated that it was epithelioma, without doubt. When nearly healed, it recurred, and was removed again, only to begin to spread when almost completely well. A third time it was taken away, with a like result. At the fourth operation, the testicle, which now appeared to be implicated superficially, was removed. When cicatrization was all but perfect, the surgeon left town for his holidays, and shortly afterwards the patient's medical attendant requested me to perform the fifth operation, as the disease was spreading again. Having the history of the case before me, in a hopeless, half-hearted sort of way I cleared away the diseased tissues as carefully and completely as possible with the knife, and watched the healing process with much interest. Matters progressed very favourably until the healing line was reached, when once more the ulceration began. Such conduct in a chimney-sweeper's cancer appeared to me unique. I saw that operating again was useless, and as I stood pondering at the bedside, my eye rested on the shining bald head of the patient. As a random shot, the question was put as to when his hair first came out. He said his hair began to fall soon after he joined the service, more than twenty years ago. The answer gave the clue. Iodide of potassium was prescribed, when the wound rapidly and perfectly healed, and has so remained.

Last year a lady, aged 60, came to consult me regarding an ulcer on the left side of the nose. She had been recommended by her medical attendant, whose card she brought, to see me regarding removal by operation. The sore, she said, began about two years ago, as a small scab or flattened wart, and continued to increase in size slowly and without pain since that time. The ulcer was now about five-eighths of an inch in length by half-an-inch in breadth, throwing out little discharge, and surrounded by an elevated, clear, glistening border. As she was accompanied by a friend, few questions were asked, and I simply stated that it might be prudent to defer operative interference in the meantime. The patient was given a prescription for tertiary syphilis, requested to use the medicine for six weeks, and then return. She did so, and the sore was completely healed. This was apparently a small rodent ulcer, with a syphilitic origin. We are, probably, yet far from thoroughly understanding the multifarious ramifications of syphilis.

ALEXANDER PATERSON, M.D., Glasgow.

DR. JAMES HYSLOP, of the Royal Edinburgh Asylum, has been appointed resident surgeon of the Pietermaritzburgh Asylum in Natal, the particulars of which appointment recently appeared in our advertisement columns.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

ST. THOMAS'S HOSPITAL.

HEMORRHOIDAL HÆMATURIA, OF VESICAL ORIGIN, WITH MARKED

ALKALINITY OF THE URINE: TREATMENT BY

BENZOIC ACID: RECOVERY.

(Under the care of Dr. ORD.)

[From notes by Dr. S. W. SUTTON, House-Physician.]

N. T., a girl, aged 12, was admitted on March 11th, 1882. The illness began three months before admission with pain in the back, which lasted for two days, and thirst. She had received no injury, and could not account for the pain. After this, it was noticed that her urine was very red, and contained clots of blood. When getting up in the morning, she had lately had pain in the right side of the abdomen, passing up and down, but lasting only a short time; and had also had headache. There was no vomiting, shivering, or giddiness. For three months before the hæmaturia began, she had had epistaxis; but this stopping about two months before admission. The family history was good; there was no history of hæmophilia.

On admission, the patient was a pale girl, with lips, gums, and conjunctivæ showing marked anemia; and complaining of nothing but the bloody condition of her urine. The urine was bright red, with a large deposit of blood, mucus, and pus; it was strongly alkaline, and contained many crystals of the triple phosphate; there were no other crystals, and no blood. Forty-one ounces were passed in twenty-four hours; the specific gravity 1030. The blood, examined microscopically (quarterly), showed the corpuscles to be well shaped; there were from three to seven pale corpuscles in the field. Examined by the haemocytometer, it showed almost fifty per cent. hæmoglobin. There was no sign of any tumour in the abdomen, and no tenderness over either kidney or elsewhere. The bowels were confined. The bladder was not enlarged. There was no pain; and no stone or calculus could be detected; but it was thought that the mucous membrane was a little rough towards the left of the fundus. The patient was put on a diet of gruel and milk, half an inch cube of bread, and a little fruit. The heart's action was irregular, and unusually strong. The lungs were clear, and there was no difficulty of breath. There was a little tenderness at the base of both lungs, with a diminution of expansion. On March 20,

the patient was given a grain of iodoform, in a little mucilage and water, and ordered to take the same daily.

On March 21st, the urine had now lost its red colour, was acid, and contained no blood, mucus, or pus. The patient was put on a diet of gruel and milk, half an inch cube of bread, and a little fruit. The heart's action was irregular, and unusually strong. The lungs were clear, and there was no difficulty of breath. There was a little tenderness at the base of both lungs, with a diminution of expansion. On March 20,

the patient was given a grain of iodoform, in a little mucilage and water, and ordered to take the same daily.

On March 21st, the urine had now lost its red colour, was acid, and contained no blood, mucus, or pus. The patient was put on a diet of gruel and milk, half an inch cube of bread, and a little fruit. The heart's action was irregular, and unusually strong. The lungs were clear, and there was no difficulty of breath. There was a little tenderness at the base of both lungs, with a diminution of expansion. On March 20,

the patient was given a grain of iodoform, in a little mucilage and water, and ordered to take the same daily.

On March 21st, the urine had now lost its red colour, was acid, and contained no blood, mucus, or pus. The patient was put on a diet of gruel and milk, half an inch cube of bread, and a little fruit. The heart's action was irregular, and unusually strong. The lungs were clear, and there was no difficulty of breath. There was a little tenderness at the base of both lungs, with a diminution of expansion. On March 20,

the patient was given a grain of iodoform, in a little mucilage and water, and ordered to take the same daily.

On March 21st, the urine had now lost its red colour, was acid, and contained no blood, mucus, or pus. The patient was put on a diet of gruel and milk, half an inch cube of bread, and a little fruit. The heart's action was irregular, and unusually strong. The lungs were clear, and there was no difficulty of breath. There was a little tenderness at the base of both lungs, with a diminution of expansion. On March 20,

the patient was given a grain of iodoform, in a little mucilage and water, and ordered to take the same daily.

On March 21st, the urine had now lost its red colour, was acid, and contained no blood, mucus, or pus. The patient was put on a diet of gruel and milk, half an inch cube of bread, and a little fruit. The heart's action was irregular, and unusually strong. The lungs were clear, and there was no difficulty of breath. There was a little tenderness at the base of both lungs, with a diminution of expansion. On March 20,

the patient was given a grain of iodoform, in a little mucilage and water, and ordered to take the same daily.

On March 21st, the urine had now lost its red colour, was acid, and contained no blood, mucus, or pus. The patient was put on a diet of gruel and milk, half an inch cube of bread, and a little fruit. The heart's action was irregular, and unusually strong. The lungs were clear, and there was no difficulty of breath. There was a little tenderness at the base of both lungs, with a diminution of expansion. On March 20,

disease may be present; next, upon the presence of pus without the presence of casts or of epithelial forms belonging to the kidney or its pelvis. The urine was searched for signs of parasites, and the blood was also examined with reference thereto. The history of pain referred to the region of the kidney was vague; and, on examination, no tenderness or tumour could be anywhere detected. At the same time, there was no dysuria or increased frequency of micturition. The benzoic acid was given in full doses with the object of restoring the acidity of the urine, and so of checking the hæmorrhage. The acid reaction was obtained the day after the commencement of the treatment, and the blood disappeared completely and permanently. The urine was again and again examined microscopically with reference to the presence of casts or other renal products which might have been detected by the ammonia; but no sign of renal complication was ever found. Hippuric acid was obtained from the urine while the benzoic acid was being taken. The patient was kept on milk-diet for three weeks after the cessation of hæmorrhage.

ST. MARY'S HOSPITAL.

CASES IN ANURAL SURGERY.

(Under the care of Mr. Field.)

CASE 1. *Chronic Mastitis.*—S. T., aged 42, a strong, healthy-looking, and robust man, presented himself at the hospital on March 23rd, 1882. He stated that, under treatment there some years previously, he had been cured of a discharge from the left ear. This, after a long period, had returned, and had lately become so offensive as to force him again to seek relief; it seemed to be unaccompanied by any suffering. He was ordered an aperient mixture and a weak carbolic acid lotion. In a week, his wife came to say that he seemed to have caught cold, and had some pain behind the ear. Six leeches, to be applied over the mastoid process, and a dose of iodide of potassium three times a day, were consequently prescribed. A few days afterwards, the patient rather suddenly died.

Autopsy.—The dura mater was moderately adherent to the skull-cap; as it was cut through, much black blood oozed from the sinuses. There was some pinkish injection of its inner layer. The arachnoid exhibited general stickiness. In the meshes of the pia mater, towards the arachnoid of the sulci of the hemispheres, was some yellowish pus, most abundant over the left temporo-sphenoidal lobe. The inferior surface of the cerebellum was adherent to the dura mater of the temporal lobe, except where separated by an abscess-cavity of the size of a walnut. The cavity had thin walls, spotted with punctiform extravasations; it was filled with greyish-green very thick pus, and extended inwards as far as the middle lobe, where the surrounding tissue was greyish and softened. No other abscess was found on either of the hemispheres. The temporal bone, which was broken at the base, showed considerable necrosis, with yellowish and greenish pus, and a portion of the wall of the tympanum; one of the veins in the mastoid was filled with a blackish clot, and passed into the middle ear, where it was united with the cerebellum. The dura mater over the temporal bone was abnormally thick and pink, and, over the middle ear, yellow and greyish. The cavity of the tympanum was mostly empty, and the ossicles were normal. The membrana tympani was absent.

REMARKS.—A Mr. Tynbee first pointed out, "affections of the external meatus and mastoid cells produce disease in the lateral sinus and cerebellum." The most truly correct view is that "the mechanical pressure of cells in which matter in the cavities of the ear injures the petrosal sinus, and the brain cannot be too often or too forcibly impinged upon by the pressure of the pus."

CASE 2. *Chronic Mastitis.*—A girl, aged 18, was admitted to the hospital on March 23rd, 1882, and four weeks previously, after a long illness of fourteen months, and lately becoming very bad in the left ear. There was no history of pain or of any other disease. On examination, the external auditory meatus was found to be closed, and the ear was found to be empty. The middle ear was found to be empty, and the ossicles were normal. The membrana tympani was absent. The dura mater was moderately adherent to the skull-cap; as it was cut through, much black blood oozed from the sinuses. There was some pinkish injection of its inner layer. The arachnoid exhibited general stickiness. In the meshes of the pia mater, towards the arachnoid of the sulci of the hemispheres, was some yellowish pus, most abundant over the left temporo-sphenoidal lobe. The inferior surface of the cerebellum was adherent to the dura mater of the temporal lobe, except where separated by an abscess-cavity of the size of a walnut. The cavity had thin walls, spotted with punctiform extravasations; it was filled with greyish-green very thick pus, and extended inwards as far as the middle lobe, where the surrounding tissue was greyish and softened. No other abscess was found on either of the hemispheres. The temporal bone, which was broken at the base, showed considerable necrosis, with yellowish and greenish pus, and a portion of the wall of the tympanum; one of the veins in the mastoid was filled with a blackish clot, and passed into the middle ear, where it was united with the cerebellum. The dura mater over the temporal bone was abnormally thick and pink, and, over the middle ear, yellow and greyish. The cavity of the tympanum was mostly empty, and the ossicles were normal. The membrana tympani was absent.

QUEEN'S HOSPITAL, BIRMINGHAM.

TUMOUR OF LEFT LOBE OF CEREBELLUM: ALBUMINURIA.

(Under the care of Dr. B. HUNT.)

[Reported by Mr. LESLIE PHILLIPS, House-Physician.]

T. W., an ill-developed lad of 16, was admitted on October 11th, 1881. There was no history of syphilis or cancer in his family; but a paternal aunt had phthisis. The patient had scarlet fever four years ago, and had suffered from dropsy for three years. Eight weeks ago, he complained of giddiness, and a week after, while at work, had a fit. He was carried home; but it was not noticed that any loss of power of one side existed. For seven weeks before admission, he had had severe frontal headache, night and day; and amblyopia for five weeks. His mother stated that he staggered, and asserted that he tended to fall to the left. He had vertigo, and vomited every morning at 2 A.M., and again at 6; this had been so since September 30th. Memory and intellectual power had progressively failed since the fit.

On admission, he had double optic neuritis. Vision, left eye = $\frac{20}{80}$, right = $\frac{20}{100}$. There was difficulty in effecting the conjugate movements of the eyes to the left. There was nothing characteristic in his gait. He held his head stiff, and walked slowly and deliberately, but did not reel. He said he could not walk quickly. No tendency to fall to the left was observed. The patellar tendon-reflex was active on both sides. He heard a watch with the left ear at four feet, with the right at one foot. He vomited frequently while in hospital. He had had constant severe headache. The pupils were large and equal, $8\frac{1}{2}$ millimetres in diameter. There was no anaesthesia; no paralysis of the muscles, but a marked adynamic condition of the body. He lay quietly in bed, speaking very little, never complaining unless asked. No abnormal physical signs were found in the region of the heart. Pulse 130, feeble. The radial arteries were thick and cord-like. He passed daily from twenty to thirty ounces of straw-coloured urine; two-thirds of the column consisted of albumen and granular casts. The sense of smell and taste were not impaired. He had no oedema of the legs. An ice-bag was ordered to be applied to the head, and five grains of iodide of potassium with three grains of citrate of iron and ammonia to be taken three times a day.

October 18th. He had severe pain in the head: he held his head inclined to the left, while his eyes looked a little to the right.

December 1st. He complained of pain on the left side of the head near the frontal suture; and was becoming weaker. On December 3rd, dimness of vision was observed. On December 10th, his head was retracted. On the 14th, he was amaurotic: he had had dysphagia for the last four days. On December 21st, his head was still retracted. On the 28th, the dysphagia was more marked. On January 14th, his neck was stiff; pulse 152. His head was inclined to the left till a few days before death, when it turned to the right. He gradually sank, and died on February 10th.

NECROPSY.—The apices of both lungs contained calcareous nodules. The lungs were adherent to the chest-walls throughout. The pericardium was adherent throughout. In the anterior wall of the right auricle was a mass of firm consistence, of the size of a hazel-nut (tubercular). The valves were healthy; the left auricle and ventricle were hypertrophied. Caseous glands were found in the mediastinum. On the under surface of the right lobe of the liver, near the anterior border, just beneath the capsule, was another nodule of cheesy material, apparently tubercular. The kidneys were triangular; the pyramids atrophied; the cortex pale. There was pyelitis of the left kidney. A deposit of lymph was found in the membranes of the brain to the left of the longitudinal fissure. The arachnoid was opaque; the sinuses engorged. The infundibulum was dilated to the size of a crow-quill. The lateral and third ventricles were dilated with serum, containing about one ounce. The left lobe of the cerebellum was enlarged, and adherent to the dura mater; the greater part of its extent was occupied by a cheesy yellow opaque mass of solitary tubercle, of the size of a small hen's egg. It was solid on section, and of firm consistence.

MATER MISERICORDIE HOSPITAL, DUBLIN.

IODOFORM IN ULCER OF THE STOMACH.

(Under the care of Mr. J. M. REDMOND.)

HAVING observed how rapidly external ulcers healed under the action of iodoform, Mr. Redmond was led to try its effect on ulcer of the stomach, and in other affections of the stomach; it was administered either alone, or combined with opium. The results have been most satisfactory, as the following case will help to illustrate.

B. C., aged 21, an unmarried female domestic servant, was admitted

on January 21st, 1882. She stated that her health had been tolerably good until about two years earlier, when she was seized with vomiting of blood, which continued for three successive days, accompanied by pain and tenderness in the epigastrium. Since then, her health had been considerably impaired. She had been alternately well and sick for days at times.

At the time of admission, the tongue was moist, and coated with white fur. Incessant vomiting had commenced three days previously, with a severe attack of hæmatemesis; she complained of pain and tenderness at a spot about one inch to the left of the xiphoid cartilage, and of pain shooting out under the left scapula. Milk, and a mixture prescribed to control the vomiting, were rejected almost immediately. On the following day, the vomiting continuing, nutrient enemata, a blister to the epigastrium, and iodoform (three grains in pill), three times daily, were prescribed. On January 23rd, the vomiting had ceased; the pain and tenderness had diminished; the tongue was still loaded. On January 26th, the improvement still continued. On February 3rd, she felt quite well, and could take milk, jelly, etc. Nutrient enemata were now discontinued. On February 15th, it was noted that there had been no return of the vomiting since January 23rd, and that meat, etc., could be used without causing the least inconvenience. A mixture containing iron was ordered. On February 25th, she was discharged from hospital. She then stated that she had not felt so well for the last two years.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 25TH, 1882.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

On Wounds of the Theca Vertebralis with Discharge of Cerebro-Spinal Fluid. By T. HOLMES, F.R.C.S. Referring to a case published in the sixtieth volume of the *Medico-Chirurgical Transactions*, in which a copious flow of limpid fluid took place from a wound in the back, and in which it was believed that the ureter was wounded, though it was also admitted as possible that the fluid might have been cerebro-spinal, the author related two cases; one under his own observation, in a patient of Mr. Rouse, at St. George's Hospital, the other from the *Lancet*, in which a similar copious discharge of watery fluid was caused by a wound of the spinal membranes, not involving any wound of the cord or large nerves, as proved in one case by *post mortem* examination, and in the other by the position of the puncture. He said that such wounds did not of themselves produce any symptoms, the loss of fluid being gradual, and the fluid no doubt rapidly re-secreted. Inflammation around them might interfere with the functions of the spinal cord or nerves even to a fatal degree; and there seemed some warrant for believing that the very sudden withdrawal of large quantities of the fluid (as in operation for spina bifida) might produce dangerous syncope.—Mr. JONATHAN HUTCHINSON referred to the escape of fluid from the ear in injuries of the head, which was sometimes unattended with any detriment to the patient, and was in some cases followed by recovery. In cases of puncture or rupture of spina bifida, even when there were no immediate serious consequences, arachnitis was very liable to ensue.—Mr. THOMAS SMITH had seen cases both of artificial opening and of rupture in cases of spina bifida. The escape of fluid was generally not attended with immediate danger; but, when long continued, it was liable to be followed by inflammation of the membranes of the spinal cord, and death. He had, however, seen cases of recovery after spontaneous rupture; rupture was, indeed, not rarely the commencement of cure among the few cases of spina bifida in which spontaneous recovery took place. He had seen a large spina bifida which had been divided by the lancet. The child lived for some time, and seemed about to recover, but at last died. It would be probably injurious in cases of supposed wound of the theca vertebralis to delay healing until a certain diagnosis could be made.—Mr. J. H. MORGAN had assisted Mr. Holmes in operating on a child from India, who had a congenital pedunculated tumour just below the middle dorsal region. The fluid contained in it could not be forced into the spinal canal by pressure. The tumour was removed by means of an elliptical incision on each side; but, when the base was cut through, the child suddenly became moribund, and, though it partially recovered, it died within twelve hours. Mr. Holmes thought that the symptoms were due to poisoning with carbolic acid; but Mr. Morgan would rather attribute them to the action of the knife on the connection between the tumour and the spinal cord. He had had under his own care a child with a tumour, also pedunculated, and having no

ceptible of removal.—Dr. DICKINSON said that no microscopical examination was yet made; the other abdominal organs were free from growth.

Dissection of Nerves and Ganglia in Addison's Disease.—Three dissections of the suprarenal capsules and of the related sympathetic, made by Mr. Sutton, were shown: one was from a case of Addison's disease, one was from a healthy adult, and one from an infant. Dr. DOUGLAS POWELL said that the patient with Addison's disease was a man aged 22, in whom the disease ran a very acute course. When admitted into the Middlesex Hospital, he was in a very emaciated condition; he presented a good deal of cutaneous pigmentation; the hands were extraordinarily pale; the pulse was hardly perceptible, and vomiting was very severe; blistering was followed by deep pigmentation. He gradually sank, and in about two months he died from exhaustion. At the *post mortem* examination, tubercular disease of both lungs was found; the heart and aorta were unusually small, and the former weighed only five ounces and a half. The suprarenal capsules were much enlarged, nodulated on the surface, and uniformly infiltrated with a fibroid material containing lumps of caseous and cretaceous matter. A dissection of the nerves of the suprarenal capsules was made by Mr. Sutton; they were found to be enlarged, owing apparently to thickening of the sheaths; the ganglia were enlarged and indurated. Dr. Powell thought that the case agreed with those others, before reported to the Society, which seemed to show that the destructions of the suprarenal capsules had little to do with the symptoms of Addison's disease, for it was impossible to suppose that such chronic changes in the capsules as he had described could occur in the short space of eight months. Microscopical examination did not reveal any decided change in the ganglia.—The PRESIDENT inquired whether the change in the nerves had travelled from the capsules along the nerves towards the plexus. He referred to a former discussion at this Society, in which the opinions generally expressed seemed rather opposed to the views held by Dr. Powell.

Embolism of Pulmonary Artery.—Mr. STANLEY BOYD, who exhibited this specimen, said that the patient was a woman, who had sustained fracture of the metatarsal bones of the right foot and severe bruising of the right leg and thigh. Thrombosis of the femoral vein ensued, and, a little later, she somewhat suddenly became cyanosed, and her breathing became exceedingly rapid, though not difficult; there was no pulse at the wrist. She died in ten minutes. At the *post mortem* examination the right pleura contained two ounces of bloody fluid; but the lungs were normal. In the right side of the heart was an almost completely decoloured clot, which extended to the bifurcation of the pulmonary artery. Beyond this, a firm clot, having no connection with the walls, was found. The left pulmonary artery was plugged as far as its second bifurcation. The clots in the various branches all ended abruptly. There was an appearance of an embolus in the clot in the left artery. On section of this supposed embolus, it was found to be firm, very dark in the centre, with a pale faintly laminated periphery.

Addison's Disease: Rupture of the Oesophagus.—Mr. STANLEY BOYD said that the patient from whose body the specimen was taken was a young woman aged 18, who was admitted in a moribund condition into University College Hospital, under Mr. Heath. The most marked symptom was vomiting of the most severe kind; there was no dyspnoea, and no subcutaneous emphysema. At the *post mortem* examination, about two ounces of bloody fluid, free from any trace of food, were found in the left pleura; this had apparently been extravasated through a rent in the left side of the oesophagus and its investing pleura. This rent was five centimetres long; its edges were well defined, and not ragged; the mucous membrane had been destroyed for a short distance in parts, and the pleura over this part of the oesophagus had quite disappeared, but was still smooth and glistening in the immediate neighbourhood; the gastric mucous membrane showed the recognised signs of self-digestion. The suprarenal bodies were much enlarged, and, on section, were firm and of a yellow colour. Microscopic examination showed a dense, very small, round-celled growth, containing many granular protoplasmic masses with marginal nuclei. Dr. Sidney Coupland, who had seen the specimens, agreed with Mr. Boyd in considering the change to be tubercular. Inquiries that Mr. Boyd had made proved pretty conclusively that the girl had been suffering from Addison's disease for about seven months (at least) before her death. Mr. Boyd believed that the rupture of the oesophagus had occurred during life, founding this opinion on the form of the rupture—a long tear, not a circular or irregular aperture—on the character of the fluid found in the pleura, and on the absence of much evidence of *post mortem* digestion. Zenken and Ziemssen had described sudden pain, cessation of vomiting, emphysema, collapse, and suppression of urine, as the symptoms of rupture of the oesophagus; and,

as these were not present, he concluded that the rupture must have occurred shortly before death.

Rupture of the Oesophagus.—Mr. STANLEY BOYD also related a case, in which the oesophagus had ruptured into the right pleura, and exhibited the specimen. The patient was an infant, aged four months, who had been exceedingly ill for some weeks before death, owing to an attack of erysipelas, succeeded by peritonitis, which had followed an operation for strangulated undescended testicle. About two hours before death, dyspnoea suddenly set in, and lasted for an hour; after the dyspnoea passed off, the child was able to take food in small quantities, but while it prevailed it choked when given brandy and milk. At the *post mortem* examination, about one ounce of clear deeply blood-stained fluid, free from lymph or any trace of milk, was found in the right pleura; both lungs were partially collapsed, the lower and middle lobes on the right side were very red, and were studded with petechiae; and at the root there was a considerable subpleural hemorrhage. The pleura was absent from the oesophagus over the whole of its right side, below the root of the lung, and its torn edge could be easily seen near the diaphragm. Pressure on the oesophagus caused a bubble of air to escape through a small opening in its wall; on the inner aspect of the gullet several small blood-clots were found near the hole referred to; this measured about two millimetres, and, for a short distance, above and below, the circular muscular fibres were exposed. Mr. Boyd considered that the clots in the gullet, the bloody fluid in the pleura, the marked redness and numerous petechiae on the surface of the lung, proved that the perforation took place during life; and that, possibly, it had been the cause of the dyspnoea which set in a few hours before death.—Mr. BUTLIN did not think that the first case was an instance of *ante mortem* rupture of the oesophagus. He inquired whether the stomach or pleura contained blood.—Mr. BOYD said that the pleura did contain some bloody fluid, and, in reply to the President, he referred to another case, described in the *Transactions* of the Society for 1846-47, where a man was seized with sudden severe pain after making an attempt to vomit soon after a heavy dinner. After death, extensive recent pleurisy was found.—Mr. MORRIS wished to know whether there had been any evidence of marked interference with the functions of the pneumogastric nerve.—Mr. BOYD said that there had been no such symptoms described by authors, or witnessed in his case, beyond some collapse.—Dr. POWELL said that it was to be remembered that, in the first case, there was Addison's disease; and, as the pneumogastric nerve gave a branch to the suprarenal capsule, the branches supplied to the oesophagus might have also been affected, and some nutritive changes might thus have been produced in the oesophagus.

Disease of the Sacrum.—Dr. ANGEL MONEY showed a sacrum, removed from the body of a boy, aged three years, who had died, under the care of Mr. Marsh, in the Hospital for Sick Children. On admission, the child presented two large abscesses, one at the upper and outer part of the left thigh, and the other in the left calf. The abscesses were opened, and, on the following day, the temperature rose to 105.4°; a scarlet rash appeared, as well as sore-throat, and some diarrhoea. These symptoms all continued. Ten days later, slight otorrhoea was noticed; and, on the following day, the child died. At the *post mortem* examination, the anterior borders of the first and second sacral vertebrae were found discoloured, bare, and rough, and the intervertebral fibro-cartilage was wasted and softened. The abscess in the left thigh communicated with the sacral disease through the great sciatic notch; there was no lumbar or rectal disease. A surface of bone at the posterior aspect of the tibia was bare and roughened; the abscess in the calf did not communicate with that in the thigh. The middle ear on the right side was full of pus, and so also was the left hip-joint; no other purulent collections were detected. Dr. Money thought the case of interest from the rarity with which the body of the sacrum was the seat of primary disease.

Tumour from Spinal Cord.—THE SECRETARY (Mr. H. Morris) said that Dr. LEDIARD (of Carlisle) had sent to the Society a specimen of tumour of the cord, and had supplied a clinical history which was shortly as follows. The patient experienced at first some pain in the back of the neck without any discoverable cause; subsequently paralysis of sensation and motion of the left upper limb gradually came on; then the left lower limb became paralysed; then the limbs on the other side gradually became similarly affected, so that for a fortnight before death he remained absolutely unable to move; finally, the respiratory muscles failed, and he died, retaining his consciousness to the last. At the *post mortem* examination, a small tumour, which was sufficiently large to entirely overlap the cord, was found lying on its posterior aspect in the cervical portion; the surface of this tumour was smooth and firm; it lay beneath the dura mater, and was attached to it chiefly by small vessels. The tumour was a fibro-sarcoma.—The PRESIDENT said that it seemed to agree with most cases of tumour of

the spinal cord, inasmuch as the nerves were first affected, and then the functions of the cord were abolished by the pressure.—Mr. LISTER, speaking as a surgeon, suggested that such tumours as these, if they gave evidence by such distinct symptoms of their existence, might be removed by an operation.—The PRESIDENT observed that there was no vital organ which surgeons would not touch now-a-days.

[To be continued.]

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 28TH, 1882.

J. LISTER, D.C.L., F.R.C.S., F.R.S., President, in the Chair.

Cases of Antiseptic Ligation of Arterial Trunks in their Continuity.

—Dr. HECTOR C. CAMERON, of Glasgow, read notes of all the cases of antiseptic ligation of arteries in their continuity in which he had performed such an operation, whether for aneurysm or for accidental wound. The material employed was antiseptic catgut (prepared by one or other of the methods suggested by Mr. Lister), of medium size, and tied in a reef-knot with sufficient tightness to ensure division of the internal and middle coats of the vessel. Very accurate coaptation of the cutaneous margins of the wound was practised by stitches of carbolised silk or silkworm gut, with an occasional stitch of thick silver wire for purposes of relaxation where that seemed desirable. Free drainage was effected by means of India-rubber drainage-tubes in all the cases except one, in which a number of strands of carbolised catgut were employed. The operations, as well as the subsequent dressings, were conducted with rigid antiseptic precautions. The first case was one of traumatic aneurysm of the brachial artery. A labourer, aged 38, in good general health, had a large aneurysm of the lower and inner part of the left arm. About six months before, he had been struck by a riveting-hammer in that situation. The brachial artery was tied with carbolised catgut in the first part of its course. In ten days, the wound was sound, having furnished throughout only a slight sero-sanguineous discharge, and having been free from any pain or swelling. In the following winter, he suffered from a limited mortification of one or two toes, from which he also made a good recovery. His arm, he said, was as strong and useful as ever. The second case was one of large diffuse popliteal aneurysm. An old soldier, aged 44, had a large popliteal aneurysm, extending as high as the junction of the lower with the middle third of the thigh on its inner side. A month before, he noticed a small pulsating tumour at the back of the knee, which he felt suddenly give way six days before treatment, while he was at work. On examining the part, he found that the swelling had greatly increased, while the pain became so severe as to make him discontinue work. From that date, the tumour had steadily increased in bulk. Pulsation could be distinctly seen and felt in it, and was controlled by compression of the femoral. There was some œdema of the foot and leg. The femoral artery was ligatured at the apex of Scarpa's triangle with carbolised catgut. On the second day afterwards, the drainage-tube was removed. On the tenth day, the wound was soundly healed. The tumour decreased in size very slowly, and he was not dismissed for two months. The discharge from the wound was, throughout its healing, serous in character, and there was no constitutional disturbance, except a slight rise in temperature during the first few days after the operation. Two months afterwards, he returned to show that the last trace of the tumour had disappeared, and to report himself as being in excellent health. The third case was one of popliteal aneurysm. Mr. H., a commercial traveller, aged 32, had an aneurysm, at the lower end of the thigh, which occupied the right ham. It was said to be due to a fall from a horse, and caused much uneasiness in the limb. He had always been a robust man, but was unusually corpulent. Dr. Cameron tied the brachial artery at the apex of Scarpa's triangle with antiseptic catgut, when pulsation ceased in the tumour. At the third dressing, on the right thigh, the wound was soundly healed, except where the drainage-tube had lain; and in a few days the spot was also untroubled. The temperature was normal throughout, and the patient's general health improved. When he returned home ten days after the operation, the aneurysm was much reduced in size. He was now quite well, and returned to his ordinary work without interruption. The fourth case was one of femoral aneurysm. T. I., aged 34, had an aneurysm of the femoral artery just above the knee-joint, extending down to the knee and the trochanter. He was a sufferer of a large aneurysm, but had been free from any trouble for many years. He had been struck by a fall from a horse, and had been unable to walk for many days after the operation. The aneurysm was much reduced in size. He was now quite well, and returned to his ordinary work without interruption. The fifth case was one of femoral aneurysm. T. I., aged 34, had an aneurysm of the femoral artery just above the knee-joint, extending down to the knee and the trochanter. He was a sufferer of a large aneurysm, but had been free from any trouble for many years. He had been struck by a fall from a horse, and had been unable to walk for many days after the operation. The aneurysm was much reduced in size. He was now quite well, and returned to his ordinary work without interruption.

and which had been prepared by a method described by him in the *Lancet* of February 5th, 1881, both chromic acid and carbolic acid being used. The patient progressed without any fever or pain in the wound. The wound was healed throughout, except where the little piece of drainage-tube lay. The aneurysm became firmly consolidated, and underwent a marked decrease in size. In a week afterwards, on removal of the dressing, cicatrization was found to be complete; and, on the thirty-third day, he was allowed to leave his bed. Ten days afterwards, he returned home. He lately consulted Dr. Cameron on account of a slight tendency to the formation of a hernia at the outer end of the cicatrix, for which the use of a truss was recommended. All trace of the aneurysm was gone, and he was in excellent health. The fifth case was one of aneurysm of the arch of the aorta and innominate artery, for which Dr. Cameron performed simultaneous ligation of the right subclavian and carotid arteries. Mrs. W., a widow without family, aged 57, had a pulsating tumour just above the right sterno-clavicular articulation. Dr. Finlayson, at the Western Infirmary, saw and examined her on March 22nd, and had furnished the following note of her case. "There was a very distinct pulsating tumour, involving apparently the innominate artery. It could be felt as a movable tumour, sliding, to some extent, behind the sterno-mastoid on being handled. Pulsation continuous with it extended into the sternal notch, and in that position had a heaving character. An obscure shock, coincident with the second sound of the heart, could be felt in the upper part of the sternum and contiguous part of the chest-wall, but no heaving impulse. On auscultation, the most prominent fact was the greatly deepened quality of the second sound, but no murmur was audible in any part of the chest. There was a pronounced area of dulness, extending from the right sterno-clavicular region towards the cardiac dulness, and measuring about two inches transversely. There did not appear to be any marked cardiac hypertrophy. The radial pulses were as nearly as possible equal, and there was no difference in the size of the pupils. No pressure-signs were recognisable, and the patient did not appear to suffer much inconvenience from the disease. The signs seemed to indicate clearly an aneurysm of the arch of the aorta of considerable size, and specially involving the innominate artery." On March 24th, Dr. Cameron tied the right subclavian and carotid arteries with antiseptic catgut given to him by Mr. Lister. It had been prepared by immersion in a one per cent. solution of chromic acid for twelve hours, and afterwards for twelve hours in the solution of sulphurous acid of the *British Pharmacopœia*. Both ligatures were placed in a watery solution of carbolic acid (1 to 20) for about half an hour before being used. The wounds were dressed four times (on March 20th, 29th, April 2nd and 5th), and, on the removal of the last applied dressing, on April 12th, were found to be healed. There was no constitutional nor local disturbance, the temperature continuing normal throughout. On April 12th, Dr. Finlayson again examined her, and reported as follows. "The incisions are healed. The defined tumour described as existing behind the sterno-mastoid muscle cannot be recognised; but there is marked pulsation in this situation, and the pulsation extends towards the sternal notch in a very pronounced manner, and is associated with much heaving there. Indeed, the heaving pulsation at this point seems to me to be more marked than before the operation, although the whole pulsating area is, no doubt, less. The dulness on percussion in the upper part of the chest, the deepened second sound, and the sense of shock on application of the hand, still continue very distinct. The radial and temporal arteries do not pulsate on the right side." In these five instances of aneurysmal disease, no large arteries were ligatured. In each, complete and permanent occlusion of the vessel was obtained without any constitutional or local disturbance, without any rise of temperature (if the case of diffuse popliteal aneurysm during the first six days be excepted), and without the formation of a single drop of pus. In each case, the last dressing was applied respectively on the fourteenth, tenth, eighth, eleventh, and twelfth days after the operation; and in each, on the removal of that dressing, the wound was discovered to be thoroughly sound. On similar principles, the radial artery was ligatured four times, the ulnar artery twice, and the popliteal artery once, with equally satisfactory results. In the last case, however, the anterior part of the last brachio-vascular, and ultimately required amputation. The vein, as well as the artery, was injured by the wounding instrument.—Mr. R. GODFREY said that in almost all these cases relieved by Dr. Cameron's ligation of the artery was the only possible treatment. It seemed to him now that as treatment of aneurysm by digital pressure, the tourniquet, Esmarch's bandage, flexion, etc., was usually very irksome and painful, it might possibly be well to treat all cases at the first by ligation with carbolised catgut which, as now prepared, kept a hold of the vessel a sufficient length of time to ensure its destruction.

Dr. Finlayson said that Dr. Cameron's experience coincided with

his own in so far as this, that the old-fashioned carbolised catgut fulfilled its purpose if properly prepared, and the treatment was thoroughly antiseptic, except in cases where a very long-continued pressure of the vessel by the catgut was necessary. But the catgut should be as strong as silk, as soft as the normal tissues; it should be capable of retaining a knot on it with perfect security, and should be free from porosity, so as not to hold organisms in it, as did silk. But, however nearly perfect the ligature might be, there was no use in it unless perfect antiseptic treatment were also adopted, because, otherwise, the outer coat of the artery must die and suppuration ensue. He believed this was the reason why Dr. Cameron's treatment was so universally successful, he having strongly insisted on the antiseptic treatment in its entirety.—Dr. CAMERON, replying to Mr. Godlee, said that Esmarch's bandage had been first tried in the two cases of popliteal aneurysm, but the agony was intolerable after some minutes, and each patient could endure no more. The ligature was then used with success. In two cases he had seen no benefit follow pressure, and his surgical colleague, going by his (Dr. Cameron's) experience, had then ligatured the femoral artery in Hunter's canal. When compression was tried, and the collateral circulation thereby established, one might find a second ligature even necessary, as in one of these two cases, in which the artery was tied in Hunter's canal, when the ligature at the apex of Scarpa's triangle had failed. He believed that as the treatment by the ligature was so free from risk, it was better practice to adopt it at once than to try earlier treatment by these other methods which were irksome, and interfered with the chances of successful treatment by ligature should it become necessary.

Case of Spina Bifida Cured by Injection of Iodine.—Mr. A. PEARCE GOULD read notes of this case. R. C. W., male, aged six months, was brought to Westminster Hospital on January 16th, 1882. A tumour was situated over the lumbar vertebrae, about the size and shape of a large tomato; the tumour was translucent, fluctuating, sessile, covered with healthy skin; the child was otherwise well, and had no paralysis or deformity. The tumour became tense when the child cried; and pressure on it caused fullness of the anterior fontanelle. Mr. Gould drew off about 3j. of the contained fluid, and injected 5j. of Morton's iodo-glycerine solution. As no effect was produced, the operation was repeated a week later, when 5ss. of the same solution was injected. After this the tumour became solid, and shrank. The child was shown at a previous meeting, when the tumour was seen as a thick fold of skin over the lumbar spines. The chief interest of the case lay in the fact that the fluid removed was analysed by Dr. Dupré and found not to contain even a trace of sugar, showing that it was arachnoid, and not cerebro-spinal fluid; and Mr. Gould pointed out that this form of spina bifida was the most favourable for medical treatment. By experiments Mr. Gould found the iodo-glycerine solution did not readily mix with the fluid, but when poured into it, it sunk to the bottom, thus confirming Dr. Morton's theory.—Mr. PARKER said he had operated successfully on a similar case five years ago; the child now had a tendency to hydrocephalus and talipes; nevertheless, successful cases were very few and far between. In another case that day, the fluid drawn off had contained no sugar, and became nearly solid on being boiled. The injection had no immediate effect on the child. In a case in which the sac was cut across, because of commencing inflammation around it from pressure, the child had recovered. This bold treatment, if accompanied by the adoption of all antiseptic precautions and subsequent pressure, might possibly avert the spread of inflammation to the spinal cord.—The PRESIDENT thought Mr. Godlee's case a favourable one for the operation, and the treatment by Morton's fluid seemed to be the best at present in vogue. He had at one time attempted the gradual treatment of spina bifida by slow drainage, under antiseptic precautions; but his first case was disastrous in its result, due to the free flow of cerebro-spinal fluid. In the next case he arranged for a still slower drainage, but that child also sank. This treatment, he was convinced, should be abandoned; nor did he think the laying open of the sac would be generally likely to succeed.—Mr. GOULD had tried the treatment by Morton's solution in two other cases. He had altogether lost sight of the first case. In the second case, complicated with hydrocephalus, the child sank, and on the day after the operation was profusely salivated by the absorption of the iodine. In another case, under his colleague, Mr. Macnamara, the tumour of the spina bifida had been injected three times, and the child was now recovering.—The PRESIDENT believed that Dr. Morton now thought it advisable not to draw off the fluid from the spina bifida, but merely to inject the fluid, that being quite sufficient for the treatment of the case.

Case of Congenital Intestinal Obstruction.—Mr. PEARCE GOULD read notes of this case. A female infant, three days old, was brought to Westminster Hospital on August 5th, 1881, because, in spite of several doses of castor-oil, it had not passed any meconium or motion.

It had vomited several times. The child was thin, but showed no outward deformity. The anus was normal, and the last joint of the little finger could be passed into the rectum, which appeared to be closed over above it. No fullness nor tumour was to be felt in the pelvis *per rectum*. A catheter and probe were each stopped about one inch from the anus. The belly was distended, its walls cedematous; and there was a little ascites. At 1 A.M., August 6th, Mr. Gould opened the belly above the left Poupart's ligament. A coil of distended small intestine presented, and no coil of large intestine could be brought into the wound. The former was therefore carefully stitched to the edges of the incision and then opened, and a large quantity of meconium escaped. The child died twenty-one hours afterwards. At the necropsy, no trace of peritonitis was found. The cæcum and lower four inches of the ileum, and four inches of the colon, were filled with a firm whitish substance of the consistence of cheese, firmly applied to, but not united with, the mucous membrane. In the colon beyond this plug, were found several masses of milk-white firm mucus. Below this, the colon and rectum were empty, and firmly contracted to the size of a clay tobacco-pipe stem. Above it the small intestine was distended with meconium and gas. It was pointed out that there was here no fault in development, but obstruction from a plug. From the white colour of this plug it was assumed that it was deposited by the third month of foetal life, as bile passed into the duodenum at that time. Three cases of congenital obstruction of the small intestine, briefly referred to by Mr. Holmes, were mentioned; and also the case of obstruction from a croupous membrane, recorded in the Clinical Society's *Transactions* by Dr. Markham Skeritt. Mr. Gould also insisted on the advantage of opening the belly in the groin in all cases of congenital intestinal obstruction, in preference to lumbar colotomy, which would have been impossible in this case.—Dr. COUPLAND asked if the obstructing mass were formed of inspissated mucus. The case was almost unique. If the substance were inspissated mucus, it showed that in that case the glands of the large intestine must be acting some time before birth.—Mr. GOULD said that the matter was undoubtedly inspissated mucus.

Case of Primary Perichondritis of the Larynx.—Dr. DEHAVILLAND HALL read notes of this case. M. C., aged 24, a dust-collector, was admitted into the Westminster Hospital on September 6th, 1881. With the exception of an attack of gonorrhoea, the patient could give no account of having had any illness till about Christmas 1879, when he had a cough and rheumatic pains. He stated that he had been hoarse since that time; the hoarseness came on quite suddenly. In the winter of 1880-81, he had a cough, and this had continued more or less, so that he had been unable to work since Christmas of 1880. About May 1881, he had a sore-throat (he pointed to the thyroid cartilage as the site of the pain) and difficulty in swallowing, but he had no difficulty in breathing till June. In August, he expectorated some blood and pus, which relieved him somewhat. In the beginning of September, he became much worse, suffering from great difficulty in breathing, paroxysmal cough and hoarseness, and was admitted in this condition on September 6th. Tracheotomy was performed on September 10th. After the operation, the epiglottis was found to be intact, the glottis greatly contracted in all its diameters, the cords being much reduced in length, the right cord moving slightly on phonation, anteriorly and posteriorly; but the central part was incurved, leaving a narrow elliptical opening, the thickened and hardly recognisable remains of the left cord being immovable in the median line. On deep inspiration, the glottis would about admit a No. 12 catheter. There was a considerable amount of inflammatory swelling in the ary-epiglottic fold, especially on the left side. While in the hospital, he was treated with iodide of potassium; and, though the swelling diminished and the glottis increased in size, he was discharged on November 22nd, still wearing the cannula, all attempts at leaving it off being followed by great dyspnoea. On December 31st, he expectorated a piece of ossified cartilage, and two smaller pieces on January 3rd. This case was brought forward as an example of primary perichondritis of the larynx, on account of the absence of all the usual exciting causes of this disease. On the most careful inquiry, no history of syphilis could be obtained. The patient was a well-nourished man, and anything but cachectic in appearance. There was no suspicion of phthisis; there was no history of any blow on the larynx. He had not had typhus or typhoid fever. The conclusion was arrived at that the patient had had an attack of bronchitis (which was very probable, considering the nature of his occupation); that, accompanying this, he had laryngitis; and that the inflammatory mischief ultimately involved the perichondrium and caused necrosis of the cartilages. The patient was still under treatment for dilatation of the stenosed larynx.—Dr. SEMON said that the chief point of interest in the case was its etiology. In this country, cases of secondary perichondritis were much rarer than abroad, especially at Vienna. In typhoid fever, ulceration of the aryteno-epiglottic fold was much less common here than

[illegible]

and to 10 amongst those who were living in an infected place. Whether revaccination would afford reasonable protection in future life, he was not prepared to say; but he thought it better that people should be vaccinated three times rather than run the risk of contracting small-pox.—Dr. Bristowe, Dr. Corner, Dr. Moore, Dr. Browning, and Mr. Shirley Murphy, took part in the discussion which followed this communication.

The Position of Legislation concerning Metropolitan Bakehouses.—Mr. SHIRLEY MURPHY made some observations on this subject. The Bakehouse Regulation Act, 1863, was repealed by the Factory and Workshops Act, 1878, which came into operation on January 1st, 1879. The sections in the former Act relating to the proper cleaning and lime-whiting of the bakehouse, to its ventilation, and to the keeping it free from effluvia arising from any drain, privy, etc.—together with the prevention, under limitation, of the use for sleeping purposes of a room on the same floor as the bakehouse—were embodied in the latter Act. But the powers which Section 6 of the Bakehouse Act gave to the health-officer, and to the inspector of nuisances, to enter the bakehouse at all times during the hours of baking, for the purpose of inspection, had not been incorporated in the Factory and Workshops Act; and, therefore, the sanitary authority now had no more concern with bakehouses than with any ordinary dwelling-house in their district. The duty of inspecting bakehouses, as such, had now devolved upon the factory and workshops inspector. Section 4 of the recent Act provided that a factory inspector should give notice to the sanitary authority of any "nuisance" which he might find to exist in the bakehouse; and it then became the duty of the sanitary authority to take proceedings. But although this authority might still be used for the purpose of remedying an evil which already existed, their influence in preventing the occurrence of any nuisance had ceased. Mr. Murphy wished to elicit an opinion, how far the existing arrangements for the inspection of bakehouses fulfilled the conditions required—not only to keep the inmates of the bakehouse in good health, but to prevent the distribution to the public of bread made under conditions not conducive to the public health. But recently, the duties relating to the prevention of disease produced by the distribution of infected milk, had been made to devolve upon a body which had not even the advantage of medical aid in the performance of this responsible office. So far as his own district was concerned, he could find no evidence that more than 37 per cent. of the bakehouses had been visited by the factory inspectors since the last Act came into force. He was led to doubt whether the inspection of bakehouses could be as well carried out by a central authority, with the very few inspectors at their command, as by the local authorities.—A discussion followed, in which Mr. Lovett, Mr. Wynter Blyth, Dr. Browning, Dr. Bristowe, and Dr. Tripe took part.

Whooping-cough.—Dr. CORNER called attention to the prevalence of whooping-cough in the metropolis; and the question was raised, whether the sanitary authority ought not to take proceedings against those who wilfully exposed in public places children suffering from this disease; or whether a letter should be sent to hospital authorities, cautioning them not to treat such cases in the out-patient department. It was stated, in the discussion which followed, that the disease was often not recognisable until it had existed a fortnight, and therefore it could hardly be dealt with as other infectious diseases; also that, as a rule, cases of whooping-cough did not attend out-patient rooms, but were attended in their own homes.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 11TH, 1882.

HENRY KENNEDY, M.B., in the Chair.

Diffuse Pulmonary Gangrene.—Dr. J. M. FINNY showed an example of diffuse gangrene of the right lung. The patient had been a labourer aged 47, who was admitted to hospital in collapse, having been ailing for three months. The lower lobe of the right lung was hepatized, and there was prune-jelly expectoration. Four days after admission, gangrenous sputa set in, and the sputa became greenish-yellow. The temperature now fell below normal, and the man sank in a state of great exhaustion. Before death, the percussion note had become tympanitic in the anterior part of the right lower lobe. Two-thirds of the right lung had been converted into a horribly fetid gangrenous slough, traversed by trabeculae of breaking down lung-tissue. In the right lobe of the liver was a large nodule—either carcinomatous or syphilitic in character.

Paronychia Gangranosa.—Mr. H. G. CROLY presented two specimens of the disease described by Mr. Charles H. Todd, in the second volume of the *Dublin Hospital Reports* (page 274), under the title "Paronychia cutanea maligna, vel gangranosa." Both patients were middle-aged ladies, and in both the seat of disease was the inguinal

phalanx of the first finger of the right hand, which phalanx at last separated. One of the initial symptoms was a severe pain, like the stinging of nettles, in the end of the finger. Vesicles then formed, which passed into unhealthy bullæ.

Irideremia.—Mr. ARTHUR BENSON exhibited the right eyeball of a boy aged 10, which he had enucleated that morning in St. Mark's Ophthalmic Hospital. The globe was considerably enlarged. The cornea was clear; the lens was subluxated and opaque, with calcareous plates here and there. The iris was entirely absent, except a small sector above, which was adherent to the lens capsule. The fundus could be illuminated round the margins of the lens, but no details could be made out. The lesions were probably due to intra-uterine irido-chorioiditis. There was a perforating ulcer of the left eye, with synechia posterior. The iris was, however, normal in extent and structure.

Ovariectomy.—Dr. LOMIE ARTHILL showed a large multilocular cyst, the rapid growth of which he had an opportunity of watching. The patient had been delivered prematurely last June. On December 17th, the tumour was of the size of a foetal head; and, in the succeeding ten weeks, it increased fourfold. The patient made a good recovery after ovariectomy.

Lithotripsy.—Mr. H. G. CROLY showed numerous fragments of stone, removed by lithotripsy from the bladder of a blacksmith, who had suffered from occasional attacks of renal colic during five years.

SATURDAY, MARCH 25TH, 1882.

WILLIAM STOKES, M.D., President, in the Chair.

Calculus Pyelitis followed by Iliac Abscess.—Dr. J. W. MOORE presented the genito-urinary organs and other abdominal viscera of a married but childless woman, aged 28, who sank after an illness of several weeks' duration. When admitted to hospital early in February, she complained of dull aching pain in the right lumbar region and hip. The urine was considerably albuminous, and contained pus. There was no anasarca. In a short time, a distinct tumour appeared in the right iliac region, while the temperature-chart indicated the occurrence of suppuration or of pyæmia. Suddenly an offensive purulent diarrhoea set in, the temperature fell, and pus almost disappeared from the urine. Notwithstanding, the patient did not rally, but sank gradually, incessant vomiting being a prominent symptom. On opening the abdomen, the right kidney was found atrophied, and little more than a mass of connective tissue. A large oxalate of lime calculus occupied a sac in the pelvis of the kidney; and behind the stone was a fistulous opening into a perinephritic abscess, which had passed down the front of the psoas muscle to form a large iliac abscess below. The latter communicated with the intestinal tube by two large openings in the ascending colon. There was no general peritonitis. The right ureter was thickened, but not dilated; the bladder presented signs of sub-acute cystitis. The left kidney was enormously enlarged, weighing fourteen ounces; it had passed into a state of consecutive fatty degeneration from that of compensatory hypertrophy. There was perihepatitis near the kidney and the perinephritic abscess. The ovaries were atrophied.

Malignant Rheumatic Carditis.—Dr. WALTER SMITH showed, for Sir William Miller of Londonderry, the heart of a girl aged 23, admitted to hospital in acute rheumatism on January 17th, 1882. She presented well-marked cardiac signs and symptoms from the first; these progressively increased. Evidences of pleural and pericardial effusion supervened, and she died asphyxiated on March 2nd. After death, extensive left pleural effusion was found, the lung being compressed against the vertebrae, weighing only 8¼ ozs.; whereas the congested right lung weighed 23½ ozs. The pericardium contained much fluid, and was coated with lymph. Traces of an early inflammation of the valves were detected on opening the heart; namely, a festooned beading along the lunule of the aortic valves. The mitral valves were also engaged.

Deposit of Crystalline Ammonio-magnesium Phosphate in a Joint affected by Chronic Rheumatic Arthritis, simulating the Deposit of True Gout.—Dr. E. H. BENNETT exhibited a knee-joint altered by the familiar appearances of chronic rheumatic arthritis, with, in addition, an extensive deposit of a white substance on the surface and in the ligaments, quite similar to that of gout to the naked eye. Chemical and microscopical examination established the complete dissimilarity of the deposit to that of gout. It contained no lithic acid, and was a deposit on the surfaces of the joint-structures, not within their tissue. In structure, it was in the main crystalline ammonio-magnesium phosphate; the crystals were minute, but most definite in shape. Examined chemically by Professor Reynolds, its composition was exactly determined. Dr. Bennett stated that this was the first instance in which he had seen this deposit, knowing only of one similar observation, communicated by the late Professor Heschl of Vienna. He referred to

the records by Professor Redfern of two observations of the occurrence of crystalline oxalate of lime in a similar position and in the same disease. The amount and character of the deposit, as well as its absence from the other joints of the same body, excluded the idea that it might be the result of *post mortem* changes. No life-history was obtainable; but the diseased condition, so far as the rheumatic changes were concerned, was most marked in the limb from which the specimen was taken. Having referred to his previous observations as to the association of true gout with chronic rheumatic arthritis, Dr. Hare expressed his inability to offer any explanation of the mode of development of the deposit exhibited.

Scrophulous Piles. B.—Dr. WALLACE BEATTY exhibited the left kidney and ureter of a woman aged 37, who had received a hurt two years ago in the left lumbar region. The prominent symptoms which frequently were, at times shooting down along the inner side of the thigh as far as the knee: diarrhoea since last Christmas; hæmaturia, micturition, which took place frequently, although the urine was scanty. Pneumonia of the left lung was the cause of her death on March 20th. The left kidney was enlarged, weighing 1 lb. 5½ ozs. On section, it was found to contain several large cavities, some of which contained cheesy matter and others pus. The left ureter was much thickened; its inner surface was covered with small yellowish granulations. The rectum, sigmoidæ, stomach, and liver were also diseased. A small abscess was found in the course of the left ureter. The patient was a sufferer from scrophulous abscess.

John, a colored man, the age of a man, which he had enucleated that morning in St. Mark's Ophthalmic Hospital for suppurative iridocyclitis of traumatic origin. Three weeks before that, a thorough bullet struck him in the eye, penetrating the globe, and producing traumatic cataract. The circumcorneal vascularity was considerable, and increasing. Removal of the lens did not arrest the inflammatory process, so enucleation had to be performed. A section of the eye showed the ciliary processes completely covered with lymph, the sclera round; the line of demarcation between them and the retina being sharply marked, the latter structure remaining free from the yellow effusion. Striae of purulent infiltration could be seen running from the ciliary body into the vitreous body.

—Dr. CHRISTOPHER NIXON exhibited the thoracic viscera of a woman aged 45, who, before death, was from stridor with both inspiration and expiration. The respiratory sounds were otherwise feeble, but healthy. There was no dyspnoea. After death, the larynx, trachea, and bronchi proved to be free from disease. A tumour sprang from the anterior and lateral wall of the trachea, and grew up on the trachea. This new growth was situated at the junction of the trachea with the bronchi, and consisted of the following parts: and extending for a considerable distance upwards.

of an aged woman, said to have been eight days ill when she was admitted to the Asylum. Her abdomen was very hard and tender. The abdominal cavity was full of blood-clots. The uterus was enlarged, and the ovaries were enlarged and inflamed. The lungs were congested, and the heart was enlarged. The patient died on the 10th day of her illness.

The Society is a non-profit organization, organized by the President, Secretary, and Treasurer.

[illegible]

No. 10) to the rapid pulse as an important premonitory symptom, and states that experiments on animals with acetone or ethyl-diacetic ether cause very frequent pulse, slow respiration, and lowering of the body-temperature.

Diabetic coma is undoubtedly more common in the young than in persons of more advanced age. Dr. Frederick Taylor shows that, while of all cases included in his statistics those under thirty form 45 per cent., they form 53½ per cent. of the fatal cases, and 69 per cent. of those dying from coma. It is liable to come on at any period of the disease; but the more rapid cases—those terminating under a year—generally die of coma; and, conversely, the majority of those dying of coma are cases which have existed for less than twelve months.

Treatment, or its absence, seems to have no distinct influence upon the occurrence of this mode of death. Constipation appears, with good reason, to be thought to have something to do with it. Teschemacher's case, for instance, was constipated for five days before the outbreak of excitement amounting to mania, which preceded the fatal coma. There is a very general consensus of opinion as to the direct effects of bodily fatigue in bringing about this condition. A diabetic patient, as Prout said, lives on the brink of a precipice; and a journey to London to consult a physician, or a journey to a foreign bath in search of health, or even the more everyday occurrences of hurrying to catch a train, to escape from a shower, or too long a walk, have been followed immediately by fatal coma.

Dr. Gamgee has described a case in which recovery took place temporarily, though the symptoms returned some time after; and probably no condition can be attended by a more grave prognosis. So far, treatment seems to have been very unsuccessful. At Guy's Hospital, stimulants, either internally or subcutaneously, and the intravenous injection of saline fluids, have been attended with no encouraging success. Dr. Foster has suggested the administration of thymol or some other antiseptic, to check the formation of acetone. The indications seem to be to relieve the constipation freely and as rapidly as possible, and to give diluents and stimulants by the mouth or veins.

MILITIA SURGEONS.

THE recent reply of Mr. Childers to the petition of the militia surgeons, laid before the War Office in February last by the Parliamentary Bills Committee of the British Medical Association, and published in our last issue, is one to which an ample reply may be made. The facts brought forward by Mr. Childers are far from being so accurate as to lead us to suppose that the present decision should be accepted in any way as final. The statement that the Act 4 George IV referred only to militia surgeons on the permanent staff, is one with which we can hardly concur; and the assertion that it expired on the 25th of March, 1825, is opposed to the fact that this Act, and all the Militia Acts passed at the time, were annual, and were continued from year to year by what was known as the Expiring Acts Continuance Acts. The Act 4 George IV was distinctly renewed and confirmed by 10 George, and this latter Act was confirmed by 31 and 32 Victoria, and the Act 4 George was not repealed, as the Statute Book shows, until the close of the session 1873. There is nothing in this, or, indeed, in any of the other Acts, to imply that it was necessary for militia surgeons to be on the permanent staff to entitle them to a half-pay of six shillings a day; but, on the contrary, it was distinctly laid down that "all surgeons of militia who, after twenty years' service, were retired, from age or infirmities," were entitled to this grant. By the general Militia Acts of George II and III, similar provision was made. Previous Governments to the present have likewise been of this opinion, or why should Act 18 and 19 Victoria have been passed? And this view of the case is further evidenced by the official circulars of Lord Panmure, in one of which (about February 1855) it was stated (in consequence of several militia surgeons having applied to the War Office, asking to what pension they would be entitled) that they would, after ten years' embodied service, receive a pension of five shillings a day. No circular can supersede an Act of Parliament,

or have retrospective action; it is therefore but fair to assume that all who were appointed previously were entitled to pensions. Both by equity and by the common statute law, and by all precedents, we are led to expect that compensation should follow changes which, in many instances, have resulted in depriving militia surgeons of their only means of support. There are innumerable instances (which, if space permitted, we might quote) in which this compensation has been granted. To go no farther, two years since, when the prisons throughout the country were taken over by the Crown, every official whose services were no longer required received a retiring pension. Mr. Childers writes: "Nor have these surgeons any claim to a retiring allowance on the ground of equity. The rule under which they are retired at upwards of sixty years of age was issued in 1872." But is it equitable, we ask, that these men should be forced to retire without pension by virtue of a rule issued years after their appointment? These very militia surgeons, who are now turned adrift without any compensation, were told, on accepting service on the departmental medical list, that they would forfeit no rights they previously enjoyed by so doing; one of these rights being that they were not compelled to retire on account of age.

No complaint is made in the petition of the pay of the militia surgeons being inadequate (and, in this respect, Mr. Childers seems to have fallen into an error), nor has such a complaint, we believe, ever been made. On the contrary, it is stated in the petition that they were aware that they would not be entitled to the same pay and allowances granted to the medical officers of Her Majesty's forces.

Mr. Childers's statements in respect to private practice, and the militia employment being always in or near the place where the surgeon resides, if they were not, as they are, quite foreign to the question of compulsory retirement at sixty-five, might, we think, be easily disproved, the militia surgeon being, in many instances, on duty at the different camps several miles from his private practice.

Mr. Childers also discusses the question of difference between the pay of army and militia surgeons, which, however, is not referred to in the petition.

The militia surgeons complain that they have been badly treated for many years. One thing, we believe, is certain, and that is, that promises of redress held out by Mr. Cardwell and Mr. Hardy have never yet been fulfilled; Mr. Hardy having more than once stated in the House of Commons, in reply to a question, "that each claim for compensation would be considered on its own merits". This, we are led to believe, has never yet been done; we are informed that, on the contrary, every representation to the Secretary for War has been ignored. We believe that, during the Crimean War and the Indian Mutiny, much abnegation of self-interest was shown by militia surgeons, who sacrificed their practices and accompanied their regiments to the Mediterranean, Scotland, and Ireland. In the Militia Regulations for 1880, there was an order to the following effect: "No future appointments will be made to militia regiments, but those who have medical officers attached to them will retain their services till vacancies occur." These vacancies were naturally supposed to be those which might arise from conditions of health or from voluntary resignation. In January 1881, for the first time, and contrary to all precedent, the order was issued that no medical officer was to be allowed to remain in the militia service after he had attained the age of sixty-five years; and this order, we are informed, has been rigorously enforced. Up to the present time, it is stated, the number of militia surgeons who have been thus forced to retire does not amount to more than twenty. We believe that we are correct in stating that the country has thus actually been the gainer to the extent of nearly £4,000 a year; and even if the twenty already retired members of this service were to receive the half-pay of 6s. a day, the country would still be a gainer of £1,350 a year—an amount which would yearly increase as the retired surgeons died out. There are a number of the militia surgeons who voluntarily resign; but by these, of course, no hardship is felt.

We trust that Mr. Childers may reconsider his decision, and allow

draws attention to the experience of Dr. J. Johnston in China respecting the successful treatment of opium-poisoning by means of hypodermic injections of atropia. This treatment, and its success in the hands of Dr. Johnston, has not hitherto received the attention it deserves. We believe that, where atropia has failed to exercise any appreciable influence in counteracting the fatal effects of morphia, it has been that the dose of antidote administered was too small. Instead of administering atropia in doses of one-sixtieth of a grain, Dr. Johnston uses one-sixth or even one-half of a grain—indeed, until belladonna-intoxication is produced. It has been stated, moreover, on the authority of Bartholow, that one grain of morphia requires one-twentieth of a grain of atropia to counteract its effects. Our readers will find Dr. Johnston's paper in the *Medical Times and Gazette*, September 7th, 1872, and February 15th, 1873; and it is referred to in the last edition of Guy and Ferrier's *Forensic Medicine*, pp. 523, 524.

QUEEN'S COLLEGE, BIRMINGHAM.

THE Council of Queen's College have determined upon some important changes in the systematic courses of lectures in the medical department of the school. Acting in harmonious co-operation with the authorities of Sir Josiah Mason's Science College, they have wisely decided to recognise the lectures of the new College in some of the subsidiary medical sciences, and to discontinue the corresponding courses in their own curriculum. In this way, the two Colleges enter upon an extended and conjoint scheme of professional instruction, to give effect to which suitable reciprocal arrangements have been agreed upon by the governing bodies of the two institutions. By this judicious and liberal procedure, the richly endowed chairs and the magnificent laboratories of Mason's College are thrown open, without extra fee, to the students of the Birmingham medical school. Botany, physiology, and chemistry are the subjects which will for the future be taught to medical students in the new science college. The professorship of botany, rendered vacant in Queen's College by the recent lamented death of the venerable Dr. Hinds, will not be filled up, and the students of the school are directed to attend the lectures of the professor of botany in Mason's College for the present summer session. Next winter, the courses upon physiology and chemistry will be given in Mason's College; the professors of these subjects in Queen's College will discontinue their instruction, retaining only an honorary connection with the school by holding emeritus professorships. The new arrangements to which we have referred, which could not have been completed in the absence of a liberal and unselfish desire in all the parties concerned to promote the welfare of the local professional school, will greatly strengthen the educational facilities of the students of medicine in the Midland metropolis, and give them unsurpassed advantages in the study of the exact sciences in their curriculum.

POISONOUS HAIR-WASHES.

THE labels on many of the compositions which are intended to conceal the effects of age as shown in the colour of the hair, etc., or to alter the tint of a lady's locks to suit the fashions of the day, inform us that the particular composition in question must not be considered as a dye, and that it contains no poisonous ingredients. We call attention to certain evidence given at a recent meeting of a medical society in London. In a discussion on a paper on lead-palsy, one member related the case of a lady who suffered severely from that affection after using a hair-wash for two years, her wrists being particularly affected, as is usual in lead-poisoning. Her cousin, who had used the same wash for a similar length of time, also suffered from distinct symptoms of lead-palsy. A second member had observed three cases of the form of insanity produced by chronic lead-poisoning in persons who had used hair-wash; and a third related his experience of two instances of lead-colic traced to the same cause. We are not concerned with the private prejudices of those who are sensitive about hair-lotions being called "dyes", or simply "washes"; but such persons should be aware that changes in the tint of the hair can only be

effected by strong chemical agents, which, in spite of assurances on labels, may sooner or later seriously affect the health of those who employ them.

THE LAW OF TRESPASS.

A BLACKSMITH, named Malloy, at the Sheffield County Court recently sought to recover two guineas from Mr. Spowart, and a member of the local police force, as damages for trespass. Mr. Spowart and the constable had arrived at Malloy's house at an appointed time to make a *post mortem* examination on the body of his son, on which an inquest had been held, when they found a woman had locked the door and left the dwelling. Entering through a window the police-constable let in the surgeon, who made the *post mortem* examination, and hence the action. The Judge held that the defendants went to the house in the execution of a public duty, and, although they had committed a trespass not justified by law, yet their conduct, considering the peculiar circumstances of the case, was almost justifiable. Verdict was given for the plaintiff—one farthing without costs. His Honour added that, in his opinion, the case never ought to have been brought before the Court.

L'EMBARRAS DES RICHESSES.

THE specimens brought to the Pathological Society have grown so numerous during this session that a complete glut has now occurred. At the last meeting, though it was prolonged to an unusually late hour, it was impossible, owing to want of time, to give to the subjects standing last on the list the attention they deserved. For instance, of a most rare and important specimen brought forward by Dr. Stephen Mackenzie, an instance of perforation of the heart by ulceration, starting at the endocardium, only the most meagre description could be given. The President said that the Council had under consideration the propriety of holding an extra meeting, and we think it most desirable that the result of their deliberations should be formally announced at as early a date as possible.

POISONOUS CRAYONS.

LAST Saturday, Mr. Carttar, the coroner for West Kent, held an inquest presenting several points of medical interest. From the evidence, it appeared that, on April 1st, a little girl aged two years and six months was noticed to be feverish and restless, and was reported to have had a bad night. The following day, she vomited constantly, was unable to take any food, and suffered greatly from thirst. Dr. Kavanagh, who was in attendance, considered that she was suffering from severe gastric catarrh, induced probably by sucking cheap coloured crayons, the pink mark of one of which was noticed on the child's mouth. It was also reported that the child had had a fall, but the date of the accident appears not to have been ascertained; and it is stated that there was no mark or bruise on the head indicating an injury. In a few days, the child rallied, and it was thought that all danger was over; but, on the twenty-third day of the illness, she was seized with convulsions, and the next day she died. On making a *post mortem* examination, Dr. Kavanagh found that all the organs were healthy, with the exception of the brain and stomach. The left side of the brain is reported to have been distended or fluid, whilst the stomach presented signs of acute inflammation, and in two places perforation had occurred. Either the effusion into the ventricles or the condition of the stomach might, it was considered, have accounted for the fatal issue. An analysis of the crayons showed that they all contained poison. The most poisonous was a pink one, which consisted of more than half its weight of white lead, coloured with an innocuous vegetable substance. The weight of this crayon was fifty grains. Another crayon contained Prussian blue, mixed with Dutch pink. The jury returned a verdict that deceased died from convulsions, brought on by an accidental fall on the head, death being accelerated by swallowing poisonous crayons. The case presents so many points of interest, that it is hoped that a more detailed account of the symptoms of the *post mortem* appearances will be published. Lead is introduced into the system in so many ways, that it would be most interesting to know definitely if sucking crayons is

to be added to the number. Dr. Kavanagh could probably give us valuable information as to the state of the bowels during the twenty-three days that the poor unfortunate child lingered on in agony. Was there diarrhoea or constipation? What was the condition of the urine? Were there any signs of paralysis, and was there a blue line on the gums? It would be interesting to know, too, what treatment was adopted, and if the contents of the stomach were analysed. In a case of poisoning by white lead published many years ago, the child—a boy aged 5—swallowed a piece as large as a marble. He suffered from abdominal pain and constipation for three days. On the third day, vomiting ensued, the body was covered with petechiae, and the gums were tense and white. He died in ninety hours from the administration of the poison; and, at the *post mortem* examination, a quantity of blood-stained fluid was found in the pericardium, the lungs were engorged, the liver, heart, and kidneys were soft and flabby, and the stomach was intensely inflamed. No trace of lead was to be found in any of the tissues.

SMALL-POX AT BARROW.

THE small-pox epidemic at Barrow, in Suffolk, seems now to have spent itself, though the infection has been imported into other villages, and fresh foci of disease set up therein. Altogether, forty-five cases have occurred, three of which have proved fatal. In consequence of the temporary hospital being quite full, an adjacent cart-shed was at the beginning of last week turned into a convalescent ward, into which thirty patients were removed. There yet remain in the hospital thirty-one cases, nineteen females and twelve males, received from twenty houses, all of which, together with those adjoining, have been disinfectant under the supervision of the medical officer of health. A somewhat drastic system of quarantine has been imposed upon the village; and it speaks well for the inhabitants that they have willingly consented to measures which, however desirable, are not strictly authorised by the law. Twelve patients have returned home in a convalescent condition; but it is stated that they "have to remain in quarantine for twenty days. Indeed, no fewer than seventy-two persons (twenty-four of whom are able to work, the remaining forty-eight being children) have had to be kept in quarantine." The local gentry have come forward with unusual promptitude and liberality in raising funds for the relief of the cottagers, and it is hoped that the crisis has now passed. Orders were given from the War Office, at the commencement of the epidemic, forbidding men from the infected district joining their regiment of militia, which was about to go into training; and we now learn that the entire training of the regiment has, in consequence of the epidemic, been postponed indefinitely.

SWANSEA MEDICAL AIDANTS AND CERTIFICATES OF DEATH.

AT the Swansea Petty Sessions, on April 15th, Mr. S. Jenkins was charged with making a false certificate of death. A man named Vaughan died on January 8th. The defendant signed a certificate, stating that he attended the deceased, and that he last saw him on January 7th. The widow of the deceased deposed that he was not attended by Mr. Jenkins, nor could she say that the defendant ever saw her husband. He was attended by Dr. Thomas and Mr. Bruen, and was ill for nine months. Only Mr. Bruen saw him within a week before his death. Mr. J. Bruen said the signature of the certificate was in the handwriting of the defendant, and, on cross-examination, he admitted that the rest of the document was in his (the witness's) handwriting. He acted as an assistant to the defendant. He was not a qualified medical practitioner. He could not say whether defendant saw the certificate before it was filed up. The defendant saw the document before and after November. He had attended the deceased from August to his death. Defendant had given him certificates, signed as if by him, for some time. In the defence, it was urged that this proceeding had not been taken by any official requested to carry out the Act, and that the information had been laid by a medical practitioner. There was no proof that the defendant ever saw the certificate, after signing it in March. He could have been induced into leaving the

signed certificate, even with his assistant, but he had not wilfully made a false entry. The magistrates, after a consultation, said they considered the offence proved; but, as this was the first prosecution under the Act, they had decided to deal leniently with the defendant. He would be fined £1 and costs. The assistant was then charged with forging a certificate of the death of Vaughan; and Mr. Jenkins (on his subpoena) was called to give evidence in support. He said he signed the certificate produced, and the defendant Bruen wrote the upper part of it. Other witnesses deposed that the certificate produced was that filled in by the defendant. The Bench inflicted a similar fine in this case. It will be seen from the above, which we have abstracted from the *Western Mail* of the 17th ultimo, that general practitioners who employ unqualified assistants to conduct branch practices, or otherwise help them in their business, run much risk of being punished by fine and exposure. Unqualified assistants very frequently possess sufficient professional knowledge to usefully aid their principals, but such assistants should never be left to have the sole control of cases; and, in carrying on branch practices, the principals should take care only to engage the services of those who, by being qualified, will save them from falling into serious mistakes.

INSANE IN PRIVATE DWELLINGS.

AT the quarterly meeting of the Medico-Psychological Association, held at Bethlem Hospital on Friday, April 28th, Dr. Lionel A. Weatherley proposed a resolution "that single cases of insanity in private dwellings should be better supervised." In doing so, he pointed out the fault of the present day in allowing outsiders, who knew nothing of the details of the treatment of insanity, to propose sweeping reforms, which psychological physicians were of necessity bound to oppose. He hoped that the resolution he proposed would be followed by others of equal importance, and thus make the Association what it should be, viz., the starting point of lunacy reform. If such were the case, how much better would the so-called "lunatic doctors" be looked upon by the general public. If better supervision was considered necessary with regard to lunatics in asylums, how much more essential was it that single cases should be thoroughly and efficiently supervised. He maintained that a more vigorous supervision would cause the single system of treating many cases of insanity to be recognised as a most useful means of ensuring early treatment, of hastening the period of convalescence, and of rendering the lives of many chronic lunatics happier than they might be in asylums. After some discussion, the President, Dr. D. Hack Tuke, felt he was unable to put the resolution to the meeting, as the quarterly meeting in London did not properly represent the Association; and Dr. Weatherley gave notice that he would bring the subject forward again at the annual meeting of the Association in July.

REMOVAL OF THE DEAD.

WE learn from the *Leeds Mercury* of the 21st April, that an inquest on the body of a girl named Elizabeth Tilson, aged 17, who had died on the 14th March, and which had been adjourned from the 8th April, was on the 20th brought to an end. It was held for the purpose of determining whether the death had been hastened by her removal, while in an unfit state, from the Women and Children's Hospital at Leeds, to the Dewsbury Workhouse Infirmary. The girl, it would appear, had been suffering from cholera; and, being very unmanageable in the hospital, owing to her affection being complicated with meningitis, was transferred to the workhouse, the hospital authorities considering that, from the fact of there being no resident medical officer, her condition could be better dealt with in the workhouse than in the hospital. The girl died three days after her removal, and the *post mortem* examination revealed meningitis as the cause of death. It would further appear that the inquisition was called for at the instance of the guardians of the Dewsbury Union, in consequence of their attention having recently been attracted thereto by Mr. J. S. Davy, Inspector of the Local Government Board, who, it would seem, had read the notes of the case as entered in the report of Mr. Haddiwell,

the workhouse medical officer. At the adjourned inquiry, Miss E. Watkins, nurse at the hospital, deposed that the girl was under her charge from the 28th of February to the 11th March, on which day she was removed to the workhouse infirmary. During the last week, she gradually became worse, and on the 10th had to be removed to a private room, and strapped down in bed. At the time, there were several bad operation cases in the hospital; and her condition was such as to endanger the well-being of other patients. The coroner remarked, "Well, one case is as good as another"; to which the solicitor for the hospital replied, "Yes, but one is not as good as eighteen"; which was followed by the coroner saying, "That is just the same; you have no right to kill one for the sake of a thousand." Some letters which had been addressed to the coroner by Mr. Ikin, one of the surgeons of the institution, were read, from which it appeared that the girl had become gradually worse, and perfectly unmanageable; and, as they had no resident medical officer, no padded room, nor other proper means of dealing with such a case, that they had directed her removal to the workhouse (where in all human probability she laboured under the same disadvantages). Mr. Ikin also protested against any inquiry being held, as he contended that the girl had been kindly treated, and only transferred to the workhouse when it was found that she could not with advantage be retained in the hospital. The coroner remarked, "That a public institution which exists for the benefit of the public should have the confidence of the public; and every one feels that these matters should be cleared up." He also pointed out that the jury would have to consider whether Tilson's removal from Leeds was simply a piece of indiscretion, or a culpable act. This hospital was an institution which made an implied contract with the public that the patients received should be taken care of; and they would have to say whether the girl's removal had been made without a proper examination as to her fitness for removal, and if death had been hastened by a neglect of proper examination. He also said it might be advisable to again adjourn, for the purpose of giving an opportunity for an explanation of the letters; whereupon a juror remarked that it was a frivolous case, and that they ought to censure the board of guardians for their conduct with regard to the inquiry; which was followed by another juror stating that it had been given in evidence that the girl would have died from meningitis, whether she had been removed or not. After an hour's deliberation, the following verdict was returned, "That Elizabeth Tilson has died from natural causes, and that we highly censure Mr. Ikin for removing her, or for causing her removal, when in an unfit state of health." In commenting on this case, we would express our regret that the perversity of the majority of the jury made them insist, despite the opinions of two of the intelligent members of their body, in censuring Mr. Ikin for directing that to be done which is carried out every day, more or less, in every large urban hospital—to wit, the transference of troublesome and, it may be, even perhaps moribund patients from their wards to the nearest workhouse infirmary.

THE TOTTENHAM SANITARY ASSOCIATION.

THE eighth annual report of this useful little society, whose organisation is worthy the attention of larger districts, has recently been published by the Committee. It contains a record of much good, if unpretentious, work in watching the doings of the local board of health, and in endeavouring to instil a greater interest in sanitary matters amongst the residents. The report refers at some length to the mortality of the district and its components, and speaks of the improvement in the death-rate which has been shown in the last few years—an improvement, much of the credit of which the Association is fairly entitled to claim. Up to 1871, the death-rate in Tottenham rose with the increase in density of population; but, though the population between 1871 and 1881 was more than doubled, the total death-rate during 1881 was 3.7 per 1,000 less than during 1871, while the death-rate from the seven principal zymotic diseases was only three-fifths of the rate during 1871. When it is remembered that, between 1871 and 1881, the increase of population in the suburb was chiefly of the wages-receiving

class, the decrease in the death-rate during the decade is "a triumphant proof of the beneficial effect on the public health of effective sanitary administration." The Committee further observe that, "if the state of things which existed in 1871 (before the formation of the Association and the commencement of earnest sanitary work through its exertions) had been allowed to continue, *i.e.*, if in 1881 Muswell Brook and the other water-courses had been the principal channels for the sewerage of populous districts; if such sewers as these were had remained unventilated; if a great part of the water-supply had been drawn from land springs in the neighbourhood of highly manured market gardens; if more than 2,000 water-closets were still in direct communication with the water-mains by means of stool-taps; then, unquestionably, instead of being far healthier in 1881 than in 1871, Tottenham would have been in a deplorable condition, and would have shown a death-rate largely in excess of that year, instead of being markedly below it." Considering the good that the Association has done and is doing, the fact that only forty-five persons subscribe to its funds is not creditable to the neighbourhood.

SMALL-POX AND FEVERS IN THE PUNJAB.

A RECENTLY published Parliamentary paper contains some interesting particulars relating to the prevalence of small-pox and fever in the Punjab during the year 1880. Small-pox prevailed with great violence, the mortality exceeding even that of 1878—the same causes, scarcity and distress, favouring the epidemic force in both years. The number of registered deaths from the disease was 49,489, or 2.83 per 1000, against 40,271 in the previous year; of the total number, 9,832 deaths occurred among children under one year of age, and 36,326 amongst those under one and twelve years. In some parts of the Province, the death-rates from this disease alone exceeded 5 per 1000. The deaths from fever in 1878 reached a number never before approached; but it was exceeded in 1879 by more than 30,000, the total number being 472,939 or 27.04 per 1000, against 440,492 or 25.19 per 1000 in the previous year. This excessive mortality was owing to a continuance of the unusually severe and widespread epidemic which commenced in the previous September, continuing through the cold months into the spring of 1879. It was attributed to the distress occasioned by the exceptionally high prices that prevailed during the two previous years, combined with an abundant rainfall in the monsoon season. In addition to these, there were exceptional causes at work in certain localities where the drainage is very defective. This evil has long been known, and works are now in progress for improving the drainage of these districts. During the monsoon months, and those following to the end of the year, or six months in all, the number of deaths registered under fevers in seven districts was 158,978, or 123 per 1000 of a population of 4,646,570. In the remaining twenty-five districts of the province, with a population of 12,841,555 for the same period, there were only 131,893 deaths, or 29 per 1000.

THE DEATH-RATE IN VICTORIA, ESPECIALLY FROM PHTHISIS.

AN interesting paper has been recently read, before the Institute of Actuaries, on the rates of mortality in Victoria. Its various bearings were discussed at some length at the meeting of the society, when Dr. Symes Thompson represented the medical view of the subject. It is obvious that, with colonial society still in so changeable a state, it is too early to arrive at decided opinions as to the comparative mortality of Victoria and of England; and that conclusions from facts can, for the present, only be received conditionally. Still, it is well to learn such facts as the following ones. That the average number of deaths *per annum*, per 1,000, in Victoria, was found to be 16½, against about 22 in England; this is considered to be partly accounted for by the lives of emigrants being somewhat better than average lives. That the deaths in Victoria from violence were 9 per cent., against 3½ in England; this is accounted for by the various accidents which happen to pioneers in new and unsettled countries. That the infant mortality is more favourable in the colony than in the mother country; this is partly explained by the large number of infants removed by parents when they

CHAIR OF NATURAL HISTORY IN ABERDEEN.

It is officially announced that the Crown has nominated Professor H. Alleyne Nicholson, M.D., Sc.D., of St. Andrew's, to the chair of Natural History in Aberdeen, vacant by the removal of Professor Ewart to Edinburgh. This appointment is regarded as a most advantageous one for the Medical School of Aberdeen, and also for the students of arts. The professor has to teach zoology and geology in winter, and zoology in summer. As Professor Nicholson has done much in both these departments, no one is more competent to fill the chair. The Medical School of Aberdeen has gained in Dr. Nicholson a teacher of undoubted ability, and one who is thoroughly acquainted with the bearings of zoology upon medicine, and also with the amount and kind of knowledge of zoology specially required by medical students. The success with which Dr. Nicholson conducted the class of natural history in Edinburgh is at once a high testimony to his ability as a zoologist, and a proof of his singular aptitude for conveying information to students. Lord Rosebery is to be congratulated on the expeditious way in which he has made the two last appointments to Scotch chairs.

HEALTH LECTURES AT DINGWALL.

We observe that a course of health lectures which have been delivered at Dingwall during the winter has just been completed. The course was opened by Dr. Sutherland of Invergordon, with a very eloquent discussion of the nature of life, which was followed by a clear and complete summary of human physiology, given by Dr. Ross of Inverness. Dr. Bruce and Dr. Adam of Dingwall took up the practical subjects of air and water, food and clothing; and Dr. Cowie of the same place then devoted a lecture to general hygiene. Personal health next received attention, Dr. Macnee of Inverness treating the subject of the health of women, and Dr. MacFadyen of Beaulieu discussing the more common diseases of children. Infection was handled by Dr. Mackenzie of Inverness, in a thoroughly interesting and instructive style; and Dr. Sutherland concluded the course by a practical account of surgical emergencies, and how to meet them. Such lectures serve more than one good purpose. They dissipate ignorance, by teaching the people what must be of vital importance to them in their daily life; and they prove to the public that the profession has no secrets which it wishes to keep from them. In the present instance, the lectures have also benefited the profession, by bringing the different medical men of the district together on the platform, and thus encouraging a generous rivalry amongst them.

THE TREATMENT OF FEVER CASES IN CHARITABLE INSTITUTIONS.

SOME time ago, the directors of Leith Hospital applied to the municipal authorities for increased assistance in maintaining the hospital now that so many cases of fever are treated in it. They have prepared a memorandum on the subject, which is certainly worthy of consideration. In it is pointed out that, for the five years from 1876 to 1880 (years when the town was unusually free from fever), the fever cases numbered 382, or an average of 76 per year; and from 1st January last to this date they numbered 228, the greater proportion of the latter being cases of typhus. The expense of the Fever House in any of the years named amounted to about £500; and it will therefore be seen that the sum (£100) paid by the local authority is quite inadequate. The large demand upon the funds which has arisen from the great number of fever cases, compelled the directors to close wards containing sixteen beds in the new hospital, which were previously available for the reception of general cases of disease. The directors state that had it not been for the inadequacy of their funds, they would not have troubled the local authority; but, considering the circumstances of the case, and that it is incumbent on the town of Leith to have provision for fever cases at the cost of the taxpayers, they are compelled to take their present step. It is satisfactory to know that, through the munificence of a lady, such addition has been made to the funds of Leith Hospital, that the directors will be able to open and maintain one of

the closed wards; and if the Leith authorities properly supplement the sum given already by them, and are followed in this by the South Leith parochial board, which at present gives £100, the North Leith, which gives £50, and the Dock Commission, which gives £50, the directors will be able to open all the wards in the new hospital. Mr. Charles Stewart, M.A., M.B., has been appointed resident surgeon to the hospital.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending April 22nd, it appears that the death-rate in the eight principal towns was 23.2 per 1,000 of estimated population. This rate is 2.3 above that for the corresponding week of last year, but 1.6 below that for the previous week of the present year. The lowest mortality was recorded in Greenock, viz., 17.8 per 1,000; and the highest in Glasgow and in Paisley, viz., 26.6 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.0 per 1,000, or 0.4 below the rate for the previous week. Whooping-cough was the most fatal epidemic in Glasgow, and measles in Edinburgh. Acute diseases of the respiratory organs caused 114 deaths, or 23 less than the number recorded last week. The mean temperature was 46.2°, being 5.4 above that of the week immediately preceding, and 3.8 above that of the corresponding week of last year.

IRELAND.

MR. ALEXANDER NIXON MONTGOMERY, Senior Assistant to the late Sir Edward Sinclair, as Secretary of the Vaccine Department of the Local Government Board, has been appointed his successor in that office.

ROYAL COLLEGE OF SURGEONS OF IRELAND.

ON Tuesday last, the following examiners for the licence were elected for the ensuing year: Messrs. B. W. Richardson, E. A. Stoker, E. S. O'Grady, W. Thomson, M.D., R. L. Swan, W. Frazer, M.D., B. G. McDowell, M.D., H. R. Swanzy, and P. S. Abraham. The outgoing examiners for the degree in midwifery, and for general education, were re-elected. The authorities of the College have decided on expending £3,000 in the enlargement and improvement of its medical school.

THE KING'S PROFESSORSHIP OF MEDICINE.

DR. WILLIAM MOORE has communicated to the President and Fellows of the King and Queen's College of Physicians, his intention of not seeking re-election to the King's Professorship of Medicine in the School of Physic, and the *ex officio* Physicianship of Sir Patrick Dun's Hospital, at the expiration, in July next, of his present septennial term of office. Dr. Moore has been the King's Professor of Practice of Medicine in the School of Physic since July 1866, having been elected to the chair on its resignation by Dr. Banks, now Regius Professor of Physic in the University of Dublin. "The School of Physic in Ireland" is a medical school, formed by the amalgamation of the schools of Trinity College and of the College of Physicians. The school is governed jointly by the Provost and Senior Fellows of Trinity College, and by the President and Fellows of the College of Physicians. The King's Professors of Practice of Medicine, of Midwifery, of Institutes of Medicine, and of Materia Medica, are appointed by the College; and the Professors are, *ex officio*, Physicians to Sir Patrick Dun's Hospital. In 1868, it was resolved by the College of Physicians that, in future, no King's Professor in the School of Physic shall be allowed to hold an appointment as medical officer to any clinical hospital other than that of Sir Patrick Dun. The legality of this resolution is now seriously questioned, and it is probable that it may be rescinded. The point is one of extreme importance to determine; especially at present, when there are two King's Professorships—that of Midwifery and of Medicine—in the gift of the College. It will be readily understood that a physician, who would be most competent to fill a King's Professorship, would not seek the chair, if he had to resign his connection with the

hospital to which he was attached, and in which he made his reputation. In this way it might, therefore, possibly happen that the best man would not be secured for the professorship. We entirely disapprove of plurality of hospital appointments. But if, in such a case as we have put above, a physician of a hospital other than that of Sir P. Dun's were appointed to a King's Professorship, and declined to resign his own hospital and to do duty at Dun's, the College of Physicians could appoint a physician to do duty in his place at Dun's Hospital. In this way, nothing would prevent the professorships from being filled by the best men; and it would be against the interests of the College to put any but a competent physician into Sir P. Dun's Hospital.

THE PROPOSED ADDITIONAL TAX ON CARRIAGES.

MUCH excitement has been caused in the medical profession by the proposal of the Chancellor of the Exchequer to impose an additional tax on carriages. Several letters pointing out the hardship that would be inflicted on medical men by the proposed tax have been received by the chairman of the Parliamentary Bills Committee and at the office of the JOURNAL. The Parliamentary Bills Committee of the association met on Tuesday last, and unanimously agreed on a series of resolutions, which will be found below. The committee agreed on the following form of petition:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The humble petition of the undersigned practitioners of medicine in sheweth—

That the vehicles used by medical men are implements of their calling as much as are the carriages of farmers, brewers, and others, which are exempt from all tax; while, being of light construction, the carriages of the medical men do less injury to the roads than the heavier vehicles which are exempt.

That members of the medical profession already contribute more in rates and taxes than any other class: it being necessary for them to dwell, for the purposes of their profession, in larger houses, which, though places of business, are rated as private dwellings.

That medical men have to pay income-tax on their gross and not on their net profits, although such income is fluctuating, and dependent on professional success.

That medical men frequently require, in virtue of the necessities of their calling, to use, as well as open carriages, the use of which is often rendered imperative by the necessity of visiting hospitals and other institutions at a distance from their residences.

That an increase of the tax on carriages would press hardly on a large number of medical men, especially those practising in country districts.

Your petitioners therefore pray that, in any proposal for an increase of the tax on carriages, an exemption may be made in favour of medical men, so that they may not be called on to pay, in respect of the carriages used by them in the performance of their professional duties, a higher rate than that to which they are now subjected.

And your petitioners will ever pray, etc.

Members of the Association are earnestly recommended to make copies of this petition, to obtain as many signatures as possible from their professional brethren, and to forward them to their respective representatives in the House of Commons. It is also essential that our petitioners should be prepared to explain, with moderation and in support of the object of the petition, the reasons for the proposed tax, and other matters of importance being taken in consideration; and petitioners should be ready to explain the importance of the exemption in the matter. It is also recommended also that the members of the Association should make such assistance in the prevention of the hardship which, through the introduction of the proposed tax, would befall the medical profession, as they may be able to do.

THE PARLIAMENTARY BILLS COMMITTEE.

A meeting of the Parliamentary Bills Committee, held at the office of the Association, on Tuesday, May 1st, 1882, was presided over by Mr. Ernest Hart, and attended by Mr. Dr. A. Henry, Dr. Partridge, Dr. Nicholson, Dr. Newman, Mr. Sibley, and Dr. Herbert. The

meeting was called specially to consider Mr. Gladstone's proposal to increase the tax on carriages.

The CHAIRMAN read letters which he had received from Mr. Dyke, Dr. C. Orton, Mr. R. S. Peart, Dr. Bryan, Mr. H. D. Palmer, Dr. Beales, Mr. T. Langston, Mr. Godfrey, and Dr. Percy Boulton.

Resolved: "That a petition be prepared to present to the House of Commons, that the proposed increase in the tax on carriages should not apply to the carriages of medical men."

Resolved: "That all the medical members of the House of Commons be requested to make formal representation to Mr. Gladstone on the subject."

Resolved: "That representation be made by the Parliamentary Bills Committee to Mr. Gladstone to this effect, and that he be asked to receive a deputation on the subject."

The CHAIRMAN reported that the subcommittee appointed at the last meeting to draft a Bill for the registration of midwives in England and Wales on the lines laid down by the Obstetrical Society, consisting of the Chairman, Dr. Robert Barnes, Dr. Glegg, Mr. Nelson Hardy, Dr. C. Holman, Mr. Sibley, Dr. Quain, Dr. Priestley, Dr. Playfair, and Dr. J. H. Aveling, had drafted a Bill in accordance with the instructions on that basis.

Resolved: "That the subcommittee be requested to continue its labours, and to obtain the introduction of such Bill into Parliament."

COLLECTIVE INVESTIGATION COMMITTEE.

THE FUNCTIONS OF THE LOCAL COMMITTEES.

THE work of studying the whole Association for the collective investigation of disease is being actively carried on. Several committees have now been appointed by various Branches of the Association, and others are being formed. Each Branch that has been applied to has most cordially responded to the call, and very able and active men have been enrolled to form local committees in the district. It is evident that a large proportion of those most competent to aid in such a work as this will gladly welcome the opportunity of easily recording their cases of interest, and thus furthering the advance of our knowledge of medicine. The fact that the observations of so large a body of men are being simultaneously directed to the elucidation of certain obscure points, stimulates the desire of every man who takes an interest in the work, to add his own experience and observations to the common fund. The committee supplies a necessary link between the great body of observers who are studying disease in all parts of the country, and under varying conditions and surroundings; it will enable them easily and with little trouble to obtain answers to many questions which are constantly presenting themselves to the mind of every thoughtful practitioner.

At the present time, when these local committees are being asked for and appointed, some information concerning the work proposed for them may prove useful. To summarize this, it is necessary to bear in mind the object for which the Collective Investigation Committee was appointed, namely, to advance our knowledge of medicine by means of the co-operation of disease gained outside the walls of the hospital.

The opportunities for studying medicine afforded by hospital practice are chiefly confined to observations on the later stages of organic disease, and to the study of acute diseases. Little or no opportunity is afforded for the observation or recognition of the functional conditions which most generally precede organic disease. Some of the more important subjects concerning which it is hoped to gain information by the collective investigation of disease, are included under the following heads:—

1. Facts are required upon various matters which can only be known by those who have opportunities of watching individuals, and some are, however, the same, occurring over many years, or throughout their lives. Of these, the following subjects are examples:—*a.* The earliest symptoms and circumstances which herald the occurrence of grave constitutional conditions, such as rheumatism, gout, enteric fever, etc., etc., and of organic diseases, such as cirrhosis of the liver, lung disease, phthisis, and many diseases of the cord and brain. *b.* The duration of various diseases in families, and the mode of inheritance in the individual; for example, the relation of epilepsy to insanity, the production of cancer by local irritation of a part, or perversion of function of an organ, the relation of gout to rheumatism and enteric arthritis, and of heart affection to nerve disease, etc. *c.* The gravity of certain symptoms under varying circumstances, such as a neural *gout* in acute rheumatism, diabetes, scurvy, anaemia, pregnancy, or Bright's disease; of hemiplegia in phthisis, gout, alcoholism,

amenorrhœa, and other conditions; of albuminuria in Bright's disease, in scarlatina, in adolescence, in gout, etc.; of ankle-clonus and other reflex phenomena in functional and organic nerve-disease.

2. Information is required concerning the liabilities to disease in certain districts. *a.* The production, modification, or prevention of disease by variations in soil, elevation above sea-level, prevailing winds, amount of rainfall and sunshine, hygrometric condition of the atmosphere, and the qualities of drinking-water. *b.* The liabilities to disease among the operatives in certain industries; this, though widely studied, is by no means worked out. *c.* The effects of syphilis on the population in districts where it is especially prevalent.

3. Many points of interest in the etiology of enteric fever, diphtheria, and others of the acute specific diseases, still await elucidation, and may well be undertaken by this committee.

4. The asserted communicability of phthisis is a subject which calls for immediate investigation.

5. The communicability of disease from animals to man is a question of increasing interest.

6. Last, but not least, carefully organised, extensive, and combined observations on the action of various drugs, may be expected to prove a fruitful subject for subsequent investigations.

These are some of the lines of work which the committee have in view; it remains to point out the manner in which the local committees may conduce to the work. The experience of past efforts of this kind, which have chiefly consisted in the circulation of schedules of questions, shows that they have failed on account of the complex and elaborate answers required, from the request being made for past and generally unrecorded experiences, from the want of a general interest in the subject, and especially from the want of an organisation by means of which personal application can be made to the members of the profession. It is hoped that, in the present movement, these causes of failure have been especially guarded against. The questions put to the observers are simple and definite; they can often be answered by a single stroke of the pen; they refer entirely to present or future observations, or to those of which a record has been previously kept; but the last and most important of these causes of failure will be met, it is thought, by the local committees. These will have essentially a stimulating function. Each member will be expected to interest his friends and neighbours in the work, and, by personal application to them, it is believed that he will obtain their assistance. The primary function of all local committees should be personal application to the members in their district, and this should be carried out in a carefully organised and systematic manner; each member of the local committee undertaking to make personal application to certain selected persons, for whom he should be made responsible.

The best method of organising and working each Branch will vary greatly; and this, again, can only be determined by the local committee.

In addition to propagating the work in their respective Branches, the local committees will be asked to consider the question of the prevalence of particular diseases in their districts; indeed, all the subjects of inquiry in the second group will come under their notice. Not only should the influence of climatic conditions in the production and prevention of disease be studied by them, but also the diseases produced by special trades or manufactures, and the local outbreaks of specific fevers. It is probable that, in many instances, special investigations, of local interest, will be suggested and carried out by local committees. Whenever a local investigation is proposed, it is hoped that a scheme will be drawn up, and the necessary questions framed, by the local committee; and that it will then be submitted to the general committee for criticism and suggestions. In drawing up the cards about to be issued, it has been found that those who frame a scheme of this sort and propound the questions in the first instance, are never able to effectively criticise their own work. This function of criticism is exceedingly well filled by the central committee, upon which all shades of thought and opinion, as well as much special knowledge, are represented.

The general committee will always be glad to lend assistance that may be necessary in carrying out any local investigation, either in organising, printing, or secretarial work.

Finally, each local committee is invited to send to the general committee a representative who will not only represent the Branch, but will keep the local committee in communication with the central body. Though it may be impossible in many cases for these representatives to attend the meetings in London, nevertheless, the subjects to be brought forward at these meetings will always be submitted to them for remarks and criticisms, which can be made by letter, and laid before the general committee.

The three cards which have been prepared, after many revisions and alterations, are now being stereotyped. Specimen slips showing

how they should be filled up will be sent with each. The process is necessarily a long one, and some unavoidable delays have occurred, but they will be ready for distribution by the second week in May; together with reprints of the memoranda on the subjects of investigation, which will be issued to those who may wish to possess them. The cards will be issued by the local committees, or by the secretaries appointed for the various districts, to whom application should be made by those willing to take part in the work.

SIR,—The work of the Collective Investigation Committee is one of so much importance, that no amount of preliminary discussion can be considered redundant. I hope, therefore, I may be thought to be within the bounds of propriety in taking up my pen to emphasise a paragraph in the letter of Dr. Sturges, in the JOURNAL of April 22nd. Let me say that I am giving vent solely to my own personal opinion; nor do I conceive that, in doing so, I am in any way traversing the lines of investigation which the General Committee have wisely laid down. The paragraph to which I refer is this: "The schedules are issued to experienced men, who may be trusted to assert themselves with sufficient plainness, and to keep clear of pitfalls on one side or the other. They will know how to make erasures and additions accordingly."

Of those who receive these cards or schedules, some will not see their way to giving much assistance to the Committee; others, and I should suppose, the majority, will take up the matter and work at it heartily. Now, by all such I conceive that the cards issued should be considered to have a twofold meaning. In the first place, they propose certain questions for solution—all of which, in whatever form they may be made, are to be considered as quite open. We are, in fact, to begin again, so far as is possible in human nature, without bias, and attempt to decide by figures what rheumatism is, what chorea is, and so on. This is what I understand to be the point of view of the Committee; and by it the inquiry, with wise precaution, is restricted to certain definite issues. But there is another point of view, viz., that of the observer; and Dr. Sturges, if I interpret him right, has in a measure expressed this in the sentence I have quoted. We are asking a number of experienced men to work at various diseases which have numberless points of interest, and which are, no doubt, viewed in proportionately different lights; and I wish to point out that, beside the elementary facts of disease—those facts which we all think we know already, but about which we are less sure when we come to discuss them—there are many others which are equally important, which no less require elucidation, and which, for some minds at any rate, may prove more attractive lines of observation. Nay, further, it is quite possible that there may be other features in any given disease, which, having hitherto escaped the notice of the many, are not even hinted at in any scheme of symptoms, but which may, perhaps, have revealed themselves to the few here or there. And now, or not for a long while to come, is the time to collect all facts of any description concerning those diseases which are proposed for investigation. The labour may appear heavy; but I assume that those who take up an inquiry of this kind are not likely to be broken by too much work, but their ardour may be chilled by cramp. I do hope, therefore, that, while we work upon the lines of the schedules, and give the General Committee the precise information for which it asks, we shall not, any of us, fail to "assert ourselves with sufficient plainness" in those points which have seemed to us worthy of note; and, as life is short, unless we do, not even collective investigation will settle those of any one disease.

And thus, I venture to suggest for rheumatism some of these points, which might very well be noted, and which are by no means unimportant. The first great want for acute rheumatism is, no doubt, a careful record of series of cases showing the life-history of rheumatic people. A. or B., when attacked with rheumatism, requires to be described on paper, as far as possible before the attack; and (what will be more easy) all his subsequent ailments should be recorded, and his heart examined at intervals. With reference to sex, this point strikes one of the many that might be enumerated: the liability to particular forms of heart-disease varies with the sex; one form (mitral contraction) is more common in women than in men. Does acute rheumatism preponderate in the female sex to explain this? and, supposing that this should be so, what is the meaning of it as regards the causes of rheumatism? Take the age, again: Are there differences between the rheumatism of childhood and that of adults? If not, well; but, if so, then what is the meaning of this with reference to the unknown quantity, rheumatism?

The state of the patient, whether married, single, or widowed, may suggest inquiry in various ways; but we want much to know whether or not there be any connection between acute rheumatism and the more chronic diseases, also popularly called rheumatism, but which are held by many to be distinct diseases—(osteo-arthritis may be taken as an

example); and also, indirectly, some information might be afforded tending to prove or disprove the relation asserted between rheumatism and certain neurotic ailments more frequent in women than in men, and under certain conditions of derangement of the sexual functions.

As to the time of year and locality, statements are made which ought now to be substantiated, not only by one or two, but by practitioners from all parts. Is rheumatism more common at one time of year than another, in cold than in hot weather, in moist than in dry, with one wind prevailing rather than with another? Is it more common in town or in country? and so on. Some practitioners hold that rheumatism is easily acquired; some that it is mostly transmitted by inheritance. What is the truth in this matter? Geographical distribution, evidence upon the climatic conditions under which it occurs, must afford most valuable information in aid of the settlement of this question. And, further, supposing it be found to be acquired, is it a constant result of uniform conditions, or a result common to varied causes?

The occupation is down for a note on the card, but much more than that might be recorded. I would have it typify the patient and his habits; his aspect, whether dark or light; his physique, whether strong or feeble; his muscular tone; his work; his recreations. Then, again, his food; it is surely necessary to know not only its character, but its quantity and quality. We ought to know what is its staple composition. Some people take saccharine matters largely; others are great meat-eaters; others vegetarians, and so on. Intemperance, too, is not confined to the imbibition of alcoholic drinks. It should always be a question whether a man is intemperate in meats, if not in drinks.

Then, again, what are the modifications of rheumatism? Has it any? Is it in one man shown by some skin-eruption, in another by neuralgia; in another by heart-disease; in another by gout? If the family history comes in. We have first to determine if any families, traced through several successive generations, be absolutely free from rheumatism; and then, if it should happen that some families are thus exempt, what are the ailments which run with rheumatism or in place of it in rheumatic families; and is there any evidence bearing upon the transmutations of the disease? May gout in one generation be rheumatism or osteo-arthritis in the next, as some think? We want also to know what ailments replace rheumatism in the individual, or affect the rheumatic with sufficient constancy to justify the assertion that certain diseases are related to acute rheumatism.

The heart-disease of acute rheumatism gives rise to numerous questions: some tending to throw light upon the disease itself; others rather upon the etiology of heart-disease. Of the former, are the frequency of its occurrence in the two sexes; at different periods of life: the various forms; and the possibility of its prevention by treatment. To the latter belongs the question, whether an acute attack of endocarditis is necessary for the production of those chronic thickenings which are so common; and, as regards recovery, both of the joints and heart, how far it would be to be able to gauge the frequency with which such chronic diseases supervene upon the acute: how important would be to have an attack of acute endocarditis having cleared up, with resolution of the subsequent slow maturation of some chronic valvular disease.

To be able to answer many, perhaps most, of these questions, and many others that might be suggested, the most conscientious observation and record of the disease in general practice are indispensable; for they involve no less than keeping an eye upon certain cases for many years. This is a task, however, a labor of no little magnitude; but it is a necessary one, which may well come up to overtake the intervening toil, and anticipate the ultimate harvest.—I am, etc.,

JAMES F. GOODHART.

SELECT COMMITTEE ON THE CONTAGIOUS DISEASE ACTS.

On Tuesday, April 24th, Dr. Alexander Patterson, Surgeon to the Glasgow Lock Hospital, was called in and examined by the Select Committee on the Contagious Diseases Acts, in relation to the Glasgow Lock Hospital, and the measures taken there for the treatment of the venereal diseases. He was asked a number of questions, and gave answers which were generally satisfactory. The Committee then adjourned until the 1st of May.

The Committee then considered the report of the Select Committee on the Contagious Diseases Acts, in relation to the Glasgow Lock Hospital, and the measures taken there for the treatment of the venereal diseases. The Committee then adjourned until the 1st of May.

The Committee then considered the report of the Select Committee on the Contagious Diseases Acts, in relation to the Glasgow Lock Hospital, and the measures taken there for the treatment of the venereal diseases. The Committee then adjourned until the 1st of May.

They also dressed in a most conspicuous manner; and it was not uncommon, on summer afternoons, to see the mistress of one of these houses, with a troop of five or six females, marching in Indian file along the streets in their gaudiest attire. Now there was a great change. These brothels had all been suppressed, there was very little street solicitation, and the indecent exhibitions just mentioned had entirely ceased. This good result he attributed to the Glasgow Police Act of 1870.

But the Contagious Diseases Acts have never been applied to Glasgow, and this part of Dr. Patterson's evidence does not bear upon them in the smallest degree. It simply shows that, if sufficiently extensive powers be put in the hands of an energetic police, a great improvement in public order will soon be visible. Moreover, the same argument may be applied to this Police Act of 1870, as is applied to the Contagious Diseases Act by its opponents, viz., that it has done too much; and, while it has checked open and disorderly prostitution, it has actually increased the number of those who carry on their trade in secret. This objection is confirmed by a tabular statement handed in by Dr. Patterson, in which he contrasts the number of yearly admissions to the Glasgow Lock Hospital with the amount of the population. From this, it appears that, during the year before the new police regulations came into force, viz., 1869, there were the largest number of admissions to the hospital ever known in the city, but since that year, though the population has increased by a hundred thousand, the admissions are very much fewer than formerly. No doubt, it may be correct, as Dr. Patterson stated, that venereal disease has much diminished in Glasgow during the last ten years; but it is difficult to believe that, with a fixed population of 800,000, and a large seaport element, the diseases admitted to the Lock Hospital represent anything like the whole of the venereal disease among the prostitutes of Glasgow and the vicinity during the past year; and the supposition is strengthened, that a large number of women must procure private medical assistance, or go unattended, from fear of betraying their place at all, and thus subjecting themselves to the most severely police regulations.

Moreover, these figures, 349, do not represent that number of distinct cases. As a matter of fact, only 200 patients were admitted for the first time; and, from Dr. Patterson's own report, which he put in evidence, it appears that very few indeed of them were avowed prostitutes. During a period of ten years, from 1870 to 1880, there were only 500 prostitutes admitted to the hospital, against 1,100 domestic servants, and 1,300 mill-hands, besides hundreds of women of other trades and occupations. Therefore, considering the class of patients that resort to the hospital, it is not surprising, as Dr. Patterson says, that they are as a rule quite willing to remain till cured.

The witness stated that the method of examination was similar to that employed at other Lock hospitals. Moreover, what has just been said with regard to the class of patients using the hospital is confirmed by the statement of the witness, that he found the use of the speculum almost unnecessary, that he had in many cases to administer chloroform before the examination could be passed.

Admission to the hospital was free, but those patients who could do so were invited to pay a fee of one guinea. The institution was supported by voluntary contributions, which were, however, very insufficient; and the witness gave as the reason why, in so wealthy a city, so little money was given to this charity, that there was a strong feeling against the reception of vice, even in the form of a licensed establishment.

On Tuesday, April 18th, the Rev. Stephen Kimbault, who described himself as an emigrant or missionary, was called in and examined, with a view to ascertaining the effect of the Acts on the town of Dundee, which he had resided in for many years. It is needless to say that Mr. Kimbault is thoroughly opposed to the Acts, and that his opinion that they cause the most serious harm. He stated that there was a great increase of venereal mortality in Dundee, and that he gave some preliminary statistics to show the gravity among both men and women in that town. As to these facts, which are well known to every person in Dundee, he thought it had the same connection with the Contagious Diseases Act, and in his narrative could not do but be reported from any other large town in the kingdom.

He stated that the number of registered women had greatly diminished in the last few years, but believed that there were very many prostitutes who were carrying on their trade in a constant fashion, that the police were unable to obtain a more accurate return. He thought that such women should be examined and treated as necessary, and, if unable to prove themselves not to be prostitutes, they should be put on the register. However, he was, nevertheless, as this is not sanctioned by the Contagious Diseases Act, and practically, Mr. Kimbault's objection to them is on the score of their too great leniency.

The examination of registered women in Maidstone, the witness said, was conducted with order and propriety, and he had never heard any complaint of indecent behaviour among the women going to and from it. Against the action of the special police in his town, he had no complaint to make. On the contrary, the present acting constable was a most respectable man, who did his duty with tact and care, though the witness was inclined to think him over cautious.

Mr. Rimbault discussed the principles of the Acts at great length; but he had very few facts to bring forward; and, however earnestly held his opinions and theories may be, they are scarcely entitled to more consideration than those of many other more competent witnesses.

THE ADVANCEMENT OF SCIENTIFIC MEDICINE BY RESEARCH.

At the first meeting of the executive committee of the new association, the treasurer, Dr. Wilks, announced subscriptions amounting to over £1,000. We are also informed that sub-committees were appointed to report—1, on the present hindrances to research due to the working of the Vivisection Act; 2, to report on the best ways in which exact researches in medical science can be encouraged; 3, to prepare a list of papers to be reprinted and circulated for the use of the profession, and through their means for the public; 4, to arrange for asking the help of those interested in the objects of the association as corresponding members in the principal towns of the kingdom.

ANTIVIVISECTION IN BIRMINGHAM.

At a meeting of the Birmingham Philosophical Society, held at Mason's College on Thursday, April 20th, Mr. Lawson Tait read a paper on "Uselessness of Experiments on Animals as an Instrument of Scientific Research". The paper was intended to be a reply to Mr. Gamgee's pamphlet on "Vivisection and Human Surgery". Mr. Lawson Tait contended that the results of experiments on animals were so contradictory and had been so misleading, that more harm than good had resulted from their employment. He disputed the accuracy of several of Mr. Gamgee's historical statements. He denied that Harvey discovered the circulation of the blood; it was only our insular pride that made us say so; nor had he done so by vivisection. The experiments of John Hunter had nothing to do with the development of subcutaneous surgery, and such an authority as Mr. Adams gave no support to such a view. Syme had discovered no more than Dubamel had taught a hundred years before, and his experiments were useless and brutal. Transfusion was not introduced in consequence of experiments on animals having been known to the alchemists, but if it were, it was an useless and almost invariably fatal operation which he would never sanction. Much had been made of the value of experiments on animals in toxicology, but to his mind the deficiency in proper chemical tests was a disgrace to chemists, and were they compelled to rely on these, they would soon be discovered. Very soon after the trial of Palmer, when the experts failed to detect strychnia, a method was invented by which the one-half millionth of a grain of strychnia could be detected.

Dr. SAUNDY, in opening the discussion, pointed out that Mr. Tait had utterly failed to support the proposition contained in the title of his paper, as he had not alluded to the large domains of physiology and pathology, which were largely indebted to experiments on animals for their present advanced state. Mr. Tait had objected to experiments on animals, because they were contradictory; but were not all experiments open to the same objection? The history of any science was a history of controversies, and apparent contradictions were necessary phases of the growth of knowledge. Mr. Tait's attack was far too sweeping; it involved the entire inductive method.

Mr. FURNEAUX JORDAN regretted that the discussion was confined to the strictly scientific aspect of vivisection. Speaking for himself, he regarded vivisection as the essential means of progress in biological knowledge, and he looked forward to the time when it would be used extensively as a means of teaching. On the one side of this controversy, there was every eminent living scientific authority; on the other, Mr. Lawson Tait and such people as Mrs. Anna Kingsford, a spiritualist.

Mrs. ANNA KINGSFORD said she had not come with the intention of speaking; but, having been attacked, she would defend herself. Dr. Carpenter had attacked her very unfairly, and she had been refused an opportunity to reply in the pages of the *Fortnightly Review*. She

had also been refused admission to the columns of one of the medical papers. With reference to Lamson's case, she did not see what the experts wished to discover by experiments on animals; and she did not know how, by physiological symptoms alone, they could distinguish between atropine, aconite, hyoscyamine, the poisonous principle of mushrooms, and stramonium.

On the motion of Dr. CARTER, the meeting was adjourned to the following Thursday evening (April 27th). It was accordingly resumed on that day.

Dr. CARTER said he applied to Mr. Tait for permission to see his manuscript, so that he might know exactly the precise statements he had to deal with, but this had been refused; he must therefore rely upon his own memory and that of the audience for the correctness of his impressions of Mr. Tait's paper. It would be remembered that Mr. Tait had said that this was a question on which every intelligent man or woman could form an opinion; and he had appealed to that audience not to be deterred from trying to do so by the statement that it was a matter for experts. Yet he held in his hand a copy of the *Birmingham Daily Mail* of April 24th, in which Mr. Tait had taken exception to Professor Tyndall's letter to the *Times*, on the ground that he was not an expert. Mr. Tait's letter contained the statement that the draining of Salisbury in accordance with the advice of Dr. Buchanan had "banished tubercle" from that town; whereas he was in a position to say that the deaths from phthisis had diminished by 49.1 per cent. This reduction was no doubt great, but this was not "banishing" the disease. Mr. Tait had confounded the predisposing and exciting causes. Dr. Carter proceeded to refer to Mr. Tait's criticisms of Mr. Gamgee's paper, and read quotations to show that Mr. Gamgee's historical facts were correct. He commented on Mr. Tait's avoidance of the subject of torsion. He had been unable to find anything in support of the statement made by Mr. Tait that, shortly after Palmer's trial, a test for strychnia had been introduced which would detect the one-five-hundred-thousandth of a grain. [Mr. TAIT here stated that his authority was Dr. Alfred Swaine Taylor.]

Miss ECKHARDT, of the International Society for the Total Suppression of Vivisection, followed, and expressed her abhorrence of vivisection, and was more than once called to order by the Chair.

Professor TILDEN (Mason's College) said he rose simply to speak on the chemical part of the subject of Mr. Tait's paper. He wished to say that there was no ground for the accusation that chemists were apathetic in studying these alkaloid poisons. Most of them were at the present, and had been for a long time, the subjects of very special and careful investigation. With reference to Mr. Tait's statement about the detection of one-five-hundred-thousandth of a grain of strychnia, he would deny emphatically the possibility of detecting even the one-five-thousandth of a grain of strychnia in a complex organic fluid, such as the contents of the stomach or an extract from the viscera. If Dr. Taylor's book said so, it was wrong. He had looked up the reference given by Mr. Tait when reading his paper, and found that it related to the detection of strychnia in a pure solution—a very different matter. He would not accuse Mr. Tait of disingenuousness; but, looking at the way chemical facts had been treated in the paper, he was disposed to feel doubtful of his other matters.

Professor HAYCRAFT (Mason's College) read from Harvey extracts which refuted Mr. Tait's statement, that he did not vivisection; and from German, French, and American authorities, passages ascribing to Harvey the discovery of the circulation of the blood, in total opposition to Mr. Tait's statement, that it was only our insular pride that made us give this honour to Harvey.

Mr. EALES pointed out that Miss Anna Kingsford's question about the alkaloids admitted of a very simple answer. If by nothing else, its action on the pupil would seem to distinguish atropine from aconitine; and this was the question, as he believed, that the experts in the Lamson case had to decide. He pointed out that this sort of agitation might be with equal efficacy directed against anatomy and pathology, so far as these involved dissecting human bodies, as there could be no doubt the prejudices of the public were against us in both these matters.

Mr. LAWSON TAIT, in replying, said that he must put the authority of Dr. Taylor against that of Dr. Tilden. Dr. Tilden might be right.—Dr. TILDEN: It is not a matter of opinion; it is a matter of fact.—Dr. SAUNDY: I am prepared, if the meeting wishes it, to explain the apparent discrepancy between Dr. Tilden and Dr. Alfred Taylor.—The PRESIDENT ruled that Mr. Tait should proceed.—Mr. TAIT, proceeding, admitted that Dr. Carter had made out a good case in some particulars. He desired to withdraw his own expression of brutal, as applied to Mr. Syme's experiments. He was in a minority, but he was

CORRESPONDENCE.

THE ASSOCIATION FOR THE ADVANCEMENT OF MEDICINE BY RESEARCH.

SIR,—The following sums, amounting altogether to more than one thousand pounds, have been already subscribed to the general purposes of the Association for the Advancement of Medical Science by Means of Research. The first expenditure will be in reprinting and circulating the numerous expository and instructive statements which have appeared on the methods and objects of scientific medicine. We must also have sufficient funds in hand to meet promptly any attack from outside upon the invaluable labours of competent investigators; and, thirdly, we hope to be able to assist such researches by the material aid, as well as by the moral support, of the united profession. Subscriptions may be forwarded to me, or to the hon. secretary, Dr. Pye-Smith.

Thanking you for the welcome with which you have received the new Association,—I am, your obedient servant,

72, Grosvenor-street, May 3rd.

SAMUEL WILKS, Treasurer.

	£	s.	d.		£	s.	d.
The late Ch. Darwin.....	100	0	0	Mr. Bryant	5	5	0
Mr. Bowman	105	0	0	Dr. Owen Rees	10	10	0
Mr. Hawksley (C.E.)	10	10	0	Mr. Cooper Forster	20	0	0
Dr. Brunton	21	0	0	Dr. George Johnson	10	10	0
Sir William Gull	100	0	0	Dr. Pavy	10	10	0
Dr. Ord	10	10	0	Sir Joseph Fayrer	5	5	0
Mr. Durham	26	5	0	Sir William Jenner	52	10	0
Dr. Matthews Duncan	50	0	0	Sir James Paget	52	10	0
Mr. N. Montefiore	20	0	0	Dr. Pye-Smith	10	10	0
Sir Thomas Watson	10	10	0	Mr. Green (Sandown)	2	2	0
Dr. Marion Sims	1	1	0	Dr. Urban Pritchard	3	3	0
Dr. W. M. Brace	1	1	0	Mr. Wright (Leeds)	1	1	0
Mr. Saunders	10	10	0	Dr. Curnow	5	5	0
Dr. Maclean (Netley)	1	1	0	Dr. Caton (Liverpool)	10	10	0
Dr. Herbert (Paris)	5	0	0	Messrs. Macmillan	10	10	0
Dr. S. Ringer	10	10	0	Dr. Theodore Williams	1	1	0
Dr. Andrew	10	0	0	Dr. Quain	21	0	0
Mr. Clover	1	1	0	Dr. Weber	25	0	0
Dr. Stevenson	1	1	0	Sir Erasmus Wilson	100	0	0
Mr. Spencer Wells	52	10	0	Mr. J. Hutchinson	10	10	0
Sir George Burrows	25	0	0	Sir William Mac Cormac	5	5	0
Dr. Brett (Watford)	1	1	0	Sir Henry Thompson	50	0	0
Mr. Morton Smales	1	1	0	Dr. Haldane	5	5	0
Mr. Josh. Clarke	0	10	0	Mr. Lister	50	0	0
Dr. Wilks	25	0	0	Dr. Gerald Yeo	25	0	0
Mr. Spottiswoode, P.R.S. ..	10	0	0	Dr. Acland	25	0	0

SIR,—The apologists for the peculiar constitution of the new Association for the Advancement of Medicine by Research assert that it will secure harmony, but it has not been sufficiently insisted on, even by Dr. Barnes, in the recent correspondence on this subject, that there is more risk of dissension in a council composed of the occupants for the time being of certain posts quite unconnected with the question of research than in a representative council. I believe the members of the first council hold the views of the profession, and, so far as that goes, they represent them; but this may not be always the case. Any one of the future *ex officio* members may, for instance, be opposed to experiments on animals. Thus, it has happened, in our time, that even a President of the Royal College of Surgeons, who, if he were in office now, would be the very pivot of the new association, has publicly thrown doubts on the usefulness of vivisection, and the something might happen again. It seems to me that the usefulness of the association would be destroyed if such disagreement on essential points occurred in the Council. The only preventive against this danger would be the adoption of a true representative constitution, including the mass of the profession, either on the lines suggested by Dr. Barnes or otherwise. I am sure the confidence would not be misplaced. I should be much surprised if any of the registered medical practitioners, who are among the opponents of experiments on animals, ever obtained a seat on a really representative Council, to sow discord there. Such a representative Council would speak to the country with an authority which, in its self-elected form, it can never wield.

It is true that the general practitioners, who form the bulk of the profession, are not themselves general experimenters, although, from the days of Edward Jenner to our contemporary Koch, they can claim some who have extended the science of medicine; but they have a deep interest in research, which it would be graceful and politic to recognise. It is impossible to overrate the influence of general practitioners in forming public opinion on the question of research, by taking part in local discussions, to which you allude in a recent editorial note, and by their private influence. The public join in the cry against vivisection,

because it is practised by "scientists", only known to them by their names being held up to obloquy; but if they saw their family doctor, whom they know to be humane and kind, identifying himself with the vivisection movement, they would come to recognise the necessity of that method of research; and it is because I fear lest this valuable co-operation of the body of the profession may be weakened or lost by their practical exclusion from the constitution before us, that I have ventured here to supplement Dr. Barnes's powerful appeal for a more representative constitution.—I am, sir, your obedient servant,

J. FORD ANDERSON.

Belsize Park, N.W., May 3rd, 1882.

MORPHIA AND ATROPIA.

SIR,—In the elaborate account published in the daily papers of Lamson's experience of the effects produced by the use of morphia and atropia (an account which of course must be received for what it is worth), he stated that he used both drugs because he thought the atropia increased the effects of the morphia, but also because it quite, or nearly quite, overcame the sickness caused by the morphia. I believe the latter remark to be correct. The symptoms produced by the one poison are arrested by the other; and, in proof of this, I refer to the successful treatment of opium-poisoning in China by hypodermic injections of atropia. In November 1875, I was at Shanghai on a visit to my friend Dr. Johnstone. Just as we were sitting down to dinner, he was summoned to see, at the Chinese Hospital, an adult male, who, with suicidal intent, had swallowed three drachms and a half of the watery extract of opium, ordinarily used for smoking. The usual treatment of emetics, coffee, etc., had been employed. On our arrival, stertor was present, with loss of muscular power and sensibility; the pupils were like pinhole points, and did not respond to stimulus. I thought the case hopeless. Hypodermic injection of one-sixth of a grain of atropia in solution was followed by dilatation of the pupils and signs of intoxication from belladonna, and finally by complete recovery from the effects of both poisons.

Dr. Harley's experiments, reported in the *Pharmaceutical Journal* (1868, p. 471), had made me sceptical, but they were not on the human subject; and it is clear the question can be settled only by observations made on man.

At the late International Medical Congress, Dr. Dujardin-Beaumez of Paris said that, since the remarkable experiments performed in England, the doctrine that opium and belladonna are naturally antagonistic had been abandoned in France.

From what I saw during my service in China I could never think of omitting to use atropia in cases of opium-poisoning. Dr. Johnstone's field of observation is a large one, and he assured me that the number of successful cases following the use of atropia, after evacuation in the quickest way of as much as possible of the contents of the stomach, had left in his mind no room for doubt on the matter.—I have the honour to be, sir, your obedient servant,

F. W. DAVIS,
Deputy Inspector-General, R.N.

THE PROPOSED HOSPITAL FOR NORTH LONDON.

SIR,—In last week's JOURNAL there is a notice of a meeting held at the Athenæum, Camden Road, to consider the advisability of establishing a new hospital for North London. At this meeting, mention was made of the Great Northern Hospital, but I do not think that justice was done to the work that has been, and is, carried on within it. It is true that the Great Northern has comparatively few beds, but these beds are always full, and it has, besides, a very large out-patient department, so that it has really been doing good work for North London.

Moreover, I think it should also be stated that the committee of the Great Northern has been for some time fully alive to the wants of the district. Already plans have been laid before the executive for a considerable extension of the hospital, and the question of building on the present site, or of obtaining a site further north, is also engaging the attention of the committee. As to the "new scheme" of management set forth, all the desiderata mentioned at the meeting on April 26th are already embodied in the constitution of the Great Northern, except that of paying-patients and part-payments.

It seems to me that the proposal to establish a new hospital is directly contrary to the well-recognised principle in hospital management that subdivision produces more expense, more difficulty in working, and less satisfactory results.—I am, faithfully yours,

R. W. BURNET,
May 3rd, 1882. Physician to the Great Northern Hospital.

DR. BYRNE, Professor of Obstetrics and Gynaecology in the Medical School of the Catholic University of Ireland, has been appointed Examiner in Obstetrics in the Royal University of Ireland.

RESPONSIBILITIES OF PRISON SURGEONS.

SIR,—The medical officers of Her Majesty's Prisons will have read with much satisfaction the able article on the subject of their responsibilities in the JOURNAL of April 22nd.

It is a most interesting to compare your very full account of the facts of the case which recently occurred at Chester, and your remarks thereon, with the story that appeared in the daily papers under the sensational heading "Censure of a Prison Doctor".

None but those who have had some experience of the unfed and intemperate, and of what I may call the physical type of criminals generally, can realise, not only how often cases of this kind are liable to happen, but also how often, under similar circumstances to those at Chester, a fatal termination is averted by the medical safeguards thrown around prisoners sentenced to hard labour. I fancy that the bench, and indeed the public too, would be a little astonished to find what a large proportion of hard labour sentences are remitted on medical recommendation, and to learn how the sting is removed from such sentences, even for the most abandoned criminals, if they be only the lucky possessors of such a trifling defect as a varicose saphena vein.

It were well, then, that coroners and juries should look very closely into facts, and think twice before thus lightly attaching blame, that may be attended with irreparable injury, to a conscientious medical man—blame founded on a single case not fully investigated.

The occurrence at Chester affords a good illustration of the responsibilities of prison surgeons, and has a direct bearing on a very common class of prisoners with whom the medical officer finds it rather difficult to deal. Men with organic diseases and men in delicate health are repeatedly returning to prison on short sentences of hard labour, which are invariably lightened for them. On discharge, their state of health, which is generally improved during imprisonment, enables them to pursue their ordinary occupation of begging, or to indulge in a drinking bout, which brings them under the notice of the police, and so again to prison. On reception, they appear to be in their usual health, although they may be known to have organic disease of a chronic character. The question is, Are such men to be admitted to hospital at once? Prison has for them already many attractions; and if to these there be added hospital treatment, with its generous fare and association with others of their class, loss of liberty ceases to be deterrent, direct encouragement is given to commit graver crimes, with the longer terms of incarceration they involve, and the prison before long becomes a large hospital.

On the other hand, is it either unfair or inhumane to place such men in well-warmed well-ventilated cells, where they get plain but well-earned rest with light work? I think not; but in these days there is a much maudlin sentiment abroad in reference to criminals, and this pervades largely that class from which coroners' juries are generally drawn. The popular interest, indeed, that attaches to the felon and criminal in his punishment is so great, and so vastly superior to that attaching to the pauper in distress, the honest pauper, that prisons are fast becoming more comfortable homes than workhouses, and the prisoners are likely to have, ere long, a better time of it than the pauper engaged with his care and keeping.

The prisoner in this Chester case was dealt with in this latter way. He was a well-known prisoner, was a native of Lancashire, was a native of the county of Lancashire, although he was a native of the county of Lancashire, was sent to the workhouse in a cell, after the usual manner of the county.

I entirely agree with you, sir, that it is very surprising that such facts. The case was a very common one, and was largely made to the public by the press. The case was a very common one, and was largely made to the public by the press. The case was a very common one, and was largely made to the public by the press.

late; and the medical officer is then held responsible, not that he did not interfere and prevent the punishment, but that he did not interfere at the right moment.—Yours obediently,
RETIRED.

SUPERINTENDENTS OF IMBECILE ASYLUMS.

SIR,—As far as I am personally concerned, I might be content to leave the letters of Mr. Beach and Dr. Shuttleworth, which appear in your issue of April 15th, unanswered. The question, however, is more than a personal one, and concerns the interests of a valuable class of institutions, which we all hope to see increase in numbers, and in the management of which the strictest economy consistent with efficiency is, therefore, essential.

My contention was that, where an efficient teacher and a resident physician could not both, from want of funds, be provided, it was better to have the competent teacher with a visiting physician; a statement which was traversed by Mr. Beach and Dr. Shuttleworth, on the ground that the state of health of the inmates rendered the constant presence of a medical man essential; and Mr. Beach alleged the number of epileptics in such an institution as a reason for this. To this, I replied that the presence of a doctor during an epileptic fit was unnecessary, as he could do no more than a skilled attendant. Mr. Beach, in his last letter, fails to meet this by saying what his argument demanded, viz.: "I never allow an epileptic fit to take place without being summoned, and remaining with the patient until it is over." No, he dare not allege this, for he says, "A third of the patients here are subject to epileptic fits, and many have twenty and sometimes more during the day, besides the *status epilepticus* into which many of them fall; so that I am frequently called to the wards for epileptics." And so would the visiting doctor be. But, more than this, he adds, "It is the custom here for the attendants to summon me when a patient not known to be an epileptic has a fit." So, in point of fact, it is admitted that, although living in the house, Mr. Beach is not summoned to the numerous ordinary epileptic fits constantly occurring; and he thus answers completely the argument of his first letter, that the fact of epileptic cases being admitted rendered the residence of a medical man indispensable. Mr. Beach, of course, "does not think that any trained attendant should be entrusted with the responsibility of attending to such cases, without due medical supervision." Neither do I. The whole question is, what is "due" supervision? and the onus is thrown on Mr. Beach of proving that a medical man cannot supervise such a patient unless residing in the house with him, a doctrine which every family physician in large practice continually disproves by the charge of such cases.

If, although residing in the house, Mr. Beach does not consider it necessary to be called from his chambers, or from penning "contributions to medical literature", to supervise the vast majority of such cases, in what respect are they worse off than if the supervision was entrusted to a non-resident physician liable to be summoned when required?

I turn now from this letter to the one of Dr. Shuttleworth, and with much that he says I cordially concur. His argument would be unavailing if physiological knowledge were necessarily confined to medical men. But, fortunately, a knowledge of physiology, so valuable to all, so essential to those having the care of youth, so indispensable to those taking charge of the inmates of such institutions, is not confined to our profession. Take the case of institutions for deaf-mutes. Is not the whole system of training to which they are subjected founded on physiological science, and yet it is not considered essential to have them trained by medical men? The last of my correspondence with you, I think, is a note which I should stretch this argument further than I intended, I think, and that I refer only to the physiological part of the question, as compared with that of others. I quite admit that more can be said in favour of a resident medical officer for purely medical purposes in such an asylum, than in one for education.

Finally, let me say that the issues raised in this speech of mine which has been so ably discussed, are of a very different nature from any primary question, which, as you say, could not be allowed to have been a secondary question, and which, as you say, could not be allowed to have been a secondary question, and which, as you say, could not be allowed to have been a secondary question.

I pointed out to the subscribers the difference between a lunatic and a criminal, and the difference between a lunatic and a criminal, inasmuch as many of

the inmates of the one suffer from acute diseases, liable to sudden and unexpected changes, while the complaints of the other are chiefly chronic, where the alterations are usually slow, and such emergencies comparatively unfrequent. I believe I express the opinion of most specialists in lunacy when I say, that, the more closely the condition of a lunatic approximates to that of an idiot, the less is his detention in an asylum considered to be necessary.

I can suppose a case where a doctor of high mental gifts, cultivated by study, and capable of making "contributions to medical literature" which might prove instructive even to Mr. Fletcher Beach, should yet not be by nature qualified to attend to those petty details of management, on which the comfort and even the health of the inmates of such an institution depend so much more than on actual medical treatment. I can suppose that, under his charge, the management of the institution might degenerate. I can further conceive that the directors might see no means of arresting this deterioration but by placing the unhappy inmates under the constant superintendence of an anxious, careful lover of his real work, acting with the advice and under the superintendence of a visiting physician of intelligence and capacity. I can further conceive that the jealousy of some medical men (and specialists are peculiarly liable to suffer from jealousy) might be roused to consider this a slur on the profession, and a dangerous experiment. I can conceive, I say, all this; but I cannot conceive that the public, by whom such institutions are supported, should either sympathise with or endorse their protest. I can, however, conceive the subscribers being unscientific enough to believe that the *raison d'être* of such an institution was not so much to establish a field for scientific investigation, or to furnish material for "contributions to medical literature", as to promote the material comfort and the moral and mental improvement of the inmates; and, if they found a medical superintendent neglecting the latter that he might attend to the former, rebuking him with the words, "this ought you to have done, and not to have left the other undone."

—I am, etc.,

ALEX. WOOD.

Edinburgh, April 17th, 1882.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE DERBY COUNTY ASYLUM.

THE Derby County Asylum contained at the close of last year 430 patients; the admissions during 1881 having numbered 151. Of the patients admitted 21 were epileptics, and the total number of inmates of the asylum subject to epilepsy was thus raised to 86. Dr. Murray Lindsay points out that epileptic lunatics are frequently dangerous and troublesome, and that asylums in which they are numerous must contrast unfavourably as regards recoveries, deaths, and casualties with asylums in which they are but a small proportion of the population. Dr. Lindsay calls attention to what appears to be the increasing tendency on the part of relatives and parish authorities to make use of the county asylum, not so much as an hospital with a view to cure, as for the purpose of a refuge and place of detention, or sometimes even as a last resting place. In reply to questions put by the Asylum Medical Officers as to the reason for delay in sending patients to the asylum, the answers returned are often to the following effect: "We kept him at home as long as we could, till we could manage him no longer. We waited to see whether he would get better, but he got worse and so we cannot do with him now." "I kept her for two years, but I am out of work now and cannot afford to keep her any longer." Frequent applications continue to be made for the admission of private patients; these, however, cannot be met, as there is no separate accommodation for this class in the Derby County Asylum. These applications show that there is a want of suitable accommodation for lunatics of the lower middle class, whose friends are able and willing to pay a moderate sum for their maintenance, but cannot meet the charges of private asylums.

BROOKWOOD ASYLUM.

DR. BRUSHFIELD, who has just retired from the office of Medical Superintendent of the Surrey County Asylum at Brookwood, on a pension of £200 a year, is complimented by the Committee of Visiting Justices in their annual report on the state of efficiency in which he leaves the institution which he organised in the first instance, and which he has ably supervised for sixteen years. The asylum contained 1,028 patients on the 31st of December last, and 1,294 patients had been under treatment in its wards during 1881. Of these, 113 were discharged recovered and 88 died. For the first time in the history of the asylum, the deaths of females outnumbered those of males, 50

women having died and only 38 men. This is attributed to an unusually small proportion of deaths during 1881 from general paralysis, which is about three times more fatal to men than to women, and to the great age of many of the females admitted. On reviewing the mortality during his term of office, Dr. Brushfield finds that of 1,188 deaths 376 or 31.6 were due to general paralysis, and that of these 376 deaths attributable to general paralysis, 307 occurred in the male and 69 in the female department of the hospital. In connexion with this subject, Dr. Brushfield points out how futile and misleading comparison between the rates of mortality in different asylums must prove, unless allowance be made for the different degrees of prevalence of general paralysis in different districts of the country. This malady is invariably much more common in urban than in rural districts. Dr. Barton, the senior assistant medical officer at Brookwood, has been appointed to succeed Dr. Brushfield.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

THE DEGREE OF BACHELOR OF SURGERY.—The Board of Medical Studies have had under consideration what arrangements shall be made for carrying into effect the provision of the new University statute authorising the conferring of the degree of Bachelor of Surgery. They are of opinion that candidates for this degree should be required to produce certain certificates of study and pass an examination in surgery, in addition to what is already required for the degree of Bachelor of Medicine. Candidates to be admissible to the examination for Bachelor of Surgery at any time after they have passed the first part of the third examination for the M.B. degree. But, having regard to the circumstances that under the Medical Act a graduate in surgery can by registration become a legally qualified medical practitioner (although he may have given no proof of his knowledge of medicine), the board think that the degree should not be conferred until the candidate shall have also passed the second part of the third examination for the M.B. degree. The board, therefore, recommend that the examination for the degree of Bachelor of Surgery shall be held twice in each year, to which candidates qualified as above shall be admitted, each candidate to pay a fee of £2 2s. to the University chest and to produce certificates—1. Of having attended the surgical practice of a recognised hospital during two years at least, and of having acted as dresser or house-surgeon for six months; 2. Of having gone through a course of instruction in practical surgery. The subjects of the examination shall be—(1) Surgical operations and the application of surgical apparatus. (2) The examination of surgical patients. The examination shall be partly written, partly oral, and partly practical.

OBITUARY.

FIFE JAMIESON, M.A., M.B.

THE students of anatomy in Aberdeen who have just left their studies will receive a shock, on learning that one whom they saw in fair health at the end of the present winter session should have succumbed within a few weeks. Dr. Fife Jamieson had been ailing for several weeks before the close of the session, and, for two or three weeks, he had suffered from jaundice, which did not prevent him from finishing the work of the session, although anyone might have seen that it was only his strong determination which enabled him to conquer his physical weakness. At the close of the session, he went to Forres to recruit for the summer session, but feeling weaker, he resolved to return home on Saturday, April 15th; but he seems to have lost consciousness during the return journey; and it was only by chance that he was recognised and taken to his father's house in Old Aberdeen, where he died on April 18th. The immediate cause of death seems to have been acute yellow atrophy of the liver.

Dr. Jamieson was born in 1854, so that he was just twenty-eight years of age when he died; but within this brief period he had shown that he was capable of doing much good work, had he been spared. He took the degree of M.A. in Aberdeen in 1873, and for some time thereafter he held several important appointments as electrician in connection with the laying of various Atlantic cables. These duties he performed until 1875, when, owing to ill-health, he resolved to devote his attention to medicine. He began his medical studies in Aberdeen in 1876, and in 1880 he received his degrees in medicine and surgery with honourable distinction. For a year after graduating, he acted as house-

UNIVERSITY OF ABERDEEN.—At the late Medical Graduation term, the following candidates, after the usual examinations, received degrees in Medicine and Surgery.

Degree of M.D.—George Ackroyd, M.B., C.M., Streatham; Arthur G. Blomfield, M.B., Exeter; Alexander Boswell, M.B., Ashbourne; Peter Burgess, M.B., C.M., Ballindalloch; Colin M'iver Campbell, M.B., C.M., Durham; Rashell T. Davison, M.B., Battle; John Davy, M.B., C.M., Halifax; Frederic H. Elliott, M.B., C.M., Andover; John G. Hall, M.B., C.M., Aberdeen; John Harris, M.B., C.M., Newcastle. New South Wales; Coll R. Macdonald, M.B., C.M., Beith, Ayrshire; William Macdonald, M.B., C.M., Inverness; Satish Chandra Mukhopadhyay, M.B., C.M., Calcutta; Arthur Purkiss, M.B., C.M., London; John Thomson, M.B., C.M., Kendal; William E. Webb, M.B., C.M., Burnley.

Degrees of M.B. and C.M.—John Barrett, P. and O. Service; James Bremner, Grange, Keith; John W. Collie, Aberdeen; Robert J. Collie, Aberdeen; Alexander Cran, Cabrach, Banffshire; Arthur W. Eddie, Aberdeen; Thomas W. Griffith, Aberdeen; David Henderson, Watten; Joseph W. Hodgson, Brighton; William R. Holmes, Aberdeen; John Jenkins, Aberdeen; George D. Knight, Skene; James A. Macdonell, Dufftown; Alfred A. Mackie, Aberdeen; Charles M. Maxwell, Hobart, Tasmania; Alexander M'Lean, M.A., Coull, Aberdeenshire; James Middleton, Auchindoir; James R. Nicoll, M.A., Rhynie; Henry A. Phillips, London; John M. Ratray, M.A., Aberdeen; John Reid, M.A., Portsoy; Charles S. A. Rigby, Preston; William P. Ross, M.A., Aberdeen; Carrapiet J. Sarkies, Calcutta; William Sinclair, Nigg; John Taylor, Stonehaven; Thomas P. Thomson, Gartly; John Walker, St. Vincent, West Indies; Richard R. Weir, Elgin; James Wilson, M.A., Rhynie; John H. Wilson, Warwick; Martensz James Wright, Colombo.

Of the above-named candidates, T. W. Griffith and G. D. Knight received their Degrees in Medicine and Surgery with highest Academic Honours; and James Bremner, Alexander Cran, John Taylor, and James Wilson, M.A., received their Degrees in Medicine and Surgery with Honourable Distinction.

The John Murray Medal and Scholarship was awarded to T. W. Griffith as the most distinguished graduate of his year.

At the same time, Henry H. Brown, Francis J. Hudson, John T. W. Leslie, David R. McKinnon, and Arthur Rannie, were certified as having passed all the examinations, but did not graduate.

The following candidates passed the First Division of the First Professional Examination.

Frank H. Cantlie, James F. Craig, George B. Currie, David A. F. Kydd, Henry G. Laskey, Robert H. Mackay, James C. Mackintosh, John Maclean, Alexander S. Manson, James Murray, William G. Stott, Andrew Whyte.

The following candidates completed the First Professional Examination.

Henry M'K. Adamson, Joseph Anderson, Christopher G. Battiscombe, Robert M. Beaton, Charles G. Bennett, Francis A. Bennet, Andrew H. Cowan, Alexander M. Cowie, William C. Crowe, Henry M. C. Dalton, George Duffus, Alexander G. Duguid, Walter A. Elmslie, Henry Gibbons, John Gordon, Alexander Gregory, James D. Hendry, John W. Hutcheon, Arthur S. Inglis, Louis Joseph, Stuart Macdonald, Frank I. Mackintosh, Alexander L. Mather, George Milne, James Mitchell, Arthur A. Morrison, Alexander Murchison, David Prain, Robert D. Presslie, Alexander Reid, Alexander Rennie, James A. Ross, James Savege, William B. Skinner, John H. Stenhouse, Herman Thiele, Leslie F. Walker, John E. Webb, Arthur M. Whitehead.

The following candidates passed the Second Professional Examination.

John H. Anderson, Walter H. Atherstone, Albert H. Barrett, George Buchan, Charles A. Butchart, Arthur G. Cunningham, George F. A. Da Costa, James M'K. Davidson, Charles A. Faulkner, John Gerard, John Gordon, Andrew Grant, John W. Harrison, Andrew Hosie, David Ireland, Charles Jeffrey, George Johnston, Thomas M. Johnstone, John B. Kerr, John M'Combie, James F. Macdonald, Cyril J. Mansfield, John Matheson, Greenville E. Moffet, John D. Moir, Arthur A. Morrison, David Petty, David Prain, John M. Ratray, James R. Reid, Richard Rees, James T. Robb, William L. Ruxton, William Scott, Alexander G. Smith, Arthur G. Smith, James L. Smith, William A. Stewart, George C. Still, John Turner, George Vincent, John Walker, John K. Will.

This next Professional Examination for Degrees in Medicine commences on Saturday, July 22nd, 1882.

MEDICAL VACANCIES.

The following vacancies are announced:—

ALNWICK INFIRMARY—House-Surgeon. Salary, £100 per annum. Applications by May 6th.

BRISTOL FORESTERS' DISPENSARY.—Qualified Medical Practitioner. Salary, £120 per annum. Applications to E. L. Burgess, 34, Horfield Road, Kingsdown, Bristol, by the 29th instant.

CHARING CROSS HOSPITAL, West Strand, W.C.—Assistant Surgeon. Applications by 15th May.

CITY OF LONDON LUNATIC ASYLUM, Stone, near Dartford, Kent.—Assistant Medical Officer. Salary, £120 per annum. Applications by the 17th instant.

COTTAGE HOSPITAL, Scotland.—House-Surgeon. Salary, £30 per annum. Applications to No. 161A, BRITISH MEDICAL JOURNAL Office, 161A, Strand.

DURHAM COUNTY ASYLUM, Sedgfield, Ferryhill.—Junior Assistant Medical Officer and Pathologist. Applications to Dr. Smith.

EBBW VALE WORKS.—Surgeon to attend the workmen and their families. Applications to Mr. W. Dayson, Ebbw Vale Works, Mon.

ENNIS UNION—Second Medical Officer and Apothecary to the Workhouse, at a salary of £75 per annum.

ESTATE OF NORTH UIST—Medical Officer, with two other appointments. Salaries, Estate £100, Parochial £65, £21, £20. Applications, etc., to J. McDonald, Esq., Newton, Lochmaddy, Inverness-shire.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E.—Registrar and Chloroformist. Salary, £30 per annum. Applications by the 15th May.

GORT UNION—Medical Officer for Ardahan Dispensary District. Salary, £140 per annum, with £10 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 13th instant.

GOVERNMENT RAILWAY SERVICE, at the Cape of Good Hope.—Medical Officer. Salary, £25 a month. Applications by May 17th.

HANTS COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by May 6th.

HARTLEPOOL UNION—Medical Officer for the District. Salary, £50 per annum. Applications to the Clerk by May 17th.

HARTLEPOOL UNION—Medical Officer for the Workhouse. Salary, £65 per annum. Applications to the Clerk by May 17th.

LANCASTER INFIRMARY.—Dispenser and General Assistant. Salary, £80 per annum. Applications by May 15th.

MEDICAL MISSION TO CENTRAL AFRICA—Fully qualified Practitioner, Salary, £200 per annum. Applications to Mr. S. Smale, Esq., Secretary, G. S. L., 89, Seymour Street, Connaught Square, W.

PARISHES OF GLENLIVET AND KIRKMICHAEL.—Medical Officer. Salary, £100 per annum. Applications to Mr. J. Hay, Inspector of Poor, Inveraven, Ballindulloch, by the 15th instant.

PORTSMOUTH LUNATIC ASYLUM—Assistant Medical Officer. Salary, £120 per annum. Applications by the 8th instant.

ROTHERHAM HOSPITAL AND DISPENSARY—Assistant House-Surgeon. Applications to John Barras, Honorary Secretary.

ROYAL HANTS COUNTY HOSPITAL—House-Surgeon. Salary, £100 per annum. Applications by May 6th.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL, St. George's Circus, Southwark.—Clinical Assistant, three days per week. Salary, £25 per annum. Applications by May 6th.

SOUTH YORKSHIRE COUNTY LUNATIC ASYLUM, Wadsley, near Sheffield.—Third Assistant Medical Officer. Salary, £100 per annum. Applications to Dr. Mitchell by the 8th May.

ST. GEORGE'S HOSPITAL.—Physician. Applications by the 11th May.

ST. GEORGE'S HOSPITAL.—Assistant-Physician. Applications by the 11th May.

TORBAY HOSPITAL AND PROVIDENT DISPENSARY, Torquay.—Junior House-Surgeon and Dispenser. Salary, £90 per annum. Applications by May 22nd.

UNIVERSITY COLLEGE, W.C.—Jodrell Professorship of Zoology. Salary, £288 per annum. Applications by the 8th May.

VICTORIA DOCK DISTRICT DISPENSARY—Assistant Resident Medical Officer. Salary, £150 per annum. Applications to Mr. J. Phillips, Boyd Institute, Victoria Docks, E.

WEST DERBY UNION.—Two Resident Medical Officers for the Workhouse, Walton-on-the-Hill. Salary, £100 per annum. Applications by May 16th.

WEST DERBY UNION.—Two Resident Medical Officers for the Workhouse for Sick Poor at Mill Road, Everton. Salary, £100 per annum. Applications by the 16th instant.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon. Salary, £80 per annum. Applications by May 6th.

WEST RIDING LUNATIC ASYLUM, Wakefield.—Resident Clinical Assistant. Applications to Dr. Herbert Major, Medical Superintendent.

WILTS COUNTY ASYLUM—Assistant Medical Officer. Salary, £120 per annum. Applications by 17th May.

MEDICAL APPOINTMENTS.

BENSON, E. W., M.R.C.S., appointed Assistant House-Surgeon to King's College Hospital.

BOBBYER, P., M.R.C.S., appointed House-Accoucheur to King's College Hospital.

CONNER, William, L.R.C.S.I., L.R.C.P.Ed., appointed Medical Officer and Public Vaccinator to the Ardleigh and Great Bromly District, Tending Union, and Medical Attendant to the Brunswick House Asylum, Mistle branch to County Asylum, *vice* J. W. Cook, M.D., resigned.

CROOKSHANK, E. M., M.R.C.S., appointed House-Surgeon to King's College Hospital.

GREEN, H., M.R.C.S., appointed Resident Surgeon to the Birmingham General Dispensary, *vice* A. O. Holbeche, resigned.

HYNES, W. H., M.D., appointed Second Medical Officer and Apothecary to the Ennis Union, *vice* Michael Greene, M.D., deceased.

McKINNON, David R., M.B., C.M., appointed House-Physician to the Aberdeen Infirmary and Dispensary.

McGREGOR, A., M.B., appointed Physician to the Aberdeen Dispensary.

MILLAR, A., M.B., appointed Junior Assistant Medical Officer to the Warwick County Lunatic Asylum, *vice* T. F. Tannahill, M.B., resigned.

OKASHOTT, J. A., M.D., C.M., appointed Assistant Resident Medical Superintendent to the Cork District Lunatic Asylum, *vice* L. J. N. Tanner, L.R.C.S. & P. Edin.

POLLARD, J., M.R.C.S., appointed House-Surgeon to King's College Hospital.

RABBETH, S., L.S.A., appointed House-Physician to King's College Hospital.

SINCLAIR, William, M.B., C.M., appointed House-Surgeon to the Aberdeen Infirmary and Dispensary.

SMITH, W. B., F.R.C.S., late Honorary Surgeon to the Stockton-on-Tees Hospital, appointed Deputy Medical Superintendent to the Ararat Asylum, Victoria.

STEVENS, B. H. L., M.R.C.S., appointed Assistant House-Accoucheur to King's College Hospital.

STEWART, James, L.R.C.P.Ed., L.F.P.S. Glas., and L.M., appointed Resident Medical Officer to the Scarborough Friendly Societies' Association, *vice* Parker Smith, M.D., resigned.

THOMSON, S. C., M.R.C.S., appointed Assistant House-Physician to King's College Hospital.

WALSH, J. H. T., M.R.C.S., appointed House-Surgeon to the Westminster Hospital.

WARREN, Thomas, M.R.C.S.Eng., appointed Medical Officer of Health for the Aylesbury Rural Sanitary District.

WATTS, E. C., M.R.C.S., appointed Medical Officer to the Wolverhampton Union Workhouse.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

At the pass examination for the diploma of membership of the Royal College of Surgeons on the 14th April, sixty candidates presented themselves, against seventy-seven in the corresponding period last year. The following were the questions in Surgical Anatomy and the Principles and Practice of Surgery, Midwifery and the Diseases of Women, and Medicine, submitted to the candidates. *Surgical Anatomy and the Principles and Practice of Surgery* (at least four questions to be answered, including one of the first two). 1. Describe the Antrum of Highmore, and mention the Diseases to which it is liable. 2. Describe the Knee-Joint, and mention those Structures which are in immediate relation with it. 3. What are the diagnostic signs and symptoms of an Obturator Hernia? and what Treatment would you adopt under the various conditions it may present? 4. Mention the conditions under which the operation of tapping the Abdomen may be required; how these are to be clinically distinguished; how and in which situations the puncture is usually made. To what risks is the Patient exposed during the performance of the operation and afterwards, and how may these be avoided? 5. Describe Fracture of the Clavicle about its Middle, the variations which may be found in the displacement, the complications which may attend the injury, the Treatment to be pursued, and the Result which may be anticipated. 6. Describe the course of Sympathetic Ophthalmia, and state the measures required for its Prevention and Treatment. *Midwifery and Diseases of Women*. 1. Describe the Mechanism of Labour with the face presenting, and the chin forward and to the left. 2. What are the dangers attending retroversion of the Gravid Uterus? How would you treat this condition? 3. Describe the usual course of Plegmasia Alba Dolens. 4. Describe the treatment of Post Partum Hemorrhage. *Principles and Practice of Medicine* (three questions to be answered, including No. 4). 1. What are the Clinical Phenomena of Locomotor Ataxia; and what are the lesions discoverable after death from this disease? 2. What diseases may lead to considerable enlargement of the Spleen? and what are their distinctive characters? 3. Discuss the signs and symptoms of Thoracic Aneurysms, and the several modes in which they may prove fatal. 4. State the effects, uses, and doses of the following drugs: Tartarated Antimony, Arsenious Acid, Bicarbonate of Potash, Tincture of Hemlock, Tannic Acid, Tincture of Indian Hemp, Rhubarb, Compound Powder of Catechu, Opium, Chloral-Hydrate, Antimonial Wine, Liquor Arsenicalis, Effervescent Solution of Potash, Juice of Hemlock, Glycerine of Tannic Acid, Extract of Indian Hemp, Tincture of Rhubarb, Tincture of Catechu, Tincture of Opium, Syrup of Chloral.

The following were the questions on Anatomy and Physiology proposed to the 220 candidates at the primary examination. *Anatomy* (four questions only to be answered). 1. Describe the Muscles which connect the Hyoid Bone with the bones of the Head. Give the Nerve-Supply to each Muscle. 2. Give the dissection required to expose the triangle at the Bend of the Elbow, and describe the contents of that space in their relative positions. 3. Describe the course and relations of the Vas Deferens from its commencement to its termination. 4. Describe the attachments and the relations of the left Psoas Magnus Muscle. 5. Describe the origin, course, and distribution of the Superior Intercostal Artery and its Branches. 6. Describe the arrangements by which the tendons of the Flexors and Extensors of the Toes are attached to the Phalanges. *Physiology*. 1. In what manner are Bread, Meat, Butter, and Potatoes digested? With such a diet, what would be the composition of the Fæces? 2. Describe the termination of Nerve-Fibres in Striated Muscle. What changes does Muscle undergo when permanently separated from nervous control? 3. Describe the minute structure of the Trachea, and state the functions fulfilled by its several tissues. 4. In what tissues of the body is Glycogen found? How may it be separated, and what are its characters? 5. What is understood by the term Blood Pressure? What are the circumstances by which it is modified? 6. What is meant by the term "Vaso-motor Nerve"? Give examples of such nerves. Explain how active dilatation may be produced by Nerve-Stimulation.

INSURANCE FEES.

SIR,—In December last, I was asked to examine a man for a large insurance office. On the form sent to me, there was a marginal note to the effect that the fee would be remitted at the end of the month. When the time came, I duly received a guinea. Subsequently, I was asked to report on two others on similar forms; I did so, and had sent, not two, but one guinea. I scored out one of the names on the receipt-form sent for my signature, and returned it, with a request for the other guinea. The manager replied that the lives were insured for £100 and £200 respectively; that their scale of fees was half a guinea when the policy fell short of £500, one guinea if not; and that "medical men of the highest standing in all parts of the country were satisfied with this scale." I replied, refusing to accept such a scale of fees, denying that medical men generally were satisfied with it, and renewing my request. No notice was taken of this letter, so I informed the manager that, unless the fee were paid within three days, I should place the matter in the hands of my solicitors. I received the guinea by return of post.

Doubtless, medical men have themselves or their brethren to thank for the prevalence of such a scale of fees, but the remedy lies in their own hands by refusing to report under any such condition as the regulation of the fee by the amount of the policy, and only insuring in such offices as adopt the principle of giving a fee for a report, be the policy what it may, we may force them into submission.—Yours, etc., M.E.

MILITIA SURGEONS.—It is earnestly requested that those militia surgeons who have not yet signed the petition will do so at once, and forward the slips of parchment sent to them to Surgeon-Major Smith, Great Yarmouth, Norfolk, and also a subscription towards the expenses attendant on this important matter.

MEDICAL ETIQUETTE.

A RESPECTED correspondent calls our attention to the answer to "C. W. G." in last week's JOURNAL (page 644, column 2), and expresses the opinion that it is not in accordance with the rule laid down in the *Code of Medical Ethics*, wherein it is distinctly set forth that—"When a practitioner is called in to, or consulted by, a patient who has recently been, or still may be, under the care of another, he should on no account interfere in the case, except in an emergency, but request a consultation with the gentleman in previous attendance," etc. This rule is certainly one which ought to be attended to; but, in the instance to which we referred, there was an apparent emergency.

SIR,—A., who is absent on duty, is sent for to see a patient at once, the nature of illness not being stated. On returning, two hours afterwards, having other duties to attend to, he sends his qualified assistant, B. Meantime, the patient has sent for another doctor, C., who arrives some time after B. The case is one of premature labour, and the patient is on a visit to her sister, in a house where A. is regular attendant, but is not herself previously known to A. The patient raises objection to the assistant, B., on account of his youth, and C. is understood to offer to attend for A. Afterwards, but before leaving, the patient expresses a wish that he should attend through the whole illness, and this C. consents to do. A., on hearing from his assistant, B., that C. is attending for him, goes at once to the house, and finds the case over, and is told that C. had consented to continue the case, on being asked to do so. A. calls on C., and is told that the above is quite true, and that he, C., could not refuse to attend, as the patient expressed her preference that he should do so.

A. feels aggrieved on the score that he was regular attendant at the house, that he was first sent for, and that he was represented by his assistant on C.'s arrival. Should C. have consented to attend the case?—I am, etc., ENQUIRER.

* * C. should, in our opinion, under circumstances as stated, have declined to take charge of the case, and have acted in accordance with the principle laid down in the following well known rule of the profession, viz.: "When a practitioner is called to an urgent case in a family usually attended by another, he should (unless his assistance in consultation be desired), when the emergency is provided for, or on the arrival of the attendant in ordinary, resign the case to the latter; but he is entitled to charge the family for his services."

A MEMBER B.M.A.—We have little doubt that, if our correspondent would write to the Home Secretary, Whitehall, S.W., giving him a brief statement of the case, he would order an examination of the body of the deceased woman.

ERRATA.—At page 611 of last week's JOURNAL, column i, line 21, for "hyo-mandi" bular" read "hypomandibular". On page 636, column ii, line 30 from bottom, for "1830" read "1825".

TRICYCLES.

SIR,—To answer "Country Doctor's" inquiry about the above, satisfactorily, it is necessary to have had a good trial of tricycle riding. I am glad to say that I have possessed a tricycle for the last year and a half, during which time I have ridden nearly 5,000 miles. The general rate of travelling is about ten miles an hour, but this can be easily exceeded; for to test the speed of my machine, I rode on one occasion two and a half miles in nine minutes. I can testify to the great utility of tricycles, the very great saving of expense, and the little or no trouble; and for night-work they are, I think, superior to a horse, providing that first-rate lamps are employed. The cost of my "Salvo" was just under £20 for cash; but in about nine months, the expenditure was cancelled. My repairs, after eighteen months' daily use, amount to only thirty shillings. It requires about a month's hard practice to become perfectly at home on a tricycle; and after that, if constantly and daily used, it will be found invaluable.—I am, sir, yours faithfully,

ANOTHER COUNTRY DOCTOR.

SIR,—As the introducer of a quadricycle about three years ago for the purpose of medical men, I may perhaps be permitted to reply to the query of "Country Doctor", and give him, as he asks for it, the result of my three years' additional experience. When I wrote before, the tricycle was comparatively new to me, yet I had tested it fully to prove its power and capability. Since then, I have had it in constant use for upwards of three years. I have travelled over distances which, in the aggregate, cannot be much less than 10,000 miles, without a single accident; been out at all hours of the day and night, frequently for six hours at a time in constant motion; have returned home without the slightest feeling of fatigue; and, after a meal, could have done as much again. I have travelled as fast as I could have done with a good cob or pony, generally with greater safety, and upon a good road with a more steady and even motion. The danger of falls, running away, shying, and the need of an attendant—the inevitable result of horses—never trouble me, and the work in connection with the horse upon arrival at home, as rubbing down, washing, bedding and feeding, grooming, are all entirely abolished. During a great part of the time, I have been entirely without a horse, have worked a large practice solely with the tricycle, have saved probably in stable expenses £200 to £300—which, in these times of keen competition, is an immense boon—have capitalised the amount, and have got therefrom an income of £8 to £12 per year instead of nothing but annoyance, which I should have had if I had spent the amount upon horses. One professional brother, who looked shy at me at first, and thought the tricycle "beneath the dignity of a professional man", is now wishing for one himself. But this is the usual result of any useful innovation. The representative of a neighbouring nobleman came down to see my tricycle, and so pleased was he that he immediately ordered one like it.

A splendid exhibition of tricycles has just been held in Birmingham; and the Messrs. Starley's machines, I consider, more than held their own amidst all competition and improvements of the last few years.

As a means of rapid locomotion with perfect safety, no trouble, no expense, and no annoyance, I feel sure that the better class of tricycles will assuredly make their way in the future, as they are evidently doing in the present. Many small practices that will not pay their way with keeping horses will do so with a tricycle, and may be made to do as well as larger ones where horses have to be kept. Even if a horse be kept from necessity or pleasure, a machine will very soon pay its cost in collateral work, afternoon or evening work, or in saving a second horse. In one of your advertisements lately for an assistant, I saw "no one was to apply who was not prepared to work the practice upon a tricycle or bicycle".—I am, sir, your obedient servant, VACUUS VIATOR CANTABIT CORAM LATRONIBUS.

Mr. J. E. Johnson, Illinois; Mr. James M. Patterson; Lecturer, University of Illinois, Urbana, Ill.

[illegible][illegible]

REMARKS

ON THE

CHOICE OF MECHANICAL TREATMENT IN SPINAL DISEASE: WITH REMARKS ON AFTER-TREATMENT AND PROGNOSIS.

By C. H. GOLDING-BIRD, M.B., F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

GIVEN a case of spinal disease; is any mechanical treatment to be adopted; and, if so, what form is it to take? This is a most common question, the answer to which must mainly come from the practitioner's general experience of the diseases which deform the spine; yet rules may be formulated to serve as a broad guide in most cases.

Omitting mention of drugs or of operation, *e.g.*, opening of abscesses, and confining the remarks now to be offered to cases of caries and of general curvature, the following rules or guides for a choice of mechanical treatment may be laid down. No description of treatment is offered. The old mechanical appliances or "spinals", and their use, will be found in works on orthopædic surgery. Sayre's method is described in his book on *Spinal Curvature*, and in the *BRITISH MEDICAL JOURNAL* for September 1878 and October 1879.

A. UNCOMPLICATED CARIES OF THE SPINE.

This may be chronic in character, or not very acute; there may be slight deformity, or none at all. There is no abscess, no sinus, nor paraplegia.

a. Of Atlas or Axis.—In the early stage, rest in the recumbent position, with the head between sand-bags, absolutely fixed, is required; and ignorance of the extent and exact situation of the disease render mechanical appliances inadmissible at first. On the subsidence of subjective symptoms, the head must be supported as under class *b*.

b. From Third Cervical to Sixth Dorsal Vertebra.—The deformity being mostly from the weight of the head, support must be given to it. This is attained (1) by a chin and occiput rest, acting crutch-like from a suitable leather corset below; (2) by a chin and occiput band, acting as a suspender, from a steel spring rod arched over the head, and rising from a plaster-of-Paris corset (this is Sayre's jury-mast). The former is a dead push up, and prevents rotation of the head on the spine; the latter gives elastic constant extension, and permits rotation; it is, therefore, the better of the two.

Note.—Disease as high as the third dorsal vertebra may be treated without the jury-mast, as under class *c*. The downward weight of the head is not obviated, but the spine is kept still by the fixation of the upper ribs by means of the jacket.

c. From Sixth Dorsal Vertebra Downwards.—A closely fitting corset of plaster-of-Paris or of poroplastic felt is required. The former (Sayre's jacket) is much better, as being more perfectly moulded to the form, more closely fitting, and therefore not felt to be present by the wearer, save by its stiffness; it is more durable, and immovable by its entirety. When this latter advantage has to be sacrificed to a patient's whims or the surgeon's wish, then the poroplastic felt which laces on can be employed; or the original plaster-jacket can be cut up the side, and made to lace on; but either way, there is a therapeutic loss. In applying the jacket to cases in class *b*, just enough extension should be employed to open up the chest as in full inspiration. In class *c*, this should be carried out to the full, just short of producing pain in the diseased spine. Extension is obtained either from the arms and head in Sayre's tripod, or by the horizontal position simply, which is second best; full room is allowed for the play of the lungs, etc., by either, and the diseased vertebræ are relieved from downward pressure.

Note.—Although the alternative of the poroplastic felt jacket is offered, yet an unprejudiced trial of it makes me condemn it, as a curative agent, in the strongest terms. As a pair of stiff stays, it is useful enough in after-treatment; though even here a thin plaster-jacket, cut down and made to lace on, is far more comfortable for the patient, more efficient, and more durable.

B. CARIES OF THE SPINE WITH COMPLICATIONS.

a. Acute Caries with Pyrexia: Excessive Sensibility: Patient positively ill, or with Acute Abscess.—Absolute rest in bed is required, with general medicinal remedies; and mechanical treatment, according to position, should be used only on the subsidence of the acute symptoms.

b. Chronic Abscess.—This is treated as though the abscess were not present, only protecting it from the support employed by a layer of cotton-wool. The abscess may even, though very large, disappear.

c. Abscess discharging: Sinus.—Support should be applied, but a "window" should be cut over the wound. If this be very low down, the jacket may be cut away to accommodate it. This must never be done just above the anterior iliac spines, or the support will not be bearable. In cases of abscess discharging, the movable jacket may be used with advantage; for the "window" is always hard to manage and to keep clean.

d. Sores from Pressure: Bedsores.—These must be allowed to heal, and the cicatrices afterwards protected with cotton-wool under the support, and outside the woven vest.

e. Paraplegia.—In children, the plaster-jacket must be employed; or the jury-mast, according to position. They then can be carried about, and propped up in a chair. In adults—especially if heavy—the plaster cannot be worn lying down; pressure-sores soon form. They must be kept in bed until able to balance themselves on crutches, then the entire plaster-of-Paris jacket should be worn. Paraplegic cases are better in bed without any appliance, than up with a movable laced support, either of plaster or of poroplastic felt.

f. Caries with much or little Deformity, of long standing: no Subjective Spinal Symptoms: Ankylosis probably completed.—Though such cases are really cured already, yet, at times, oppressed action of the thoracic organs, mechanical indigestion, and pain across the pit of the stomach, remain as causes of invalidism. A twelve months' use of the plaster jacket, with the fullest extension, gives marked relief. Projecting breast-bones from angular curvature improve wonderfully, though in the boss behind there may be no apparent change. The poroplastic jacket may be employed after the plaster, but cannot, in these cases, be substituted for it from the first.

Prognosis in Caries: After-Treatment.—The rules of repair generally must be intelligently applied to spinal caries. It being a question of repair, no limits can be fixed to this; "it is never too late to mend". Saving the presence of amyloid disease, prolonged exhaustive suppuration, or other intercurrent malady, by far the greater number of cases may be viewed hopefully. Other things being equal, the earlier seen and treated, the better the chance of cure. In practice, from two to four years will be found an average time for continuing necessary mechanical treatment.

When the plaster-jacket is used, after a subsidence of every subjective symptom (tested for when changing it), during six months, it may, as a rule, begin to be discontinued. Except in quite young children, its discontinuance must be gradual; the jacket must be made movable, or of poroplastic felt; or stays can be substituted; or even the old time-honoured "spinal support", if the patient have one already by him. Thus he is weaned from the full support of the entire plaster. He should be under observation after his "cure" fully another six months, for fear of relapse.

C. LATERAL OR "GENERAL" CURVATURE.

The choice lies between the reclining board, the old "spinal supports", and Sayre's calisthenic exercise, with or without the jacket. The first is damaging to the general health; the second, curatively of little worth, and now obsolete; the last is the best mechanical mode at present known. In selecting mechanical treatment here, the stage of the disease, rather than the patient's age, or the position of the curvature, must be considered; and no such treatment should be undertaken without due attention to general health.

a. Antero-posterior General Curvature in Neck and Upper Dorsal Region, causing Poking of Head and Slouchy Appearance.—The treatment should consist of the daily use of Sayre's calisthenic exercise.

b. Outgrowing Shoulder.—This is very commonly disregarded, and masked by the dressmaker with "padding". The treatment is just as in *a*, with the addition of a well-made but ordinary corset. Over-support, taking all the work from the patient's muscles, is in these cases to be as strongly deprecated as their total neglect.

c. Curvature and Rotation present, but slight: Spine straightens in the Tripod Swing (Sayre's): Deformity augmenting: Case not over a Year's Standing.—Here the plaster-jacket (entire, not laced on, nor the poroplastic) is to be used, together with Sayre's calisthenic exercise.

d. Curvature, and especially Rotation, well marked; the latter, at least, not vanishing on Extension: Over a year's duration, and still augmenting.—The treatment is just as in the last case, as long as any improvement is to be gained.

*e. As Class *d*., or even worse; not augmenting: no Oppression of Abdominal or Thoracic Organs felt: Patient an useful member of society.*—There is no treatment; or at most calisthenic exercise, to develop the muscles and expand the chest. If support (*i.e.*, the jacket) be given, no permanent good result is obtained, save a temporary bolstering up, which the patient most distressingly misses when removed. It is true,

this may be avoided by the continued use of mechanical means. But why should a treatment be commenced which must be continued perhaps for a lifetime, where, but for the surgeon's interference at first, the patient would have gone on happily through life unaided and independent?

f. As Cause, but without arrest of Breathing and Circulation: An acute Intercoastal Neuralgia. Thorough Invalids, and useless in every.—Temperament and social surroundings being considered first, the gradual use of Sayre's exercise should be ordered; then a support, either of plaster or of felt. Outdoor exercise should be tried and encouraged, the patient being thus supported. This treatment should be persevered in till a cessation in improvement appears: the patient will be left better than she was found. A permanent support of felt can be ordered if requisite.

Prognosis in General Curvature: After-Treatment.—In classes *a*, *b*, and *c*, a cure may be expected. It is astonishing in *b* how soon—three months—complete cure may be accomplished. In *c*, the treatment on an average will last two years. In classes *c* and *d*, weaning from the plaster support must be carried out as in caries; while in *d*, amelioration, and not cure, must generally be expected. The after-treatment in *c* and *d* consists in the "weaning" process, and the continuance of the swing exercise at least three months after all support has been stopped. Relapse in all these cases is very likely from any failure of the general health; they should be carefully watched for some months. Classes *e* and *f* are essentially examples of "after-treatment" from the first; the greatest gain expected in *f* is the loss of subjective symptoms, and breaking the neck of invalidism. Cases of the class *d* had better at once know what *c* and *f* already will have learnt, that some deformity, little or much, must be to them a "condition of life". This may be thought by some a pessimist's view of the matter; but, call it by whatever name one will, an appeal to everyday experience cannot but confirm it.

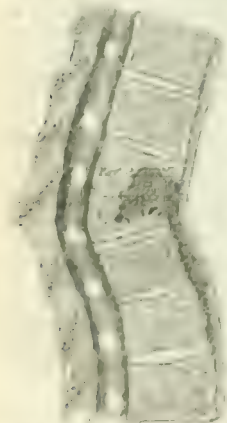
THE TREATMENT OF CARIES OF THE SPINE.

By E. NOBLE SMITH, F.R.C.S. Ed.,

Surgeon to the Farringdon Dispensary.

IN discussing the etiology of this disease,* I expressed my reasons for agreeing with those pathologists who consider that caries is not necessarily a scrofulous or tuberculous affection. I there suggested how caries might occur in a healthy individual, as the consequence of continued irritation of traumatically injured tissues; and I also remarked that, although the disease might thus occur without a predisposing cause, it was much more likely to happen when the vital powers of the patient were depressed either by tuberculous or other constitutional disease.

These observations upon the etiology of the disease are here made for the purpose of drawing attention to the fact, that caries must be dealt with chiefly as a local affection. The general health in all cases, without doubt, requires to be carefully treated; and, when symptoms of scrofula or tubercle are present, the administration of the appropriate remedies for these constitutional conditions will of course be required; but at the same time the fact must be recognised, that the disease of the spinal column cannot be cured by general treatment alone. Local rest of the diseased part is the only treatment that will give relief or effect a cure.



The question next arises, How should this rest be given to the diseased vertebrae be given? It is not to be understood that the patient is to be confined to bed, or that the spine is to be immobilised in any way, but that the diseased part is to be supported in a position which will allow it to rest, and that the rest of the spine is to be supported in a position which will allow it to rest. The diseased part is to be supported in a position which will allow it to rest, and the rest of the spine is to be supported in a position which will allow it to rest.

together as the caries progresses. Thus there are a falling forwards of the part of the spine above, an incurvation of the part below the disease, and a projection of the spinous processes in the back. Occasionally, but rarely, the disease attacks the same structures laterally, or even at the posterior part of the bodies of the vertebrae.



Fig. 2.—Very severe case of Caries, drawn from a Preparation in St. Mary's Hospital Museum, showing that even in so bad a case the Arches of the Vertebrae remain sound.

As the upper portion of the body falls forwards, the equilibrium is upset, and the superincumbent weight is not supported equally upon the vertebrae, but falls chiefly upon the anterior diseased portions of the column. Partly to relieve the pain caused by pressure of the diseased parts upon one another, and partly to restore the equilibrium and to raise the head to a more natural position, the patient supports or raises the upper part of the trunk by means of his arms, placed either upon his thighs or upon a table or chair, etc. He also uses the muscles of the back for the same purpose. Although the patient may sometimes relieve the pain by raising his body as described, yet he fails to relieve it for long; because, as the vertebrae above the disease are brought backwards, the vertebrae below the seat of disease accommodate themselves to the alteration of form—an apparent incurvation of these vertebrae taking place; and thus the superincumbent weight continues to be transmitted chiefly through the anterior diseased part of the vertebrae. The following diagrams show these conditions (Figs. 3, 4, 5, 6).

In Percival Pott's time (he wrote in 1770), violent attempts to straighten the spine used to be made, and Pott recognised the evil of such treatment. He pointed out that to draw the carious bones asunder could not be beneficial, as it would interfere with the natural mode of cure, which takes place by junction and coalescence of the diseased bones. This opinion was founded upon sound surgical principles, and holds good to the present day. Bonnet of Lyons has also deprecated all violent attempts at extension. "But," says he, "if we must not extend (redresser) the parts,.... is it not desirable to diminish the pressure of the upper part of the body, and to immobilise as much as possible the parts which have been separated by the caries?" To this question I would answer "Yes". And, in order to effect this diminution of pressure upon the diseased parts, the object of treatment should be to place the spine in a position which allows the superincumbent weight to be supported by the posterior sound parts of the bones and by the arches of the vertebrae, and, above all, to retain the spine in one fixed position. In fulfilling this object, no force whatever should be used.

When the patient lies perfectly recumbent (prone or supine), the spine assumes its natural position—i.e., the diseased parts are relieved from undue pressure; and, if we can then succeed in fixing the spine, the object is well attained by Bonnet will be obtained.

In order to maintain the spine in the good position which it has assumed by recumbency, it is necessary not only to preserve the external position of the portion of the spine above the disease, but also to prevent the part below the disease from arching backwards.

The means of treatment at our disposal are the following: 1. Recumbency, in the supine position; 2. In the prone position; 3. Spinal supports, back splints, etc., in conjunction with recumbency; 4. Plaster of Paris, felt, and other bodies, without recumbency.

It has been argued that, by continuing the patient in the recumbent position, suppuration is inevitable, and the spinal health will suffer. Experience, however, proves the fallacy of this argument; for, if recumbency be thoroughly carried out, and the spine also fixed in a good position, the health of the patient immediately and rapidly improves. That the patient should be able to take exercise in the open air, and

that most of the inconveniences, troubles, and expenses of the sick-room should be done away with, are the points urged in favour of treatment without recumbency. But if, to gain these advantages, we run the risk of interfering with the progress of the disease towards recovery, ought we not to hesitate before adopting such a mode of treatment? Fresh air and exercise are very valuable adjuncts to the treatment of delicate subjects. Fresh air can and should be afforded to patients with diseased vertebræ; but exercise, if it moves the diseased structures, is surely contraindicated in the acute stage of this disease.

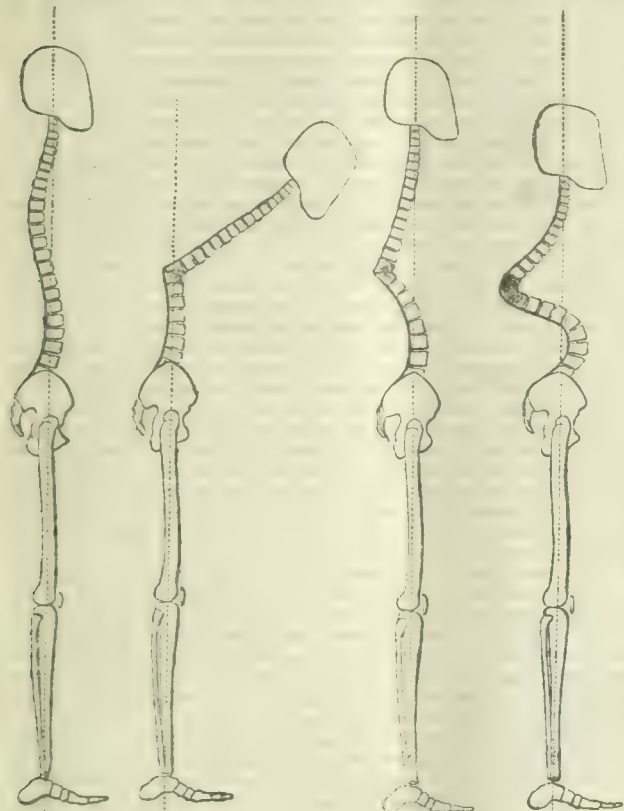


Fig. 3.—Showing the natural Curves of the Spine.

Fig. 4.—Showing the disturbance of Equilibrium from Caries.

Fig. 5.—Showing the usual position of the curves in a case of Caries when the Body is held erect.

Fig. 6.—Showing the position of the Curves in a more severe form of Caries than in Fig. 5.

Although urging the desirability of recumbency in these cases, I am well aware that, in a large number of instances among the poor, absolute recumbency cannot or will not be carried out; and then the surgeon must content himself with fixing the spine as thoroughly as possible. But fixation of the spine, combined with recumbency, is probably the best mode of treatment which we can adopt.

The plan of treatment for fixing the spine which is most popular in the present day is, as the reader knows, Sayre's plaster-of-Paris jacket. Since the introduction of this treatment, a large number of children throughout the country, who before that time had received no remedy at all, have been greatly benefited (temporarily at least) by this means of treatment; and there can be no doubt but that this plan, or some modification of it, will yet be the means of curing some cases, and of temporarily benefiting many others. Nevertheless, I do not believe it is the best plan which can be employed; and I shall now point out some of the disadvantages which belong to it.

1. The surgeon is unable to watch the progress of the disease; and, therefore, the angle may increase (from extension of the caries), abscesses may form, and ulcerations occur without his or the patient's knowledge;* and, as the progress of the disease cannot

be watched, the surgeon has no indication for the readjustment of the bandages.

2. Perspiration is checked, and, among the poor, vermin may congregate beneath the casing.

3. It interferes with, or prevents, thoracic respiration, and so favours collapse of the thoracic walls.

4. It retards the growth of the whole trunk, and especially of the thorax, and may thus cause considerable mischief when worn for three, six, or even sixteen to twenty months, without removal.*

5. Suspension is dangerous, and the position which it produces is not maintained by the bandage.

In fact, although the support given by the jacket may be sufficient to relieve the patient from much pain, and allow him to run about, it is not sufficient to prevent enough movement of the spine to cause irritation of the diseased bones.

The use of the plaster-of-Paris jacket, when compared with no treatment at all, or when compared with that very inefficient mode of treatment—recumbency in bed, without any special means for fixation of the spine—appears in many cases at first remarkably satisfactory; but at the same time it is not perfect, and is not the best means of treatment which we have at our disposal.

The majority of the old-fashioned spinal instruments are very cumbersome, very complicated, very expensive, and are inefficient as spinal supports. They are nearly all formed upon the principle of propping up the body by means of crutches beneath the arms, a plan which never thoroughly succeeds, because the arms allow of so much perpendicular movement that fixed points are not obtained.

Back-splints of leather and other materials, moulded to the body, may, with great care and attention, serve every purpose that is required; but the apparatus which best fulfils all the requirements of these cases is that invented and used by Mr. E. J. Chance, at the City Orthopædic Hospital, and which I have named the "Skeleton Adaptable Metal Splint." It consists of two light metal bars passing from a pelvic belt upwards, one upon each side of the spinous processes of the vertebræ. These bars are bent to accord with the angle

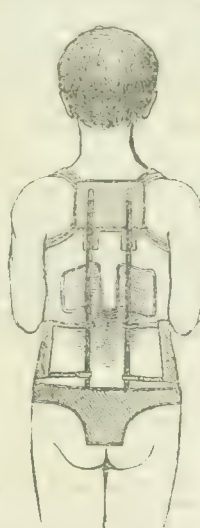


Fig. 7.—Posterior View of the Splint in Position.



Fig. 8.—Postero-lateral View.

of deformity, and they reach as high as the second or third dorsal vertebra. Fixed to the upper ends of the bars is a pad, to which is attached shoulder-straps. At the angle of deformity, each bar is separated from the back by a pad. Between the angle and the pelvic belt is another pad, to which is attached straps, which extend to an abdominal belt. Between the projecting portion of the spine and the pelvic belt, the bars do not fit into the curve of the back, as it is not desirable to perpetuate that curve, but, upon the contrary, it is of advantage to control the tendency to curvation, and the abdominal belt acts in such manner (Figs. 7, 8).

The effects of this splint are as follows. 1. It fixes the spine in a good

* Even if the jacket be removed and reapplied frequently, still, growth is not permitted to proceed, because the evil is kept up by the reapplication of the jacket.

* I have seen instances of each of these occurrences.

"My neck is so sore." Such phrases should rather make the mother, or at any rate the surgeon, apprehensive; and the child should be stripped stark naked and thoroughly examined, on several occasions if necessary; for, as Howard Marsh says, although angular curvature may not be detected in a suspected case, still it must not be concluded that the spine is sound.

On hearing that a child has slight and obscure pains, which we may attribute to the result of an injury to the spine, one must be particularly careful not to treat the case lightly. One is inclined to say to the mother: "I do not think it serious." But, often, rest is as necessary as if one could see with the naked eye incipient osseous changes.

The earlier the treatment is begun, the better. Better even that two boys should be treated for spinal disease, where, after all, no disease existed, than that treatment should be delayed for a third boy, because the symptoms of the disease were not unequivocal.

And now a few words as regards treatment. In my opinion, the best method consists in placing the child at once on his back, on a firm flat horse-hair mattress, without a pillow. And there he must be kept, lying in absolute rest—by means of armlets, if necessary—for an indefinite time. If the disease be taken at the onset, that is, in the stage of inflammatory osteitis, a few weeks' rest may have the effect of causing the surgeon to wonder if his original and early opinion was, after all, correct. So much the better. But, if it be a matter of months, the small mattress may be carried out into the garden as a litter, or put upon an easily going wheel-chair. Later on, a plaster-of-Paris jacket should be carefully moulded over the trunk, from just above the great trochanters high up into the arm-pits; but no suspension need be used.

There is, in my opinion, no better splinting than that afforded by a Sayre's jacket, though that may be a matter for discussion. But I will insist on this: that, if a jacket be put on the child with early spinal disease, the patient must still be kept in bed, or else we are not obtaining for it that near approach to absolute rest of which we all talk so much. Little children do not fret, or become thin, because they are kept in bed; they are, when well managed, as patient as those of maturer years. The head of the bed may be raised by blocks beneath the legs, so that the inmate may get a better view of what is going on around him.

The treatment of the later stage of spinal disease, I do not here discuss. Indeed, if the early stage receive its proper attention, its discussion will haply include also that of the later stage.

I may go so far, perhaps, as to deal with the disease when the little spinal boss is making its earliest appearance, but no further. Of a permanent angle produced by caries, I will say nothing. It is not found in the early stage. I have heard disciples of my friend, Professor Sayre, lay claim to an ability to straighten such an angle; but I could never admit that even the enthusiasm which they displayed in the question was sufficient palliation for their pretentious and misleading assertion. Hence, at the meeting of the International Medical Congress in London, it afforded me the sincerest satisfaction to hear Dr. Sayre deliberately refuse to entertain the notion, as it also did to hear him admit that suspension is not an essential part of his method.

For the future, let us all recognise this fact—when we are encasing the body of a child whose spine is inflamed or carious—that we are simply treating the diseased vertebræ as we should treat the tarsal or carpal segments when similarly affected, viz., by securing for them the nearest approach to that absolute physiological rest of which our Hilton was the High Priest. And let us stretch our hand across an Atlantic ocean, which, under the influence of science and scientific gatherings, is yearly becoming less worthy of the adjective "wide", to give fraternal greetings to Professor Sayre—a fellow-workman, who has systematised and has brought to us a practical means of helping those countless children whom we had almost begun to regard as surgical outcasts.

or marked osseous deformity, that complete cure is possible. Before pronounced osseous lateral curvature can occur, it must gradually pass through many intermediate stages from the time when the patient first began to assume a temporary vicious position of the trunk. The position of writing, as generally practised, is, more frequently than anything else, an initial cause of lateral and other curvatures not due to caries. The much larger proportion of girls than of boys affected, is due to the fact that girls do not enjoy, as a rule, one-fourth of the usual amount of physical exercise allowed to boys. Their muscles become weak; and, although they sit no worse than boys at their lessons, they have not sufficient strength to hold themselves erect, and to restore the balance of their curved backs out of school-hours.

After a careful examination, before the patient is allowed to dress, it is essential to ascertain to what extent the spine can be restored to its normal position, by a voluntary effort with the help of the surgeon. Although attention is first directed to the improvement of the lumbar curvature, any position that increases the upper lateral curve, if present, should be avoided. One arm directed and held upwards or outwards at a higher level than the other, is very frequently useful in helping to restore the symmetry of the trunk. Sometimes the best result is obtained by both arms being raised vertically by the side of the head, while avoiding undue elevation of the scapulæ. This best position of the patient's trunk and arms for improving the spine, is the "key-note" of the exercises to be practised during treatment. It is extremely important to note whether any article of dress is too tight across the front of the chest, when the patient is holding himself in an improved position; the stoop of a scoliotic patient is often confirmed by closely fitting garments. This remark applies not only to the clothes worn by girls and women, but also to the shirt-collars, waist-coats, braces, buttoned coats, and overcoats of boys and men.

The treatment of lateral curvature should embrace the following points. *a.* The spinal muscles should be sufficiently strengthened, so that the patient can maintain an erect or improved position for an indefinite time, whenever required, without extra effort. *b.* The thorax should be developed by systematic breathing and methodical exercise acting directly on the ribs. *c.* All causes increasing or perpetuating the spinal curvature must be removed; that is, bad positions must be avoided, and good ones prescribed. *d.* The general health should be improved by attention to diet, by a daily morning bath, by tonics if necessary, and by as much open-air living as possible. The spinal muscles are strengthened by means of "medical gymnastics" (Swedish movements)—a scientific system of gymnastics based on anatomy and physiology. By them it is possible to bring any desired group of voluntary muscles of the trunk and limbs into regulated contraction, as slight or as severe as may be required. In many of these exercises, the position of the limb or of the trunk assures a sufficient amount of resistance to be overcome by the contracting muscle; while in others the resistance is given by the surgeon. The erectors spinæ muscles can be easily and thoroughly brought into action while the patient is either lying, sitting, or standing. Space does not permit me to describe more than two or three such exercises in detail. Let a patient lie prone, with the pelvis and legs supported, and the heels fixed on a padded table, while the head and trunk to the level of the iliac crests project beyond the edge of the table. The back-muscles must contract forcibly to enable a patient in this position to slowly raise his trunk into the same horizontal plane as his legs and pelvis, and to maintain that position for ten or twenty seconds, and then as slowly to allow his trunk to be flexed again by its own weight. The surgeon can easily increase the exertion, if required, by more or less pressure with one hand at the back of the patient's head or neck. During this exercise, which is repeated from four to eight times, the trunk and arms may be in any required posture. A less severe exercise for the erectors spinæ muscles is for the patient to lie prone on the floor or on a table, and, while the trunk is immovable, to describe slowly a circumduction, first of one hip and then of the other, while the knee is kept fully extended. The contraction of the erectors spinæ can be felt by placing the finger on them; they are forced to contract to steady the pelvis. The amount of exertion can be increased by a pressure of the surgeon's hand on the heel. If the back-muscles be very weak, and the weight of the leg be too great, the surgeon can partially support the limb during the circumduction. A third exercise for the same muscles is for the patient to sit erect, astride a narrow table. The surgeon, with one hand against the back of the patient's head, gently presses him forwards, he having been previously requested to yield gradually in the lumbar vertebræ. As soon as the trunk is flexed at an angle of 50° or 60°, the patient stops, and then returns slowly to the previous erect posture; the surgeon in his turn gently resisting with the hand at the back of the patient's head.

The following is a prescription of exercises, which, with a few modi-

THE TREATMENT OF LATERAL CURVATURE OF THE SPINE.*

By BERNARD ROTH, F.R.C.S. Eng.

A MOTHER notices that a shoulder or a hip is beginning to grow out in a child, generally a girl at the onset of puberty. The family doctor is called in; the patient is stripped, and the trunk flexed. If there be no decided or marked irregularity in the bent spine, the parent is assured that the patient "will grow out of it"; and that nothing special need be done, except, perhaps, lying down daily for a short time. I have heard this story frequently when examining a case of incurable spinal curvature which had developed in the course of one, two, or more years. It is, however, precisely at the time when there is no decided

* Division of a paper read at a conjoint meeting of the East and West Sussex Districts of the South-Eastern Branch.

4. A patient with confirmed lateral curvature, with or without osseous deformity, is so habituated to the vicious position, that attempts on his part to improve the spine, except with the help of the surgeon's instructions, generally increase the deformity.

5. Exercises of the spinal muscles, with and without resistance, by the surgeon or an assistant, while the patient is in an improved position, are absolutely necessary to the rational treatment of spinal curvatures not due to caries.

6. Good positions should be always assumed, not only at meals and at lessons, but whenever otherwise occupied. This is practicable in slight cases, even with ordinary backed chairs; in some cases, a couch, with horizontal seat and movable and moulded back, is necessary.

7. A moderate amount of walking, short of much fatigue, is beneficial.

8. Lying prone or supine does not tend to cure lateral curvature, as it does not strengthen the spinal muscles. Lying for a quarter or half an hour is useful when it rests the patient; but, if it be continued for several hours daily, only harm results from the physiological activity of the spinal muscles being prevented.

9. Sayre's plaster-jacket and other spinal instruments are injurious in all cases not due to caries, where the patient by an effort can maintain an improved position of the spine, even for a few seconds only. Sayre's jacket is only permissible when the sole object is to prevent further increase of extreme osseous deformity.

10. Swinging by the head does not strengthen the spinal muscles, and dates back to the time of Dr. Glisson, more than two hundred years ago. In Germany, "Glisson's swing" has been known and used for many years (see JOURNAL, July 26th, 1879).

11. By all vicious positions being avoided, good ones shown and maintained, and suitably prescribed exercises carefully carried out, better and quicker results are obtained in cases of lateral spinal curvature, than by any other treatment hitherto practised.

I intend publishing shortly an abstract of fifty cases of lateral and antero-posterior curvature treated by me in private practice since January 1st, 1881.

THE TREATMENT OF SPINAL CURVATURE BY MEANS OF THE CUIRASS.

By NICHOLAS GRATTAN, L.R.C.P. & S.Ed.,

Senior Surgeon to the County and City of Cork Hospital for Women and Children.

FOUR years have elapsed since Dr. Sayre's remarkable demonstration on the Treatment of Spinal Curvature by means of Suspension and the use of the Plaster-of-Paris bandage. As he has already written fully on the subject, it may seem presumptuous in me to make any further remarks. It is only, however, after the lapse of some time, that the true value of a remedy can be ascertained. When it is first discovered, those who have faith in it are apt to look on it as the remedy of the age, and to use it on every possible occasion, too often rashly and unwisely; whilst those who do not understand or appreciate it, and who have seen its bad results when it was injudiciously applied, are inclined to deny its value altogether.

Perhaps the man of genius who first discovers a really valuable remedy, and whose intuitive skill will save him from some of the blunders of his less gifted brethren, is not so capable of judging how far it is likely to be successful in general practice, or of seeing the dangers which may attend its indiscriminate use, as the man of ordinary ability who has carefully studied his own and his fellow practitioner's failures and successes. Surgeons all over the world are now called on every day to decide whether they will or will not use Sayre's plaster-jacket, in cases of spinal disease; both surgeons and patients have in many cases a strong prejudice against it.

Having employed this method of treatment both in hospital and in private practice, since Dr. Sayre's visit to Cork in 1877, with considerable success, I venture to make the following remarks as the result of my experience on the subject. I believe the prejudice to which I alluded, is caused by the fact that at first too much was expected from the use of the jacket, by practitioners who had not carefully studied Dr. Sayre's book. Unhappy results have certainly attended its use. These results have followed too severe extension of the spine in cases of caries, especially where ankylosis had already commenced. Serious injury has also arisen in cases of lateral curvature, from a too long continued use of the jacket, which produced atrophy of the spinal muscles, and consequent weakness, owing to the want of proper exercise.

The general impression of all surgeons with whom I conversed on the subject (an impression which I shared for some time), was that Dr. Sayre directed that the patient should be suspended until only his toes

touched the ground. Now he does unfortunately say in page 17, "The patient is to be gradually drawn up until the feet swing just clear of the floor", but he proceeds to add most emphatically a little further on, "Do not attempt the impossible: do not try to straighten curved spines, the result of caries, that have become partially or completely consolidated; do not break them up; but simply extend the patient very slowly, until the patient says he feels comfortable; and never extend beyond this point." This caution, more than once repeated, cannot be neglected without the most disastrous results ensuing.

It is an easy matter, in the case of an adult, to extend "until the patient says that he feels comfortable"; but with a young and often frightened child, it is extremely difficult to find whether his comfort is increased or not, except in cases of advanced spinal disease. I would suggest to the surgeon to use his own judgment, while extending, to watch the patient carefully, and to extend *just to the degree which* (when the jacket is applied) *will relieve the spine of the burden it has to bear, and no more.* I believe, as this advice is carefully followed, so will the patient be relieved, without any danger of producing an aggravation of his spinal mischief.

A young delicate child may be often best extended by having his hands held up, so that his elbows are level with the top of his head. The assistant who holds him up can keep the spine steadily extended in this manner while the bandages are being applied, if his own hands be supported by passing them through the axillary supports of the extension apparatus.

The extension apparatus which I prefer, is that manufactured by Cocking. The neck appliance, being of soft felt, does not hurt, and the head and the axillary supports can be regulated with the greatest nicety and ease.

At the Children's Hospital, we occasionally extend the children over the backs of two chairs, a pillow being placed under the child's shoulders and hips; the chairs are slowly separated to the required extent, and the bandages are easily applied. Hammock-extension I have found satisfactory with children; I had, however, the misfortune to injure an adult by its use; while in the hammock, he suffered so much pain from over-extension that he had to be at once lowered. I suspended him according to Sayre's method the following day, and applied a jacket. This gentleman is now quite well, having constantly worn a cuirass for eighteen months. With any weight such as that of an adult, there is a tendency in the hammock to sag in the centre; owing to this, I do not see how the danger of over-extension with this appliance can be avoided.

Whilst prolonged rest to the spine, procured by the continued use of the plaster-jacket, is essential for the successful treatment of Pott's disease, I hold that the long continued use of any jacket in cases of lateral curvature, (where caries does not exist), is injurious. Very many of these cases are best treated by means of self-extension without the aid of any mechanical appliance; but when the curvature is severe, in order to enable the patient to exercise in the open air without pain, some external support must be worn during the day. In treating these cases, I have found Cocking's felt jacket, or the plaster-jacket with a lacing arrangement, of great service. It is necessary to impress on patients suffering from lateral curvature the importance of suspending themselves as frequently as possible, and never less than three times a day. Before retiring to rest, the jacket should be taken off, and reapplied each morning, while the patient is suspended. This treatment, with fresh air and attention to the health, has always proved beneficial. With regard to extension, I have found it nearly impossible, on account of the trouble and expense involved, to make many of my patients use a neck suspension-apparatus, as recommended by Dr. Sayre; they will not take the trouble. I am more successful when I desire them to procure a piece of round timber suspended from the ceiling by a rope, just like a trapeze, from which to swing by the hands several times a day; this I can get them to do. They enjoy the exercise; but nearly all, more especially children, object to use the neck-piece. Nevertheless, where the curve is high up, I insist on the neck-piece being used, and self-suspension practised, strictly according to Dr. Sayre's directions. With regard to the jackets, I believe that Cocking's felt jacket, if worn at night, becomes soft.

The plaster-of-Paris jackets, whether used for caries of the spine, or for lateral curvature, I generally cut down and lace, according to the method described by me in the *Lancet* of November 20th, 1880; by so doing, I can more readily arrange the pads, or remove any portion I think likely to press upon projecting parts. Jackets laced in this manner will be found even stronger than before they were cut, and they can be removed at intervals for the purpose of cleaning the patient. I seldom use a dinner-pad, but make my patients have a good meal before operating. I believe the hips are best padded by sewing two or more layers of thick flannel outside the skin-fitting vest; but I find that the less I pad my patients, the better their jackets fit. I have had much loss of time and disappointment with my plaster bandages. Sometimes a

The spine of the ischium is produced backwards to unite with the transverse processes of some of the pseudosacral vertebrae, enclosing a sacro-sciatic foramen. The sacro-iliac articulation is commonly ankylosed. The femur is long, slender, and flattened from before backwards. There is no third trochanter; the head is large and globular, and placed near the middle of the proximal end of the shaft, with the axis of which it more nearly coincides than in most mammals. The tibia and fibula are complete, and more nearly equal in size than in most mammals. They are both curved, so as to be separated considerably, in the middle part of the leg. The ankle-joint differs from that of any other known animal, the lower end of the fibula having a conical prominence which turns inwards, and fits into a deep cup-shaped depression on the outer side of the articular surface of the astragalus, as a pivot into a socket. The foot much resembles the hand in its general characters, being long, very narrow, and curved, terminating in strong, pointed, compressed, unguis phalanges, supporting hook-like claws.

The appellation "two-toed" applied to the genus *Cholepus*, refers only to the anterior limb, for, in the hind foot, the three middle toes are functionally developed, and of nearly equal size in both the genera of the family. In *Bradypus*, the tuber calcanei is long, compressed, and widened at the extremity. The tarsal bones have a great tendency to ankylosis. The first and fifth metatarsals are very rudimentary, and support no phalanges. The proximal phalanges of the three middle digits are very short, and coalesce very early with the metatarsals, as in the corresponding part of the upper extremity. In *Cholepus*, the tuberosity of the calcaneum is very small. The tarsal bones remain distinct from one another. The proximal phalanges of the three middle digits are extremely short, but not ankylosed with the metatarsals. The first and fifth metatarsals are about three-fourths of the length of the others, flattened, and gradually diminishing in size to their free ends.

OBSTETRIC MEMORANDA.

CASE OF EXTRA-UTERINE GESTATION: HÆMORRHAGE: DEATH.

THE following case will, doubtless, be interesting to obstetric readers. On the evening of June 8th, last year, I was summoned to see a young married lady, who had been taken suddenly ill in the afternoon with severe abdominal pain and faintness. Dr. Wylie, who resided in the immediate neighbourhood, had been sent for at the time. On my arrival, at seven o'clock, we had the opportunity of seeing the patient together. The history of the case was as follows. The lady had been married about a year; she had enjoyed good health, although the menstrual periods had always been somewhat irregular. Five weeks had elapsed since the last period; but as this had occurred on other occasions, the suspicion of pregnancy was not strongly aroused, especially as there was a total absence of any other sign indicative of this condition. The sudden pain in the lower part of the abdomen occurred whilst the patient was standing upon a step-ladder, hanging up a curtain in her drawing-room; she became very faint almost immediately, and was assisted to bed by her servant. The condition, when we saw her, was one of extreme pallor and faintness, with a very feeble pulse, indicating, apparently, some severe internal hæmorrhage. Her intellect was clear, she being able to reply to every question; but on the slightest attempt to raise the head, she became almost unconscious. There was not much pain on pressing the abdomen, but some dulness in the hypogastric and iliac regions, and a sense of fluctuation. Vaginal examination revealed the uterus abnormally low, with an œdematous os; no tumour could be felt in Douglas's pouch. A catheter was passed, but only a few drops of urine were removed. Taking all the circumstances into consideration, we concluded that there was some grave internal hæmorrhage going on, possibly arising from the rupture of an extra-uterine gestation, and ordered opiates, and the frequent administration of small quantities of nourishment and stimulants. We saw her again at midnight, and her condition was much the same; she had taken nourishment freely, and had not vomited. Early next morning we met again, but she had grown rapidly worse just before our arrival, and was moribund when we saw her, dying shortly afterwards, twenty hours from the first symptoms. The following day we made a *post mortem* examination, with the full consent of the friends. Upon opening the abdomen, we found three or four quarts of fluid blood and coagula in the cavity; on further exploration, and removal of the uterus and appendages, we discovered a ruptured cyst about the middle of the left Fallopian tube, on its anterior aspect, about an inch in length, on its walls being the remnants of some torn vessels. The embryo we were fortunate enough to discover subsequently; it had been baled out

along with the liquid blood into a bucket, and escaped observation at the time, but was afterwards found floating on the surface, apparently about five or six weeks old. The corpus luteum was found in the left ovary, and the uterus somewhat enlarged, the sound passing over three inches. A case of this kind shows what a fatal state of things may be in existence without the least symptom of uneasiness, and how slight a cause, as in the present instance, may produce rupture at an early period of development, and how extensive may be the hæmorrhage from a comparatively insignificant origin, causing death in a very short period.

WILLIAM S. PAGET, M.D. Lond., Great Crosby.

POST PARTUM HÆMORRHAGE.

I WISH to add two cases to those in which the injection of perchloride of iron has saved life in *post partum* hæmorrhage. The first case was that of a multipara, who, after a tedious labour, from inertia uteri, was delivered with forceps. The second was that of a young primipara, who had a good natural labour. In both cases the placenta was removed, after waiting some moments, on account of copious hæmorrhage. In both, the uterus completely refused to contract, and poured out blood in such quantity that the patients' condition rapidly became one of extreme faintness and imminent danger. Extreme pressure, introduction of hand, and injection of cold water, were tried in both cases, failing to produce any contraction of the uterus, and only to be followed by another alarming gush of blood. The tincture of perchloride of iron, one part to about four of water, was then injected with Higginson's syringe. The cessation of hæmorrhage was immediate. In the first case, the uterus remained perfectly flaccid; in the second, a very feeble attempt at contraction took place. Recovery, though ultimately complete, was slow in the first case, as the loss of blood was so great that the woman was in a very anæmic condition. In the second case, recovery was rapid and complete, without a bad symptom.

In such cases as the above—which I believe to be, happily, rare—where uterine contraction is out of the question, and the patient's condition is one of immediate peril, it appears to me that the application of a styptic to the inner surface of the uterus gives the only chance of saving life.

HERBERT THOMPSON, M.R.C.S., Sevenoaks, Kent.

THERAPEUTIC MEMORANDA.

ON THE TREATMENT OF ECZEMA BY DIET.

THE treatment of eczema by a Banting's diet, as recommended by Mr. Balmanno Squire in the JOURNAL for April 8th, is by no means a new departure in the dietetic treatment of skin-disease. The plan has been in use here for several years. The extraordinarily rapid way in which cases of the most chronic kind recover by careful dieting on Banting's principles is very remarkable. The following is an example.

Richard O., aged 9, had suffered from general eczema ever since he was five months old. For this he had been under constant medical treatment, without any permanent good being effected. He came to the hospital on March 6th, where he has since regularly attended as a patient of Mr. Walker. He was ordered the rigid diet. After a fortnight's careful adherence to the diet ordered, an appreciable improvement was noted; in a month, he was rapidly improving, and now he is almost well. The only other treatment was an ointment of pitch and vaseline.

I could adduce other examples from private, as well as from hospital, practice. I have chosen the above, as it appeared to be an unusually hopeless case of chronic skin-disease. The best results of Bantingism are, no doubt, seen in lymphatic infants; but it is also applicable to the chronic eczema, local or general, of adults. Mr. Squire would apparently restrict the employment of this diet to eczema. As a matter of fact, the Banting diet is of great value in other skin-disorders, especially in the chronic skin-affections of stout free-living patients about fifty years of age.

As to the use of cod-liver oil, I am not disposed to concede that in every case this most valuable medicine and food-stuff must be excluded. In sallow phlegmatic children, provided the digestive powers be fairly good, I believe the oil, used in small doses, to be of the highest importance. It is well known that cod-liver oil aids digestion where it can be tolerated, and it is usually granted that it acts in this way by aiding the conversion of nitrogenous food. In some children, if fatty material be forbidden, the digestion ultimately suffers, and the little patient becomes troubled with irregularity of the bowels, and also coldness of the feet and hands, with a tendency towards catarrhal affections of the respiratory tract. In these instances, a little cod-liver oil, while not supplying too much fat, yet provides enough for purposes of diges-

A. CRESWELL RICH, M.B.Lond., Liverpool.

ATTACHMENT OF SCROTUM AND PENIS.

EDWARD Mc DONNELL, M.B., Murrumburrah, N.S.W.

MILD SCARLATINA.

A. J. P. van der Meulen, M. V. P. L., P. de laan street, near H. van der Meulen.

(Under the care of Dr. GOWAN.)

In the next case, there was a similar sensation of an itchy and prickly feeling. M. H. H., aged 43, was an interesting instance of a sensory aura followed by no motor discharge, but by paresis. The aura began by a head-ticking noise in the right ear; this was followed by a burning sensation in the right leg, which ran down the right side of the thigh to the lower limb, and then affected the right hand and arm. No motor discharge occurred; but the patient found her right arm and hand stiff and felt weak on the right side. Dr. G. was informed that there was no loss of speech, and was anxious to test her seen after extinction. When there was doubt, the test could not be performed. The location of the sensory aura is probably the expression of an inhibition of the motor center, by the discharge of the sensory and sensory centers. It was pointed out that in such a case, the auditory center was related to the center of the sensory and the sensory center of the brain, and must have been the result of a discharge on the sensory center of the brain. The sensory center of the motor were in the sensory center of the brain. The sensory center of the brain, from the motor center of the brain, and the sensory center of the brain, but was proved by method of sensory and motor center of the brain, and was proved by method of sensory and motor center of the brain.

Department of L. C. RANNEY, W. H. FORD, J. R. C. S. FORD,
Assistant Medical Officer)

MARY L., aged 10, was brought to the out-patient clinic of the hospital on October 2nd, 1931, by her mother, who gave the following history of the girl's previous condition. At the age of eleven months, she was

apparently in a normal state of health, could walk a little by holding on to a chair, could use her hands in eating, and could say one or two childish words of one syllable. On arriving at that age, the child had a fit. She lay quite still for two hours, with her eyes wide open, noticing nothing, and giving no sign except an occasional hiccough. Her mother perceived her mouth to be drawn to the left side. For two days after this she slept almost continuously, and the distortion of the mouth disappeared. A few days subsequently, she suffered from an attack of a similar character; and after this second fit it was noticed that she could move neither the right arm nor leg; and that the right hand was kept constantly closed, with the thumb within the fingers. From this time, she never walked until she was three years old; nor did she talk properly during that period, although she could understand what was said to her. On reaching the age of four, the right hand was gradually opened—the little finger opening first, and the thumb last. Since the hand had been opened, the fingers and thumb had been noticed to be in an almost perpetual state of movement while she was awake. The motion was arrested during sleep. In this condition she remained without change for about three years, when she began to have fits of another kind, and these had gradually increased in frequency until, at the time of admission, she had as many as two or three in a week. They were said to last only for a minute or so; and, when they came on, she staggered and fell, if not supported. Occasionally, when she felt one of these attacks coming on, she would cry out that she was falling, and would then fall stiffly, with the right hand stretched out. This was not followed by any clonic spasms. On recovery, she seemed to feel a sensation of weakness and languor, and spoke thickly, so as to be rather unintelligible. She had never suffered from rheumatism.

On examination, the girl was found to be of fair mental capacity for her station in life. Her heart and lungs were normal. The pupils were equal, and there was no loss of sight. There was no tremor of the tongue, and no anæsthesia on the right side. The patellar reflex was greater on the right than on the left side. Her right hand was constantly in a state of slow involuntary movement, the fingers moving from extreme extension to partial flexion; at the same time separating from each other, and coming together again with a peculiar slow twisting action, reminding one of the writhing of a worm. The hand moved also on the wrist in slow alternate supination and pronation, together with extension and flexion, but with a manifest tendency to become rigid in a state of flexion, with the fingers and thumb strongly extended, and moving slightly in a lateral plane. At times, she could maintain the hand open in this position for a short period without any movement. The hand could be kept closed quite easily if she were allowed to rest it on a table; but, without that support, it appeared to require a great exertion of will to keep it so. The forearm was usually flexed at the elbow. These movements of the hand at times became, it was said, almost imperceptible when she was quiet at home; but they always increased if she were excited or particularly observed. There were no marked differences in the measurements of the corresponding parts of the limbs of the two sides. There was a halting with the right foot as she walked, a slight talipes equinus, and a little flattening of the nates and lowering of the gluteal curve on that side. There was no movement in the foot when she stood still, even when her hand was stretched out and the fingers were in full motion. When told to pick up any small object with the right hand, she seemed to have no power of co-ordination; the hand sprawled on the ground, with the fingers extended to the utmost; and only after repeated efforts could she succeed in grasping the object.

February 25th, 1882. After taking small doses of bromide of potassium for four months, the epileptiform fits almost ceased. Although the movements in the right hand were as characteristic as ever when she was excited, she had been observed to stand with the hand hanging down by her side perfectly quiescent. The grotesque movements of the fingers in her endeavours to pick up a penny were as marked as at the time of her admission.

REMARKS.—This case is an instance of a class of cases (probably not so rare as might be supposed) which are, perhaps, best classed provisionally under the name of posthemiplegic disorders of movement. No doubt, in some of the cases there is no definite hemiplegic attack; but, as Dr. Gowers pointed out in his paper on Athetosis (*Med.-Chir. Trans.*, 1876, p. 271 *et seq.*), if the symptoms be due, as is generally supposed, to some sclerosis or softening in the central cerebral ganglia, then it must be a question of position and extent of lesion, whether motor weakness does or does not accompany or precede the spasm; and the same remark would hold good if the lesion affected the cortical regions of the brain. In this case, there was a definite account of a hemiplegic attack, during which the symptoms were of very wide extent. This was followed by paralysis and contracture. Then, appar-

ently, as the paralysis diminished, the contracture gave place to irregular movement; the fixed spasm yielded place to mobile spasm. The relation of such a case as this to the athetosis of Hammond is not clearly worked out. They differ in several important respects—in the character of the movements, which are slower, not increased by attention, and, according to Hammond, not present during sleep, in athetosis. On the other hand, they seem to have some connection with the so-called congenital chorea of imbecile children, which, however, is bilateral, and not always associated with imbecility. But few *post mortem* examinations have been made in cases of this kind. In three reported by M. Charcot, lesions were found in the posterior extremity of the optic thalamus, and in the posterior parts of the caudate nucleus and the corona radiata. In one case reported by Dr. Gowers (*loc. cit.*), in which there was no spontaneous spasm, the sclerosis was found extending across the optic thalamus; while, in two cases reported by Dr. Weir Mitchell, the corpus striatum was the site of the lesion.

ROYAL NAVAL HOSPITAL, GREAT YARMOUTH.

A CASE OF INSANITY, WITH HALLUCINATIONS OF HEARING, OF SEVEN YEARS' STANDING, DEPENDING ON DISEASE OF THE MIDDLE EAR: CURE.*

(Under the care of Dr. DUNCAN HILSTON, Fleet-Surgeon.)

[Reported by Dr. THOMAS BROWNE, Staff-Surgeon.]

THE subject of the following article has been an inmate of this hospital for seven years, labouring under hallucinations of hearing. As the hallucinations ceased after successful treatment for disease of the middle ear, the case is thought worth reporting.

J. B., aged 43, able seaman, a strong well-built man, was admitted on January 14th, 1875, having been invalided from the East Indies. In the report accompanying him, it was stated that his health had always been good till July 1874, when he suffered from "a severe attack of congestive headache, due to hyperæmia of the cerebro-meningeal vessels, caused by a change to colder weather than the man had been accustomed to for two years before."

In September of the same year, he complained of vertigo and debility, and his messmates observed a marked alteration in his manner. He became morose, obstinate, and taciturn, and would sit for an hour at a time talking to himself, and then suddenly jump up in an excited manner and want to fight with some one; shortly relapsing into a state of sullen indifference to all about him. When questioned, his replies were rational, and to the effect that he only suffered from vertigo and debility. It is further reported that he became absent and listless in manner, very forgetful of orders, and that his face assumed a vacant and stupid expression.

In November 1874, he was received into the Royal Naval Hospital, Haslar, on arrival from abroad, where it is noted he complained of slight pain in the middle of the sternum, and that he often sighed. He answered questions rationally, though in a querulous and rather insubordinate manner. "Says he was sent home for being wrong in his head, defective memory, and constant headache, and that he does not care to answer questions."

He was transferred to the Royal Naval Hospital, Yarmouth, on January 14th, 1875; and, on admission, replied rationally to most questions, but answered questions about himself in an uncertain way, so that his replies could not be depended on. He became taciturn and morose, and at times quarrelsome and violent. In February, he saw an inoffensive patient sitting in the water-closet, and was about to smash his head with a bucket, when the attendant prevented him; he then turned on the attendant, and attacked him with a stool. From this time, he often complained of being annoyed by people talking to and abusing him, especially when in bed at night. He asserted that people were calling to him from over the wall, but that he never could quite make out what was said. He gradually became more gentle and industrious, assisting the attendant or working in the wash-house. Once he attempted to escape by climbing over the wall.

There was little change in his hallucination for seven years. Sometimes he complained that the attendants whispered as they passed him; at other times, he asserted that he could speak without moving his tongue, and often did so, he said, hearing himself speak, but that he had no power either to produce or check such utterance. He frequently declared he was quite well, and demanded his discharge, threatening the medical officers for their alleged wrongful detention of him.

This was his condition on January 18th, 1882, seven years after his admission, when he complained of an uneasy feeling in his left ear.

* Communicated by the Director-General of the Medical Department of the Navy.

Wood's operation were Spanton's screw-operation and the antiseptic stitching up of the neck of the sac with catgut or fishing-gut. Mr. Spanton had performed his operation twenty-five times between December 1877 and December 1879, with twenty-one successes; but, twenty of these cases having been done in 1879, sufficient time had hardly elapsed for a final judgment to be given; and it appeared, besides, that some of the cases had not been seen since December 1880. Spanton's operation possessed many requisites for success, and was easy of application; but its weak point seemed to be in not drawing the boundaries of the canal into sufficiently close contact. The author proposed to partially remedy this defect by having the screw made much smaller at the handle than at the point, and thus gradually drawing the pillars of the ring into closer apposition by rotating the screw. The stitching operation, of which there were four modifications at least (the best being ligature of the neck of the sac, with excision of the sac, and stitching together the margins of the abdominal opening), was held in favour by Sir W. MacCormac, Dr. P. H. Watson, Mr. Annandale, Mr. H. G. Croly and Mr. A. H. Corley of Dublin, Mr. Rushton Parker of Liverpool, and many others; and statistics of seventy-one cases, with fifty-eight cures and four deaths had been collected. The stitching operation was useful for cases of irreducible hernia, and for some cases of reducible or strangulated hernia in patients beyond the age of thirty, and for those in whom, owing to ill-health, it was not advisable to proceed to the major operation of Mr. Wood. It had many advantages, and, being not difficult of performance, was certain to be popular; but, owing to its neither affording as firm an invaginating material nor as copious an exudation of lymph and subsequent contraction of the openings, as Wood's operation, its effects could not be so permanent; and no patient after the stitching operation ought ever to be without a truss. The author, in conclusion, recommended Wood's operation in all cases of reducible hernia not easily retained by a truss, where the patient's age was under thirty, and his health good.—The PRESIDENT said that the operation for the radical cure of hernia had taken its place in surgery. He thought that the objection to Wood's operation was not founded on its danger; for it had been proved to be very safe. The real point to be considered in this (and in all similar operations) was, how far it was permanently successful. Some surgeons had performed the radical operation in cases of strangulated hernia; but this was a different thing from applying the operation to hernia at any time. That some of the patients were still obliged to wear a truss, was not sufficient evidence against the utility of the operation. In some cases, such as large scrotal herniæ, a truss was quite inefficient; and in these the operation, though not producing complete cure of the hernia, reduced the canal so much that a truss could be worn comfortably and successfully. He thought, however, that it should not be done in every case where a hernia could be kept up by means of a truss. He had operated with complete success in a lady who had an inguinal hernia, in the canal of Nuck, and who reported to him her condition regularly every year for thirteen or fourteen years.—Mr. TIVY showed the screw which he used. A year ago, when he brought the subject before a medical society in the country, only one surgeon among those present thought the operation justifiable.

Ectrotic Treatment of Varioles in Small-pox: Cauterisation by Carbolic Acid: Morbid Anatomy and Pathology of the Varioles. By MONTAGU D. MAKUNA, M.R.C.S. (Communicated by Sir JOSEPH FAYRER, K.C.S.I.)—The plan of cauterisation by carbolic acid was first suggested by Dr. Eade of Norwich in 1878, and the author of the paper had given it a trial, and had to report its success. The cases were seen by Dr. Klein and other medical men. After some general observations, the author described the pathology and morbid anatomy of the varioles, papules, vesicles, and pustules, following the rules of Dr. Tilbury Fox and Dr. Klein. This part of the paper was illustrated by twenty-four microscopic sections of the eruption, made by Dr. Klein. He described the method which he had followed, of cauterisation by carbolic acid on the first or second day of the vesicular stage, cutting open the vesicles, and dabbing their surface with carbolic lotion at the height of the vesicular stage. Velpeau's plan of using nitrate of silver was followed in a few cases. The author condemned the practice of darkened rooms, basing his arguments on the researches of Dr. Downes, Mr. Blunt, and Professor Tyndall, on the influence of light on bacteria and other animalcules. He also made some remarks on the mercurial preparations, iodine, cold compresses, gutta-percha, collodion, plasters, and ointments, which were more or less used by some and condemned by others.—The PRESIDENT asked if the author had read the writings of M. Lemaire and Dr. Sansom, who had recommended the local application of carbolic acid in small-pox. This fact did not detract from Mr. Makuna's merits, as he had demonstrated the value of the remedy.—Mr. GOUDE said that, at the Highgate Hospital, experiments were

made by treating one side of the face with nitrate of silver, and leaving the other untouched; and the results in the latter were the better of the two.—Dr. WHARRY suggested that iodoform might be found useful.—Dr. THIN commented on the peculiarity of small-pox in forming pustules—i. e., small abscesses in the rete mucosum; while this did not occur in scarlatina or measles. Why should these be produced in limited parts, though the cause was spread over a large area? He suggested that some of the exuded cells were charged with the variolous poison, which found in the part a condition in which it might act more energetically than in the blood.—Mr. TIVY had seen benzoated ointment of oxide of zinc used successfully in an epidemic of small-pox, in Ireland, twelve years ago.—Dr. A. W. MACFARLANE had had charge of cases of small-pox in Stirlingshire in 1872. A solution of carbolic acid in olive-oil (1 in 5) was applied; it gave much relief to the patients, and prevented pitting to a great extent.—Mr. SCRIVEN had, in India, been accustomed to keep the body covered with a solution of carbolic acid (1 in 12) from the first appearance of the symptoms of small-pox; and had certainly seen some cases of confluent small-pox recover without much pitting.—The PRESIDENT said that darkened rooms were recommended for the protection of the patient's eyes.—Mr. MAKUNA had not seen the writings of Lemaire and Sansom, to which the President referred. He had not used iodoform. The mixture of carbolic acid and olive-oil certainly relieved irritation; but it could not be described as acting as an ectrotic, if merely applied without preventing the suppuration. He had not met with many cases in which the eyes were affected; he kept them clean, and applied a little carbolic acid to the lids at night, to prevent them from adhering.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 2ND, 1882.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

[Concluded from page 660 of last number.]

Lateral Asymmetry of Bones and Brain.—Mr. PEARCE GOULD showed several specimens illustrating the asymmetry of a woman, aged 24. The specimens were from the Westminster Hospital Museum, and no history of value was attached to them. They consisted of the skull, which was markedly larger on the left than the right side; the fossæ, sinuses, and foramina, were larger and the bones thicker on that side; further, the roof of the orbit, the root of the great wing of the sphenoid, and the tympanic plate were greatly thickened on the left side. There were two exostoses on the left side, one just above the nose, the other at the extremity of the alveolar process. On the inner surface of the left part of the dura mater, were several small rounded bony growths. The left side of the lower jaw was much larger and thicker than the right, and the tongue and hyoid bone were also larger on the left than on the right side. The bones of the upper extremity were larger on the right side, but there was unusual thickening of the lower end of the left humerus and the upper end of the left radius and ulna. The left femur was longer and much larger, and more nodular and irregular than the right. Attached to the left patella was a bony tumour of the size of an orange. The spine was very irregular, most of the vertebra being more or less deformed. There was a lateral curve in the neck, convex to the left, and another in the loins convex to the right, entirely produced by asymmetry of the bodies of the vertebrae. Some of the vertebrae were ankylosed together, and the uniting material was more abundant on the left than the right side. The left hemispheres of the cerebrum and cerebellum, and the corpus striatum, optic thalamus, and corpora quadrigemina were larger than the corresponding parts on the opposite side; but the right side of the medulla oblongata and the right olivary body were larger than the left. Mr. Pearce Gould pointed out that on the head the left side was characterised by increased size, by bony thickenings at certain points, and by exostoses; in the upper limbs, the bones on the right side were longer, but the tendency to bony thickening was found on the left side; in the lower limb there were again greater length, greater thickness of bone, and a bony tumour, all on the left side. In the spine, the deformity was very irregular. In reply to Mr. BUTLIN, Mr. GOULD said that he could not offer any satisfactory explanation of this condition, but he believed that it was due to hypertrophy of the one side which was manifestly deformed, and not to atrophy of the other.

Calcified Bronchocele.—Mr. JONATHAN HUTCHINSON showed a patient who presented a small sinus leading down to a calcified mass, evidently connected with the thyroid gland. He had been the subject of bronchocele from early youth, and the calcification occurred in middle life: a probe passed along the sinus grated against calcareous matter as hard as bone. Mr. Hutchinson had never seen a case of this kind before; he had met with calcification of a bronchocele, but had never before known the calcified tumour to necrose.

The Scotch Poor-law Act of 1845 introduced another body, but the epidemic of 1847 proved the essential weakness and inefficiency of a mixed system of parochial, charitable, and municipal treatment of epidemic disease. The Glasgow Police Act of 1862, renewed and amended in 1866, together with the Scotch Public Health Act of 1867, enabled the municipal authorities by degrees, educated by circumstances which were described, to develop their present policy and practice. They had now provided, from rates, hospitals of their own for fever and small-pox. Into these, anyone living within the area of the rates, was admitted free of charge. No person suffering from infectious disease had been treated as a pauper in a parochial hospital for ten years. Beyond the area twenty-five per cent. of the population lived under nine burghal jurisdictions, independent of that of Glasgow. But, by appealing to the Board of Supervision to compel these bodies to appoint medical officers and sanitary inspectors, and by procuring the exclusion of their cases from the Royal Infirmary, hospitals had been erected by five of these authorities, and the remainder sent their cases to the Glasgow municipal hospitals, at a charge which covered current expenditure and interest on capital. The special practice as applied to small-pox was fully detailed. The securing of the thorough primary vaccination of the population was deemed of such importance that although the Scotch Vaccination Act vested the enforcement of its provisions in parochial boards, the Glasgow municipal authorities had *ex gratia* assumed an additional supervision. Defaulters were traced with much more success and with little extra labour by the sanitary inspectors. As to re-vaccination, experience had shown that it would be accepted by the mass of the population only in the presence of small-pox. Under these circumstances, the method at first adopted was to cause the inspectors to make out lists of persons who would consent, and then to send a medical man to perform the operation; but this delay was fatal to the effective protection of any number. The majority refused to accept his services. The medical vaccinator in charge of the station for primary vaccination was therefore charged with the duty of selecting the lymph and teaching the epidemic inspectors. They always carried a stock with them, and on going to an infected house, at once offered their services in the house and in the locality. Few recalcitrants were encountered, and protection was there and then secured. Compulsory removal to hospital was rigorously enforced. In the ten years, 1871-80, there were 12,718 primary vaccinations by the medical vaccinator, and 9,614 re-vaccinations by the staff. Small-pox was epidemic during the four years, 1871-2-3-4, during which time 4,328 cases were known to exist, of which 74 per cent. were treated in hospitals; and 8,730 re-vaccinations were recorded. The total deaths in those years numbered 786, of which 67 per cent. occurred in hospitals. The death-rate was never higher than 4.3 per 10,000 inhabitants, and averaged 3.8. Since 1875, when small-pox caused only two deaths, it had been in entire abeyance, there having been only 25 deaths in seven years. The Scotch towns had all in recent years been very free of small-pox; but a more correct estimate of the comparative immunity was obtained by taking in each case the epidemic acme. In Glasgow this was passed with only 4.3 deaths per 10,000 inhabitants in 1873. It reached 46.7 per 10,000 in Leith in 1872; 35.3 in Edinburgh in 1872; 32 in Greenock in 1873; 24.2 in Dundee in 1872; 14.5 in Aberdeen in 1872; 12.5 in Paisley in 1874; and 6.5 in Perth in 1872. The special service applied to the suppression of typhus was the prevention of overcrowding by night-inspections of small houses, under local powers, averaging 41,000 per annum. This fever had been distinguished by the Registrar-General only since 1873. In the five years, 1876-80, the death-rate from typhus was scarcely 1 per 10,000. In 1881 it was only 682. The "fevers" as a whole had steadily diminished in fatality from 16 per 10,000 in 1871 to a minimum of 4.34 in 1881. In the ten years, 1871-80, they gave a mean death-rate of only 7 per 10,000, as compared with 20.24 in the preceding ten years. In the five years, 1837-41, they maintained a mean of less than 44½. The hospital treatment of the infectious diseases of children was encouraged by admitting mothers to nurse their own children. Disinfection and washing of clothing and bedding were applied to all these diseases. Contrasting the last ten years with the preceding, there was evidence of substantial improvement in all. In the death-rate from scarlet fever, there was a fall from 13 per 10,000 to 10; in measles from 8 to 7; in whooping-cough from 15 to 12½. In conclusion, it was pointed out that these results were obtained while this policy and practice were being thought out and slowly developed, so that they did not measure the full extent of the benefits which might be reasonably anticipated during the next ten years.—In the discussion which followed, the President, Dr. Thorne, Dr. Squire, and Surgeon-General Murray took part.

Observations on the Pre-eruptive Stage in Small-pox, with History of Cases.—A paper on this subject was then read by Mr. M. D. MAKUNA,

late Medical Superintendent of Fulham Small-pox Hospital. The paper was based on observations made in about 1,600 cases. There were two reasons why a distinct line of demarcation could not be drawn between the period of incubation and the initial stage: 1. No symptom was constant to usher in the initial stage; 2. They were not definite in their duration. The symptoms complained of during the initial stage in 626 cases were as follows in point of frequency: headache, back-ache, epigastric symptoms, lassitude, prostration, langour, inability to walk about, symptoms of cold and sore-throat, pains over the body, and general *malaise*. Other symptoms were constipation, rigors, faintings, stupor, delirium, pains over the præcordia and syncope, constriction round the chest, epistaxis, photophobia and lacrymation, symptoms of laryngitis, metrorrhagia, erythema variolosa; in children, fretting, grinding of teeth, and convulsions. The duration of the initial stage in 626 cases, of which 517 were vaccinated, and 109 were unvaccinated, was as follows: One day in 123, or 19.6 per cent. of the cases; two days in 224, or 35.7 per cent.; three days in 128, or 20.4 per cent.; four days in 50, or 8 per cent.; and prolonged in 79, or 12.6 per cent. There were no noticeable symptoms during this stage in 22, or 3.5 per cent. of the cases. He discussed the causes of the variation in duration of the period of incubation, and gave the experience of various observers on the comparative study of the period in various exanthems. He gave the history of 117 cases in which the period of incubation and the pre-eruptive stage were determined. In 12 cases, the exposure to the source of infection was single, and of short duration. The period of incubation in them was as follows: 6 days, with 7 days of initial stage, in one case; 8 days in one; 9 days in two; 11 days in one; 12 days in three; 13 days in two. It was 14 days in one case of three visits, on three consecutive days, each visit lasting for half an hour. Two of the cases had contracted the disease during the initial stage in the primary case, proving that this period was infective. He related the history of 90 cases in whom the pre-eruptive stage was determined, with a view to prove that the period of incubation was non-infectious. The history showed how the disease spread by direct contagion. Had the period of incubation been infective, the secondary cases would have occurred coincidentally with the primary cases. The pre-eruptive stage in these cases varied from 8 days to 23 days, and in 41 of these it was from 14 to 18 days. When susceptible individuals were continuously exposed throughout the pre-eruptive stage to the source of infection, the period of incubation was shorter than in those of single exposure. In Mr. Makuna's 14 cases, it varied from 11 to 19 days. Quarantine of 14 and 16 days in two of these cases was useless, as the pre-eruptive stage in one was 15 days, and in the other was 19 days. The following table was given, showing the duration of the initial stage in 626 cases.

Disease.	Total Cases in each Disease.	One Day.	Two Days.	Three Days.	Four Days.	Prolonged.	None.
Variola varicelliformis	22	6	6	5	1	1	3
„ discreta	316	64	115	52	34	39	12
„ ciliaris	45	4	22	12	3	4	—
„ confluent	223	42	67	48	11	29	6
„ corymbosa	1	—	1	—	—	—	—
„ maligna	39	7	13	11	8	6	1
Vaccinated cases	517	105	186	103	44	60	18
Unvaccinated cases	109	17	38	25	6	19	4
Total cases	626	123	224	128	50	79	22

In the discussion which followed, Dr. Squire, Dr. Mackellar, Mr. Sweeting, and Mr. Shirley Murphy took part.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, APRIL 3RD, 1882.

S. LEE RYMER, L.D.S., President, in the Chair.

Syphilitic Teeth.—Mr. ACKERY showed two cases of unilateral syphilitic deformity of the upper central incisors; in each case the left central showed the typical notch, while the right was normal.—Mr. COLEMAN showed a model of a case in which there were two supernumerary central teeth of distinctly syphilitic type, whilst the proper centrals, which were coming down within the arch, were well formed. The patient presented other evidences of syphilitic taint.

Recurrent Epulis.—Mr. GADDES read notes of a case of recurrent epulis. A girl was sent to the National Dental Hospital on account of a tumour connected with the first right upper molar; it was about the size of a bean, and bled frequently. Under gas and ether, the tooth and the bulk of the tumour were removed. The growth proved to be a

previously to her confinement, eight years ago, a similar eruption appeared on the arms, hands, and feet; the face was quite free; and about three weeks after the "lying-in" the skin was quite free again. She had always enjoyed very good health. She was at the time of reading this paper (seven weeks after confinement) considerably better, although bullæ were still present on the legs; but she could walk about with comparative comfort. The severity of the former attack was not nearly to the extent as in the present instance.

The Treatment of Angular Curvature of the Spine.—Mr. JOHNSON SMITH said that the value of Professor Sayre's plaster-jacket method had been shown by a long list of his own cases, many treated and demonstrated in this country, and by the favourable experience of surgeons both here and on the continent. Of the few who had declared themselves opponents of this plan, most acknowledged that, in some cases of spinal caries, it had advantages; whilst amongst those who had practised Sayre's plan of treatment, there was an almost general conviction as to the object and value of the jacket. There seemed to be doubt as to the part intended to be played by the extension or suspension, and as to the degree to which such should be carried. Some had extended carefully and gently, while others had thought it necessary to administer an anæsthetic during the application of the plaster bandage. It being granted that the pressure of the inflamed parts on each other might be relieved by extension, it yet seemed difficult to believe that this relief could be maintained for several weeks by the support of any stiff apparatus, however carefully and skilfully applied. The body, when gently extended under the tripod, was certainly placed in a favourable position for the application of the bandage. A still more favourable relation probably existed when the body was in the recumbent posture; but, with the trunk thus placed, the jacket could not be applied in Sayre's own way, and the surgeon was likely to lose by substituting for a continuous bandage any arrangement of short slips. If this difficulty could be overcome, and a jacket, equal in strength and firmness, and as closely fitting as that devised by Sayre, could be applied whilst the body was in the recumbent posture, extension, it was argued, need no longer be practised, and the tripod might be dispensed with. The chief of the disadvantages were held to be those common to all the so-called stiff or fixed bandages which concealed the seat of the disease or injury. In discussing the indications and contra-indications of Sayre's plan of treatment, the author expressed an opinion that it might be dangerous in cases where there was paraplegia; and that, where sinuses existed in the back, its advantages were neutralised by its inconvenience with regard to the maintenance of cleanliness.—Mr. MASSEY asked if Mr. Johnson Smith had tried poroplastic felt.—Mr. NOBLE SMITH said the question at issue might be brought down to the point of how best to give local rest to the diseased parts. The old plan of recumbency gave no rest to the parts, since every movement altered the position of the spine, and he thought it was not too much to say that the old instrument often did as much harm as good. The chief objection to the plaster-jacket was the retardation of respiration. He had seen many cases where ulcerations and abscesses had formed beneath the jacket without giving any indication of their presence. Unless the disease were very low down, the jacket did not give sufficient support. He thought a splint used by Mr. Chance, which he had modified somewhat, would be found very useful.—Mr. NELSON HARDY had used the poroplastic felt jackets in several cases with great advantage. He thought that Mr. John Wood's plan of double extension was worth a trial.—The CHAIRMAN (Dr. CARPENTER) thought that, in many cases, Sayre's jacket was a great success, because there was no angular curvature at all; in fact, in hysterical cases, great care was necessary in using extension.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL SECTION.

MARCH 31ST, 1882.

J. F. WEST, F.R.C.S., in the Chair.

Coloboma Iridis.—Dr. WADE introduced a lad with well-marked coloboma of the iris.

Large Gall-stone passed per Rectum.—Dr. WADE showed a large gall-stone, and read notes of a case of hepatic colic which had occurred in the practice of Dr. Nason of Stratford. The first attack of colic occurred in June last year, followed by another about a month later, attended with vomiting, which was at first bilious and then stercoraceous. The symptoms then subsided, but once more recurred, disappearing finally with the passage of a large calculus per rectum, together with a great quantity of fæces. The patient ultimately made a good recovery.

Suprarenal Capsules in Addison's Disease.—Dr. WADE also showed the suprarenal capsules from a case of Addison's disease, which had

occurred in the practice of Dr. Nason. The patient was a female, of middle age, much emaciated, and in colour resembling a mulatto. The capsules on microscopical examination were found to be undergoing general caseous degeneration.

Burn.—Mr. WEST introduced a patient convalescing from an extensive and severe burn upon the lower part of the abdomen, the upper and inner part of the right thigh, and the pudenda, caused by falling when drunk on a box of fuses in his right trouser's pocket.

Aneurysm of Aorta.—Dr. MILNER MOORE of Coventry showed a specimen, and read notes, of a case of aortic aneurysm in the neighbourhood of the cœliac axis. The aneurysm was firmly adherent to the duodenum, into which it ultimately burst. The case was interesting in the fact that though the hæmorrhage was severe, the man, aged 28, lived for six days afterwards; and, secondly, that, though the hæmorrhage was into the transverse part of the duodenum, the blood was discharged by vomiting and not by the rectum until a short time before death.

Malignant Infiltration of the Breast.—Dr. BARLING showed a specimen of malignant infiltration of the mamma, which had been excised by Mr. Bartleet at the General Hospital. The patient had no hereditary tendency to cancer. It began with induration near the nipple, with pain in the heart and axilla. On admission the breast was enlarged and hard, but no definite tumour could be made out. The nipple was retracted, and the axillary glands enlarged. Microscopic examination revealed the general characters of diffused scirrhus.

Malignant Disease of Colon: Right Colotomy.—Mr. BENNETT MAY showed a specimen of malignant disease of the transverse colon, presenting the microscopic characters of cylindroma, for which right lumbar colotomy had been performed. The patient was 53 years of age, and the symptoms of obstruction came on gradually. She lived only four days after the operation. The fact that she could retain an enema of three pints indicated that the obstruction was above the sigmoid flexure.

Fibroid Phthisis.—Dr. SAUNDEY showed a patient with fibroid phthisis in that form which had been called cirrhosis of the lung. There was no history of pleurisy, and the patient considered himself well up to three weeks previously.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, APRIL 5TH, 1882.

EDWARD LUND, F.R.C.S., President, in the Chair.

Excision of the Tongue.—Mr. WHITEHEAD introduced a man whose tongue he had excised for epithelioma in February, and upon whom he had subsequently performed tracheotomy and gastrostomy, in consequence of the disease having extended to the pharynx. The patient had improved since being operated upon and expressed himself hearty and free from pain.

Exfoliative Dermatitis.—Mr. WHITEHEAD exhibited some large pieces of cuticle which he had received from Mr. Chevallier Reston, of New Zealand. They were reported to represent specimens of a periodic and complete exfoliation which occurred with a woman, whose case was reported in 1881.

Tricuspid and Mitral Stenosis.—Dr. LEECH showed the heart of a woman who had suffered from tricuspid and mitral stenosis.—The right auricle was enormously dilated, the left auricle slightly so. The other cavities of the heart did not appear increased in size.

Staphylorraphy and Uranoplasty.—Mr. HARDIE showed a series of twelve cases of cleft palate, in nine of which he had closed the defect by operation; while three, which had not yet been operated on, illustrated certain varieties of the malformation. In detailing his method of operating, Mr. Hardie expressed his preference for the detachment of the soft parts from the bone in the case of the hard palate, and the division of the muscles by Pollock's puncture when dealing with the soft palate. For sutures, he used silver wires, and found that they might be inserted most easily by first passing the unarmed needle, and then threading it as it presents in the cleft. He showed also small silver clips by which sutures of relaxation might be used in cases in which there was tension on the flaps. For success, he held that much more was to be gained by the cultivation of patience and dexterity, than by the use of curiously contrived instruments.

Case of Spontaneous Fracture in Early Infancy.—Dr. COLLINS showed a child (born on January 2nd, 1882) who had all the appearances of recently united fracture of the left femur when first seen on January 13th. The left humerus was found broken on January 30th; the right humerus on February 20th; the right femur on February 24th. Each fracture occurred at the centre of the shaft of the bone. There was not the slightest evidence of violence or injury; and he was unable, by the most careful inquiry, to trace a history of syphilis or other

hereditary disease. All the long bones in this child were more or less curved, especially the tibia and fibula on both sides, which were almost angular about an inch above the ankle, with some thickening. Analysis of the mother's milk, collected March 3rd, showed that casein and butter were below, milk-sugar above the average quantity; salts were normal. Twenty days after, during which cod-liver oil was administered to both mother and child, a second analysis was made of the milk, showing normal quantities of casein, butter, milk-sugar, and salts. All the fractures had united firmly and rapidly, and the child's health had not apparently been in the least affected.

Thrombosis of Left Innominate Vein.—Dr. WALTER showed a patient, aged 24, recovering from thrombosis of the left innominate vein, which occurred in connection with phlegmasia dolens of the left arm a month after labour. The lesion was ushered in with rise of temperature (104°), delirium, and excessive tenderness along the deep vessels of the neck, and was rapidly followed by swelling of the entire left half of the neck, the superficial veins of the same side of the face, neck, and infraclavicular and mammary regions becoming greatly enlarged. In a week, the symptoms abated very much, and a month later had completely disappeared, with the exception of the enlargement of the veins of the left infraclavicular and mammary regions.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, MARCH 14TH, 1882.

HECTOR C. CAMERON, M.D., President, in the Chair.

Aphasia.—Dr. FRASER showed an aphasic patient, who had become re-educated to a considerable extent. He did not understand spoken words, nor could he reply correctly to spoken questions, but replied at once correctly to written questions, and read what was written. Thus when a purse was shown to him, he called it "foke"; when "purse" was written he read it at once correctly; but immediately afterwards when shown a purse, he called it "foke". When asked orally his age, he answered "John"; when asked in writing, he answered "56", originating the number in speech. He also told the number of fingers, so that he had not lost the faculty of numbering, or had regained it.—Dr. W. T. GAIRDNER showed a similar patient for comparison. He also had become re-educated to some extent. His intelligence was fairly normal, and he had considerable sense of humour. When first seen, four years ago, he could hardly name anything correctly, or else he did so with great hesitation; some things he named better than others. He had lost the faculty of numbering, and "foke" expressions which came out whatever questions were asked. He learned to play dominoes correctly, but could not name the numbers, and if a number were asked he was quite puzzled. He could render numbers on his fingers, and thus could tell the game correctly. After some time he learned to draw a little, then to write large figures, or the number of a domino; but still he could not say it, or said it wrongly.—Dr. MEIGHAN made an exhibition of a combination of both patients. In Dr. Fraser's case the refraction was hypermetropic; $\frac{1}{2}$. The optic disc of the left eye was pale, with a small spot of pigment at the upper and outer side; the veins were dilated and tortuous; the arteries small and contracted. In the right eye, the appearances were normal. In Dr. Gairdner's case refraction was emmetropic and the discs normal, but the vessels in the left eye were dilated and tortuous, and the arteries small and contracted.

Gum Tumour of Lower Jaw.—Dr. GEORGE FRANKLIN showed a patient, aged 40, with a large walnut, distending the body of the lower jaw. The walls of the cavity were very thin, and gave the sensation of egg-shell crackling. The tumour apparently arose in connection with a painful tooth. The entire jaw was removed; and, on examination of the specimen, the tumour was found to consist of granular masses of a soft, spongy, and cellular structure, and contained a few small vessels of a blood-vessel character.

Gum Tumour of Lower Jaw.—Dr. FRANKLIN also showed a large tumour from a patient, aged 40, of the body of a jaw of 13 years. A year ago, after a tooth had been removed over the tooth, which gradually increased in size. The tumour was found to be a large, soft, spongy, and cellular mass, and gave the sensation of egg-shell crackling. On making an incision, however, the tumour was found to be a solid, and contained a few small vessels of a blood-vessel character. The tumour was removed, and the patient was cured.

Gum Tumour of Lower Jaw.—Dr. W. T. GAIRDNER showed a patient, aged 40, with a large walnut, distending the body of the lower jaw. The walls of the cavity were very thin, and gave the sensation of egg-shell crackling. The tumour apparently arose in connection with a painful tooth. The entire jaw was removed; and, on examination of the specimen, the tumour was found to consist of granular masses of a soft, spongy, and cellular structure, and contained a few small vessels of a blood-vessel character.

set in. She never complained of pain or of constipation, and when bilious never took medicine, but merely lay in bed, and abstained from food for a few days. Ten days before her death she had a severe bilious attack with vomiting diarrhoea and increased distension of abdomen. Several doses of purgative medicine were given, and were reported by the attendants to have operated freely. The patient seemed to have recovered, and on the morning of 17th February she arose and took some breakfast, but fainted suddenly and died: aged 64. *Post mortem* examination showed all the organs healthy, except the colon, which was very large, measuring 26½ inches in circumference and distended with faeces. The rectum completely filled the pelvis, pushing the uterus and bladder forwards and upwards into the abdomen. The small intestine was fairly normal in size. No stricture or other organic obstruction was found. Microscopic examination of the colon showed that great hypertrophy of the muscular fibres had taken place, the walls being twice their normal thickness; the mucous membrane was considerably congested in patches, and there were numerous small superficial erosions in it. The abdomen at the level of the umbilicus measured 43 inches in circumference.

Perforating Ulcer of Duodenum.—Dr. EDWARD McMILLAN showed this specimen, from a woman who had suffered for some time from indigestion, for which she had been in the habit of taking quinine and tincture of perchloride of iron. While sitting at breakfast, she had been suddenly seized with severe pain and cramps in the abdomen. In two hours she had marked symptoms of peritonitis, and died in twenty-four hours. On *post mortem* examination, a small perforating ulcer was found half an inch beyond the pylorus, and resembling in its characters a typical gastric ulcer. There had been no hæmorrhage.—Dr. W. T. GAIRDNER remarked that he had seen some chronic ulcers of the duodenum, ending in perforation and death, without hæmorrhage.

Sponge-Grafting.—Dr. W. McEWEEN showed some microscopic specimens to illustrate this process. He had grafted one half of an ulcer on the outer side of the leg; but, while the meshes of the sponge rapidly filled with granulation tissue, the ulcer did not heal. The sections shown demonstrated the fact that absolutely no change had taken place in the sponge, and Dr. McEween therefore objected to the term sponge-grafting, because the sponge-tissue never became alive. He did not find the process of any value.

REVIEWS AND NOTICES.

ON THE ENDEMIC HÆMATURIA OF HOT CLIMATES CAUSED BY THE PIERCE OF BILHARZIA HÆMATURIA. By F. H. H. GONVILLE, M.A., M.D. Gonville and Caius College, Cambridge; Fellow of the Royal Geographical Society. London: Baillière, Tindall, and Cox. 1882.

THE special interest of this pamphlet is that it contains the carefully detailed history of a case of endemic hæmaturia, studied from its very onset by a careful observer. After describing the type-case and various phenomena connected with Bilharzia disease as noticed in this case, an historical abstract of the discovery of the parasite and its life-history is given, the mode of infection discussed, and its geographical range indicated. The symptoms, diagnosis, pathology, prognosis, and treatment are reviewed; and in an appendix are some remarks on Bilharzia in animals, and the relation of the disease to *Leishmania* and *Trypanosoma*.

The type-case, a male, aged 29, travelling in South Central Africa, was attacked with hæmaturia and dysentery, when he was one day suddenly seized with sharp pain in the urethra while passing urine. This was followed by dysuria and sharp periodic pain, and hæmaturia developed. The hæmaturia began in April. When he reached the Transvaal in June, his urine was first examined, and found to contain numerous specks about the size of a pin's head, of bright red colour. It was free from albumen. Microscopic examination revealed the hæmatococcus, a long, slender, rod-shaped organism. About two months from the commencement of his hæmaturia, he was first noticed by the natives, who called him "the man who urinates blood." A few days later he was taken to a native hospital, where he remained for the remainder of his life. The hæmaturia was not cured, but the dysentery was cured, and the patient returned to his native country, where he died of hæmaturia. On his return to his native country, he died of hæmaturia, and his body was buried in the native manner. On reaching England, three copies of a solution of sulphate of potassium, one given to the patient, were made. The result, however, was most unfortunate, it being followed by an attack of hæmatococcus with great constitutional disturbance. It is not clear that the hæmatococcus was altogether eliminable for the result; for, at the time of the operation, the orifice of the urethra was slightly in-

jected and swollen, certain portions of the perinæum and under part of the penis were slightly tender on pressure, and the passage of the catheter was attended with extreme pain. Supervening on the cystitis, digestive disturbance, a slight attack of pericarditis, and, later, muscular twitchings, troubled the patient. There then occurred gradual improvement of health, but hæmaturia persisted. Nine months' residence in Madeira much benefited his general health, but little improved his local condition. His "present condition" is described in considerable detail, irritability of the bladder and occasional acute lancinating pain in the perinæum being the most prominent symptoms. It is stated: "The patient is firmly convinced that he can at times feel the actual movements of the helminth in the urethra; and, considering the size of the animal, it is not impossible." We must here remark that this statement is liable to prove a little misleading; for, though it is possible that the movements of the worms are appreciable to the patient, it must be remembered the parasites are in the urethral veins, not in the urethra itself. We make these remarks because one of our contemporaries, in reviewing the little book, has fallen into the mistake of believing the parasite (more probably parasites, for the female is enclosed during ovulation in the gynæcophoric canal of the male) to lie in the urethral canal, and has made the ingenious suggestion that "it seems probable that it might be seized by an instrument adapted from the lithotrite". The general characters of the urine are well given, and attention drawn to naked-eye appearances, which are almost pathognomonic. These are, minute opaque rounded masses, not exceeding the size of a pin's head, either white, yellowish, or brilliant red; and brightly blood-stained branching fragments, resembling small fragments of veins, floating in the urine or deposited as a sediment.

In writing of the appearance of the ova, the author perhaps speaks a little too positively of the relative positions of the head of the ovum and the spine of the ovisac. He remarks: "Cobbold says, probably from an error, that 'the tail is generally directed towards the spine-bearing end'." The relative positions are very indefinite; and in some recent specimens we examined from two patients—one from North, and the other from South Africa—the spine was nearly equally directed to the tail and the head. If there were any preponderance in one direction, it was towards the tail. The remarkable and most interesting phenomena of hatching the eggs is graphically described. One of the most important points to be yet determined is the mode of infection; for, when the parent helminths are once in the urethral or mesenteric veins, treatment is practically confined to minimising the effects they evoke. Most writers now believe that the disease is communicated by means of unfiltered drinking-water. The author, however, is inclined—it seems to us with some reason—to connect the infection with river-bathing; and thus is explained the predominance of the disease in males. Whether the embryos gain admittance through the skin or natural apertures of the body, as the author suggests, or by water imbibed whilst bathing, is certainly open to doubt. The native belief that the parasite enters by way of the urethra, and the means taken to prevent this, mentioned by Dr. Norman Moore at a recent meeting of the Pathological Society, when Dr. Zancanol of Alexandria introduced the subject, are alluded to. The tendency to calculus is mentioned. It is interesting to note that the blood of the type-case was found on one or two occasions to contain embryonic *Filaria sanguinis hominis*. The same thing has been also observed by Sonsino in a few cases. The author very properly regards the coexistence of the trematode and nematode in the same subject as a mere coincidence; but he throws out the suggestion that this coexistence may explain cases which begin as hæmaturia and ultimately assume the characters of chyluria.

In conclusion, we have only to cordially recommend this well-written essay to our readers. By an hour's agreeable reading, anyone can obtain a very good knowledge of the disease of which it treats, which is certainly one of the most remarkable and interesting in our nosology.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE
ALLIED SCIENCES.

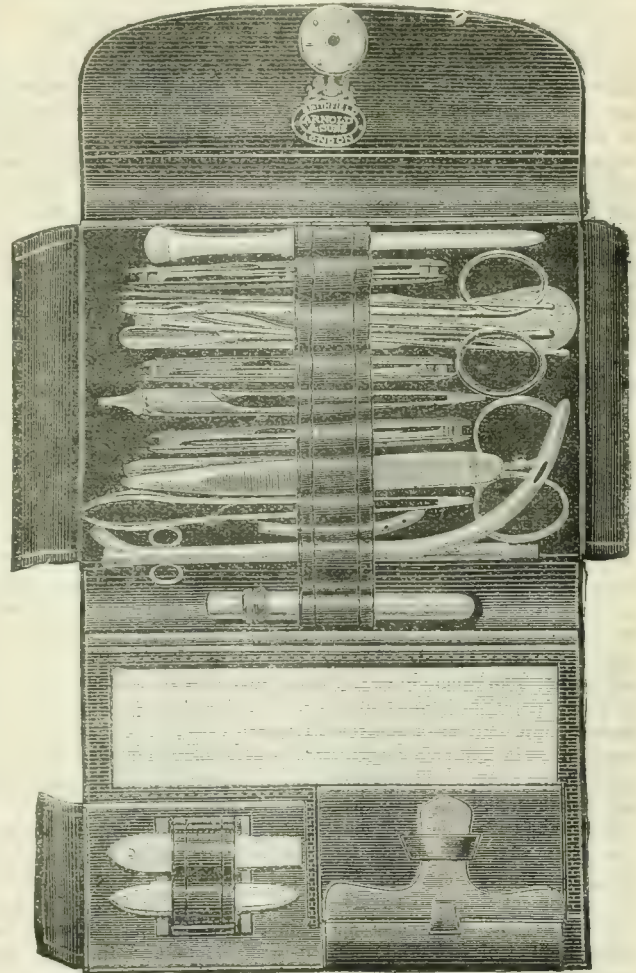
CLINICAL THERMOMETERS.

MESSRS. E. Greenwood and Co., of Topsfield Road, Crouch End, London, N., have brought under our notice their "New Improved Clinical Thermometers", which are well adapted for use in hospitals and infirmaries, and the medical profession generally. These instru-

ments are specially made, and every care is taken so that they should be perfectly accurate, while they are remarkable for their extremely low price. They have also a great advantage over those of the old pattern in that the indices are much longer, and will not run down, which oftentimes is a great annoyance when a quick reading is required to be taken in urgent cases. Many of the large hospitals in London, and also in the provinces, are now being supplied from these makers. These thermometers are also supplied at a singularly cheap rate, viz., 48s. per single dozen, or 4s. 6d. each in cases; or, where three dozen are ordered, at 42s. per dozen in cases complete. This low cost is often a great consideration, especially where a large number are required for public institutions.

NEW-SHAPED POCKET-CASE.

MESSRS. ARNOLD, of West Smithfield, have designed a Pocket-Case of an entirely new design. Its advantages over the old form of case



will readily suggest themselves. It is made curved, so that it adapts itself to the contour of the body, and can be carried in the breast-pocket without bulging. The contents are arranged in an exceedingly small space; although, whilst containing the full complement of instruments usually found in an ordinary three-fold case, its dimensions are only 5½ x 4¼ x 1.

The case contains: exploring trocar and cannula, Syme's and Paget's abscess-knife, scalpel and finger-knife, sharp and probe-pointed bistoury, electro-plated spatula, bow dressing or polypus forceps, torsion forceps, dressing scissors, spring dressing forceps, silver male and female catheter united, silver caustic-case with palladium spring holder, gum lancet, bleeding lancet, silver director, two silver probes and half a dozen needles. In addition to the above, it is provided with an ivory tablet for pencil notes.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 761A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 13TH, 1882.

RECENT RESEARCHES ON BACTERIA.

II.—Koch's INVESTIGATIONS ON TUBERCULOSIS.

EXPERIMENTS which have been carried on during the last few years have demonstrated beyond a doubt that tuberculosis belongs to the group of infective diseases, although various questions have arisen as to the origin of a similar disease from inoculation with non-tubercular matter. Many of these difficulties have been cleared up, and a great advance has been made in the pathology of this subject, by the beautiful experiments recently published by Dr. Koch. Starting from the point of view that the infective nature of the disease has been demonstrated, and with the knowledge that all the infective diseases at present thoroughly investigated have as their cause some form of micro-organism, Dr. Koch has studied tuberculosis in man and in animals, both spontaneously occurring and artificially produced, according to the methods described in our last article.

The first point was to ascertain whether any micro-organisms were present in the body of men and animals which had died of tuberculosis, and whether, if present, they were always of the same kind, and had definite characteristics distinguishing them from other forms. For a long time, these attempts failed; but, by a special method of preparation, the difficulties were at length overcome, and a bacillus was found, of definite form, and with certain very characteristic peculiarities. One cubic centimetre of a concentrated alcoholic solution of methylen blue is mixed with 200 cubic centimetres of distilled water; to this is added two cubic centimetres of a ten per cent. solution of caustic potash, the fluid being well shaken. The material to be stained is kept in this solution for from twenty to twenty-four hours, or, if at the temperature of 40° Cent. (104° Fahr.), for a half to one hour. The cover-glasses on which broken down portions of tubercle have been dried, are then placed for two minutes in a filtered concentrated watery solution of vesuvium. As a result, the methylen blue is displaced by the vesuvium from everything but the tubercle-bacilli; so that, after washing in distilled water, the bacilli stand out as blue rods on a brown ground. Sections are treated similarly; after having lain for twenty-four hours in the methylen blue, they are transferred to the filtered concentrated watery solution of vesuvium for fifteen to twenty minutes, then they are placed in distilled water till no more of the stain comes out, and afterward in alcohol, oil of cloves, and Canada balsam. Here, also, the nuclei are stained brown, while the tubercle bacilli appear as delicate blue rods. All the other forms of bacteria which Dr. Koch has as yet examined in this way are stained brown, with the exception of the bacillus of the typhoid, which also retain the methylen blue in presence of the vesuvium. These bacilli may also be stained by other aniline dyes if the solution is made alkaline by the addition of caustic potash or soda. The bacilli found in this way are delicate rods from a quarter to half the length of a tubercle bacillus, and are found in great numbers in all places where the tubercle is of recent formation and spreading rapidly, more especially at the border of the growing mass. They possess a special relation to the giant-cells, being found in their interior sometimes to the number of twenty in each cell. In old tubercles, there are fewer bacilli, though they are seldom altogether

absent, unless where the tuberculous process has come entirely to a standstill.

It might be objected that these appearances have, in some way or other, resulted from the staining process employed; but Koch states that the bacilli may be seen without being stained at all. For this purpose, a portion of tubercle containing these bacilli may be examined in blood-serum or distilled water in a hollow slide, when the bacilli will be found as delicate rods which do not possess any power of movement. In some of the rods seen in sections, spore-formation may be observed, the spores being of oval form. Dr. Koch has examined the following cases in man: eleven cases of miliary tuberculosis, twelve cases of cheesy bronchopneumonia, one case of a tubercle in the brain as large as a hazel-nut, and two cases of intestinal tuberculosis; in all of these, bacilli were present. Three cases of freshly extirpated scrofulous glands were examined, in two of which bacilli were found enclosed in giant-cells; and in two out of four cases of synovial degeneration of joints they were present in small numbers in giant-cells. Among the lower animals, ten cases of *perlsucht* were investigated, also three cases of so-called bronchiectasis in cattle, a cheesy gland in a pig, a tubercular hen, three monkeys which died of spontaneous tuberculosis, nine guinea-pigs and seven rabbits which had spontaneous tuberculosis, and 172 guinea-pigs, 32 rabbits, and 5 cats which had been infected with the disease; in all of these, the tubercle-bacilli were found. The constant presence of a distinct form of organism in a distinct pathological process was thus demonstrated, but it did not, therefore, follow that this organism was the cause of the pathological process.

An important point now arose, viz., whether the disease which followed the inoculation of material containing living bacilli was produced by that inoculation, or was due to accidental causes. The following points indicate that it did not arise spontaneously. In spontaneous tuberculosis, such a plentiful crop of tubercles never develops in so short a time as in those cases where inoculation was performed; secondly, control animals which were treated in the same way as the inoculated animals, with the one exception that no material containing these living bacilli was introduced into them, did not become tuberculous; further, in spontaneous tuberculosis, the bronchial glands become enlarged and cheesy, and then the lung is affected. In these cases, where inoculation was performed generally on the abdomen, the nearest lymphatic glands, viz., the inguinal, and at times the axillary, became first enlarged, and the spleen and liver were specially affected.

That the material which produced this infection must contain living bacilli for a successful result—that, in other words, the bacilli stood in relation to the result of the inoculation as cause to effect—was rendered probable by the following fact. In all cases where the material used for inoculation contained living bacilli or spores, the result was positive in animals liable to infection; while, where the material inoculated did not contain these bacilli or their spores, a negative result was obtained, the animal remaining healthy. Thus, in several cases, experiments were performed with the contents of a scrofulous gland, and with degenerated synovial membrane, neither material containing bacilli; and also with the tubercular lungs of a monkey, some parts of which had been dried for two months, and some kept one month in alcohol, and in no instance did tuberculosis follow.

In order to prove that the bacilli were the real and only cause of the infection, it was necessary, however, to separate them from the tuberculous material, and introduce them alone into the animal. This was done in the manner indicated in our last article, by growing them on a special gelatinous medium. It was found that these bacilli required a temperature approaching that of the human body for their growth. Now, at that temperature, the gelatine cultivating preparations became fluid, and thus the advantages of solidity were lost, while it was also found that these bacilli grew only with the greatest delicacy. The medium was, therefore, prepared and kept in a solid state in blood-serum which has been rendered solid by heat, but which has not been exposed to so high a temperature as to become opaque. If blood-serum be kept in a water-bath daily to a temperature of 55° Cent. (131°

Fahr.) for several days in succession, it is generally thoroughly sterilised; then, by keeping it for some hours at 65° Cent. (149° Fahr.), it becomes solid without losing its transparency. Portions of tubercles removed from the body, with various precautions to prevent the access of extraneous organisms, are placed on the surface of this material, and the vessel kept in an incubator at a temperature of 40° Cent. (104° Fahr.). The following phenomena occurred, whether the tuberculous material was taken from animals which had been killed after infection with tubercle, from animals which had died of spontaneous tuberculosis, or from human beings which had died of tuberculosis. For a week, there was no marked alteration; if marked development occurred within that time, it was always due to extraneous bacteria, and the experiment had failed. About the tenth day, small points and scales became evident, which slowly spread, and were seen to consist of tubercle-bacilli. After about fourteen days, these bacilli were transferred to fresh blood-serum. In doing this, the scales were broken up as much as possible, and a minute portion transferred to a new flask. When this transference had taken place several times, the original material was entirely got rid of, and only the bacilli developed from it remained. Now, inoculation of these bacilli, isolated in this way from all the other original material, produced tuberculosis with the same certainty as did the inoculation of tuberculous material containing living bacilli. The substance inoculated was generally introduced beneath the skin of the abdomen, or into the anterior chamber of the eye; and the bacilli had been cultivated in four to ten or more different flasks. Without enumerating the experiments, we may give the first as an example. Of six newly bought guinea-pigs, four were inoculated under the skin of the abdomen with bacilli which had been obtained from the lung of a human being who had died of miliary tuberculosis; these bacilli had been grown for fifty-four days, during which time five successive cultivations had been carried out. Two of the guinea-pigs were not inoculated. One of the inoculated animals died on the thirty-second day, and all the rest were killed on the thirty-fifth day. All those which had been inoculated showed extensive tuberculosis in the various organs, while those which had not been inoculated remained healthy. A number of experiments carried out in this way, and several in which the bacilli were injected into the abdominal cavity, yielded results absolutely identical with those which followed the introduction of tuberculous material containing living tubercle bacilli.

Similar results followed the introduction of bacilli into the anterior chamber of the eye. Thus, to mention one experiment, four rabbits were taken; into the eye of the first, pure blood-serum was injected; into the second was introduced the point of a syringe filled with blood-serum containing bacilli obtained from tuberculosis in a monkey, and cultivated for 132 days; but the piston was not moved, and thus no injection was made (this was an inoculation properly so called), while this serum with bacilli was injected into the eyes of the third and fourth rabbits. All the animals were killed on the thirtieth day. The first rabbit was healthy; the third and fourth had iritis, panophthalmitis, emaciation, and numerous tubercles in the lungs; the second had typical tuberculosis of the iris, the lymphatic glands under the jaw and near the root of the ear were swollen and infiltrated with whitish yellow nodules, but the lungs and other organs were still free from tuberculosis. This experiment shows that the rapidity of development of the morbid process depends on the number of bacilli inoculated, as was also demonstrated by the fact that the development of tubercles was more rapid and more extensive when the material was introduced directly into the abdominal cavity or into the veins. Also, in the second rabbit, there was nothing introduced except a few bacilli or their spores adhering to the end of the syringe; the microscopic portion of material which produced the infection could not possibly contain any of the original tuberculous matter, seeing that the bacilli had been passed through at least ten different flasks. We have already stated that the tubercles produced in this way were similar to those arising spontaneously; and, on microscopical examination, the appear-

ances as to character of cells, presence of bacilli, etc., were absolutely identical.

These investigations seem very definite, and only require careful confirmation to enable us to accept the matter as proven. That the facts are accurate and have been observed with scrupulous care, all who are acquainted with Dr. Koch and his work will admit; and Koch does not seem to be going beyond a legitimate conclusion when he writes that it must be looked on as a great advance of knowledge "that, for the first time, the parasitic nature of a human infective disease, and, indeed, of the most important of all diseases, has been completely demonstrated." As yet, the only disease in which so much and such convincing proof has been furnished is anthrax; though the presence of micro-organisms, which seem to stand to the morbid process in the relation of cause and effect, has been shown in a number of other affections. The questions which arise as to the relation of these organisms to the complex processes grouped together as phthisis, the views as to heredity, infection, etc., are too numerous to enter upon in the present article.

ANTIVACCINATION FALLACIES.

DR. CHARLES J. PEARCE has recently published another attempt to prove, by statistics, the worthlessness of vaccination as a protection against small-pox; his work is published by the Society for the Abolition of Compulsory Vaccination, and is dedicated to the British Parliament. As a contribution to vital statistics, it affords yet another example of the difficulty which strong partisans find in dealing dispassionately and scientifically with figures. It is unnecessary to doubt Dr. Pearce's intention to deal fairly with the statistics of small-pox and vaccination; but it is surprising to find that he has simply adopted and reiterated all the most extravagant assertions and misleading figures that have been put forward during the past ten years by uncompromising antivaccinators; and that all the statements and statistics issued by believers in vaccination during the same period are not only unanswered, but are simply ignored. Neither will truth or the cause of antivaccinators be served by this method of treatment. The uninformed may be deceived and carried away by Dr. Pearce's one-sided statement of the case for antivaccination; but whether from a statistical, a medical, or a public health point of view, the fallacies with which his statement abounds can scarcely escape the notice of readers who bring intelligence and knowledge to bear upon the question.

Dr. Pearce, few years ago, indited a letter to Mr. Selater-Booth, then President of the Local Government Board, in which he called attention to the fact that, since compulsory vaccination was enacted in 1853, there had been three small-pox epidemics in England and Wales: in 1857-8-9, in 1863-4-5, and in 1870-1-2. He further showed that the number of fatal cases of small-pox successively increased at each of these epidemics; and also that this increase of deaths from small-pox was proportionately much greater than the increase of population between those periods. This statement, so far as it goes, is correct, and is perfectly satisfactory to Dr. Pearce, who complacently remarks: "So much for vaccination in relation to small-pox in England and Wales." This statement, however, is so distinctly a partial statement of facts, that it suggests, and Dr. Pearce distinctly asserts, the fallacy that the mortality from small-pox has largely increased in England and Wales since compulsory vaccination was instituted. The fallacy of Dr. Pearce's statement, which has been disseminated broadcast on leaflets by the Society for the Abolition of Compulsory Vaccination, was pointed out in these columns, and elsewhere, at the time; but it suits Dr. Pearce, as well as other advocates of the repeal of the Compulsory Vaccination Acts, to ignore the following unquestionable fact. The mortality from small-pox in England and Wales since when this Compulsory Act was first enacted, has fallen to less than 1853, half what it was in the years prior to that date. The annual death-rate from small-pox in England and Wales averaged 420 per million living during the 12 years prior to compulsory vaccination, for which such mortality statistics are available; whereas in the twenty-eight years 1854-81,

during which vaccination has been compulsory, and more or less effectively enforced, the rate of mortality from small-pox has declined to 196 per million. We should be interested to know what Dr. Pearce and other antivaccinators have to say to this fact, which they carefully avoid mentioning in their sensational literature. There has been, indeed, in recent years a tendency to increased mortality from small-pox in epidemic years, but, in non-epidemic years, comparatively few deaths occur; hence the mean rate in a long series of years shows a marked decline.

Apart, however, from this avoidance of figures, which are objectionable, as not fitting in with his opposition to vaccination, Dr. Pearce's book contains some inexcusable inaccuracies. We may especially note that, in Table XIV, he gives the annual death-rate from small-pox in England and Wales per million living in the five years 1875-79 as 344; this is more than four times the correct figure, which is only 82. This incorrect figure, Dr. Pearce states, was furnished to him by the courtesy of Dr. Ogle, the successor of Dr. Farr in the General Register Office. It is hardly probable, however, that such a manifest blunder could have been committed in an official communication from the General Register Office. Any way, there is no foundation for the conclusion, based upon this false figure, that the "death-rate from small-pox has greatly increased". The fact is that, in the years 1873-81 that have elapsed since the remarkable fall of 1871-2, the annual death-rate from small-pox has been so low as 30 per million, which is less than a fifth of the rate that prevailed during the previous compulsory vaccination period of which we have trustworthy records. Dr. Pearce's book is based on the assumed fallacy of small-pox fatality in England; and, in face of the above facts, it is evident that this assumption is a fallacy, and that it is impossible in any one who writes authoritatively on the subject of small-pox and vaccination. This is far from being the only error in Dr. Pearce's essay, but it is, perhaps, the most glaring. No one can assert that vaccination has caused the appearance of Jenner; and no one can deny that the epidemic of 1871-2 disclosed serious defects in its administration, which have been the reason for revaccination of adults. Such a work, however, as Dr. Pearce's, full as it is of exaggerated statements and false figures and assertions, will not assist in arriving at the true medical relation between vaccination and small-pox.

PUBLIC APPOINTMENTS THROUGH NOMINATION.

It need hardly be observed to those who rightly understand the history and constitution of the British Medical Association, that one of its objects is not the advancement of the general welfare and reputation of the medical profession as a whole, and not the mere promotion of an individual or any one section of it. Although its chief business is the place of publication of its transactions, happens, from the nature of the circumstances, to be located in the metropolis, it by no means neglects the concerns of the metropolitan part of the medical profession, or of the teachers and students of the metropolitan schools, but any more would with those in whose hands the direction of the affairs of the Association is for the time placed, than the concerns of the schools and practitioners in other parts of the kingdom. It should be evident, indeed, to all who may give attention to the subject, that the Association would never have the influence it really possesses, if its members were merely to claim special advantages for a portion of the profession, whether educational or as practitioners, as the case of other occupying similar positions, or engaged in similar occupations elsewhere. No member of the Association would assent to the truth of this statement; and, if we now assert that it is only a very few years since it was taken to task by a military surgeon for its inactivity, in some remarks which we found reproduced in the last communication for communications in the Army Medical Department, it is a mistake having occurred of surgeons being named as the cause of its inactivity, but that all the appointments

had been given to surgeons who had publicly competed for them. It is certainly true that we did not make any complaint on the score mentioned. We did not do so for various reasons of a general nature, which need not be now stated, as they were put forth fully at the time of the publication of the warrant, in which, for the first time, the military authorities secured for themselves the power of nominating a proportion of the medical officers of the army independently of public competition; and also for another reason, which was not, at that time, adverted to, but which nevertheless is not without considerable weight: and that is, because we are well aware that, if a system of nomination were carried out, it would practically be assisting the London schools of medicine at the cost of all the other medical teaching establishments of the empire. With the opportunities of intimate communication which exist between the staffs of the military departments in London and the staffs of the metropolitan medical schools, there is danger that the appointments by nomination would nearly all fall into the gift of the latter. Even without any intention of favouritism, owing to the difficulties in the way of free consultation with the teachers of schools at remote distances, the result could hardly be otherwise if such a system were in force. Under any circumstances, suspicions would be aroused that private interests ruled the choice of the nominees, and feelings of jealousy and dissatisfaction would be engendered in every medical school which did not happen to receive an offer of nominating one or more of its students to a commission in the Army Medical Department. As it is, and as it has been for a long time past, knowing, as all schools do, that the vacant medical commissions in the public service are open to free competition; that every student, after obtaining the necessary qualifications, may start on equal terms in the race for such appointments if he chooses to do so, the ground is cut away for any sense of unfairness, and no cause of complaint can be established.

Notwithstanding that the advantages of admission to the medical branches of the military services by fair and open competition appear to be generally accepted, our contemporary, the *Broad Arrow*, has expressed its opinion, in an article in its issue of the 8th April, that, "as a leading representative of professional opinion", this JOURNAL should have "ignored the growing grievance amongst medical men aspiring to commissions" of there being no entries by nomination. After pointing out that the Royal Warrant of 1870 prescribed that half the vacancies in the Army Medical Department should be filled up by competition, and that, as regards the other half, the Secretary of State was empowered to supply them on the nomination of the governing bodies of the medical schools, our contemporary argues that, although the filling up of half the appointments by nomination was only permissive, the removal of the compulsory condition as regards this half was clearly intended to convey something more than a hope that competitive examination was not to be applied universally as before. Yet no application for admission on the system of nomination, it mentions, has been entertained, so that the supposition becomes inevitable that the permissive clause was meant to be inoperative, and that it was simply introduced as a bribe to win back candidates when the service was unpopular. The final conclusion at which our contemporary arrives is that, as the medical service has become popular without the nomination clause being acted upon by two successive Secretaries of State, and as it appears evident that it is not intended to be acted upon, "all concerned, and certainly not least the medical schools themselves, will be benefited by its removal. To keep it in reserve in case of future unpopularity of the department is not a dignified, nor even a prudent, proceeding; for whilst, on the one hand, warrants have suffered too much already by saying what they do not mean, on the other hand, the class of candidates would not be worth having who would accept a commission which their brethren should for any good reason decline."

With the conclusion to which the *Broad Arrow* has come regarding the nomination clauses of the last Army Medical Warrant, we fully agree, although we cannot admit that there has been any sense of grievance among members of the medical profession because it has not hitherto been acted upon. We believe that all aspirants for commis-

sions whose medical services have been worth acceptance, so far as the welfare of the officers and men of the army is concerned, have been quite willing to compete on fair and equal terms for the vacant commissions; and that the profession—and not only the profession, but the public also—would have raised an outcry if, through the influence of any particular set of teachers, or any particular school, some individuals should have had commissions conferred on them by private recommendation and favour. There has been abundant evidence of the unsatisfactory conditions under which testimonials and laudatory certificates are sometimes obtainable; and experience has proved the little real importance which is not unfrequently to be attached to them if relative qualifications and merits be considered. Our contemporary, in remarking that no application for admission to the Army Medical Department by nomination has been entertained, leads to the inference that such applications have been made. We should like to know from what quarter these applications have emanated. Supposing they were made by some particular London school or schools, and that the applications should have been granted, we would ask our contemporary to consider how the fact would have been regarded by other London schools on whom no such favour had been conferred. And presuming there to be vacancies enough for nomination appointments to be allotted to all the London schools, so that every one had a commission placed at its disposal, what about the provincial, Irish, Scotch, and Colonial schools, who could most justly claim the right to a similar privilege? The appointments in the medical branches of the services are undoubtedly public appointments, and, subject to the special qualifications imposed on all candidates for them alike, ought to be available on equal terms, without favour or private interest, to every qualified practitioner wishing to obtain them. No legitimate objection can be urged against an arrangement by which the competition for appointments is equally open to all concerned, and the appointments are given to those only who prove themselves, to the satisfaction of reliable and impartial judges, to be the best among the competitors; but we may safely assert that no system under which one body of candidates are compelled to compete publicly for half the vacant appointments, while another body of candidates are to receive a similar number as personal gifts through private or special recommendations, will ever acquire favour with the profession at large. The necessity for such a divided system, and one so foreign to the spirit of the age, must be very strong and patent indeed, before it can be carried into operation without very powerful opposition, not only on the part of the medical profession, but also of the public in general.

DR. FANCOURT BARNES has been elected Assistant Obstetric Physician to the Great Northern Hospital.

THE Clinical Society will hold its usual meeting this (Friday) evening. The notice was accidentally omitted from last week's JOURNAL.

A DINNER in aid of the funds of the London Fever Hospital is to be given at Willis's Rooms on Wednesday, the 14th June, when His Royal Highness the Prince of Wales has consented to preside.

THE epidemic of small-pox at Wells, Somersetshire, shows, unfortunately, no sign of abatement. With a view of securing, so far as possible, the isolation of those attacked, the local authority have decided to erect a series of huts for their reception.

THE Bishop of London has this week presided, at King's College, over the annual meeting of St. John's House and Sisterhood. The report showed that the work of the Sisterhood was still increasing, and was doing much to diminish human suffering, especially among the poor.

ON the 9th instant, the Convocation, and on the 10th instant, the Senate, of the University of London passed resolutions condoling with

the Duke of Devonshire, who was for many years Chancellor of the University, on the recent terrible bereavement which has befallen the house of Cavendish.

MR. HENRY C. BURDETT will read a paper at the meeting of the Statistical Society, King's College Entrance, Strand, on Tuesday evening next, 16th instant, at a quarter to eight, on "The Relative Mortality of Large and Small Hospitals, and the action of the Antiseptic (Listerian) System upon such Mortality." The statistics cover a period of six years. The paper will be followed by a discussion, in which members of the profession are invited to take part.

MEASLES seems to be very prevalent in Bradford. At one of the schools nearly two hundred children have been absent on account of this disease, and fourteen deaths have happened in one week. The health-officer deplors that this malady is treated by a large class of the inhabitants as one of trifling importance, and as almost a necessary incident of child-life. This mistaken fatalism, he says, renders it difficult, owing to the absence of all precautions, for any child to escape the infection.

THE case of *Neville v. Smith*, which lately came before Mr. Commissioner Kerr, resulted in a decision which must commend itself to all. The plaintiff, on taking a house, was assured by the defendant that the drains were all right. This, however, turned out not to be the case, and the children of the plaintiff fell ill in consequence, and an action was brought against the owner to recover damages. In answer to the charge, it was contended that the landlord had not authorised the agent to give the assurance that the drains were perfect; and Mr. Kerr, in giving judgment for the plaintiff for £35, said "it was a mockery that an agent should have anything to do with letting a house, without knowing whether it was healthy or unhealthy".

NAPPER TESTIMONIAL FUND.

A PUBLIC meeting in aid of the above is announced to take place at Willis's Rooms, King-street, St. James's, S.W., on Thursday, May 18th, at 4.30 P.M.; J. Eric Erichsen, Esq., F.R.S., in the chair. Tickets of admission are to be sent to all subscribers and cottage hospital surgeons, but all members of the profession and their friends are invited to attend. Collection-papers, etc., with cheques, should be returned on or before the 16th inst. to the honorary secretary, Dr. Stowers, 23, Finsbury Circus, E.C.

THE BACILLI OF TUBERCLE.

AT the Physiological Laboratory at King's College, on Monday last, Mr. Watson Cheyne and Mr. E. M. Nelson exhibited some specimens showing the bacilli found in tubercle, prepared by Dr. Koch, and brought over to this country by Dr. Goldammer. On one slide was a miliary tubercle from the human lung, crushed and spread out on a coverglass, and stained with methylen blue and vesuvin; in this, the bacilli appeared as delicate blue rods among the brown-stained nuclei and granular material. The second specimen was a section of a tuberculous mesenteric gland, from a guinea-pig which had been inoculated with tubercle; the bacilli lay in large numbers among the nuclei towards the outside of a tubercle. The third was a section of a tuberculous mesenteric gland from a cow affected with bovine tuberculosis (*Perlsucht*). This specimen demonstrated the presence of bacilli in the interior of giant-cells. The discovery of the bacilli in this case was much more difficult than in the others; but on carefully focussing, several minute delicate blue rods could be found. Mr. Cheyne showed other forms of bacilli, for comparison with the tubercular varieties. Large numbers of the bacilli, which have been described as occurring in leprosy, were shown in a section of a leprous nodule. These differ from the tubercle bacilli in being more pointed at the end, and in being stained by methyl violet (Weigert's nuclear method of staining). There was also a specimen of the bacilli which produce septicæmia in house-mice, and of a long delicate form which apparently caused erysipelas in the ear of rabbits (see Koch's *Traumatic Infective*

small-pox rate, came eighth on the list. In 885 of the 2,371 fatal cases of small-pox, no reliable statement was made as to previous vaccination or non-revaccination. Of the remaining 1,486, only 524, or 35.3 per cent., were certified to have been vaccinated; while 962, or 64.7 per cent., were certified to have been unvaccinated. Of the deaths among the unvaccinated, speaking roughly, three-quarters occurred before the age of twenty; while, of the deaths among the vaccinated, three-quarters occurred after the age of twenty. Thus, taking the age of twenty as the dividing point, the figures were almost exactly inverted in the two classes. The explanation is obvious. The vaccinated are protected in youth, and especially in childhood; but at later ages they become more assailable, owing to the gradual weakening of their protection and its non-renewal by revaccination. The unvaccinated, on the other hand, are least protected in infancy and childhood, for at the later periods of life an increasing proportion of them have become protected by attacks of small-pox.

THE UNIVERSITY OF LONDON AND THE LATE CHARLES DARWIN. At the meeting of Convocation of the University of London, on the 9th instant, a vote of condolence with the family of the late Mr. Darwin was unanimously adopted. Its terms were as follows: "That the Graduates of the University of London, in Convocation assembled, desire to record their sense of the irreparable loss which science and philosophy have sustained in the death of Mr. Darwin, whom they recognise as an acute and patient investigator, an earnest seeker after truth, and an original thinker whose writings have exercised a profound influence upon the progress of science and scientific thought throughout the world." On the following day, which was "Presentation Day", Sir John Lubbock, the member for the University, referred in eloquent terms to the deceased naturalist (for to Mr. Darwin, as Dr. Pye-Smith had observed on the previous day, this old-fashioned title may be rightly applied). Sir John Lubbock dwelt especially on the change in public opinion which was manifested by the large attendance, not only of men distinguished in science and in literature, but also of eminent theologians and divines, at the funeral in Westminster Abbey. Loud applause greeted the speaker when, in a voice tremulous with emotion, he spoke of the earnest and reverent feeling which pervaded all that Mr. Darwin had written, and of the warm affection with which he was regarded by all who had had the privilege of his personal acquaintance.

HOSPITAL SATURDAY IN BIRMINGHAM.

THE Hospital Saturday collection in Birmingham has been large this year. The general collection was made on Saturday last. Up to Wednesday, the sum of £4,245 15s. 11d. had been paid into the bank, as against £3,379 17s. 10d. received at the corresponding period of last year, showing an increase of £865 18s. 1d. Some further contributions have yet to be made; and it is hoped the total may reach £5,000, and so far surpass the collection of any previous year. This satisfactory increase is due partly to an improvement in trade, and partly to improved organisation in the movement.

THE NOTIFICATION OF INFECTIOUS DISEASES.

A RETURN has just been issued of the several communications received by the Local Government Board and the Home Office from the local authorities of the several towns in England and Scotland, in which local Acts are in force containing provisions which require the notification of infectious diseases, as to the operation of these provisions. A circular was issued on April 3rd from the Local Government Board, by Sir John Lambert, asking the local authorities of the urban sanitary districts in which such provisions relating to the compulsory notification of infectious diseases are in force, whether they are satisfied with the working of these provisions, whether they have any suggestions to make on the subject, and whether, before the powers contained in these provisions were obtained, public attention was specially directed to the intention of the local authority to apply for them. This circular was sent to the following authorities: Barrow-in-Furness, Birkenhead,

Blackburn, Blackpool, Bolton, Bradford, Burton-on-Trent, Derby, Huddersfield, Jarrow, Lancaster, Leicester, Llandudno, Manchester, Norwich, Nottingham, Oldham, Preston, Reading, Rotherham, Stafford, Stalybridge, and Warrington. The replies which are contained in the return are too long for analysis this week; but we shall lay a summary of them before our readers in an early number.

AMERICAN CHEESE.

THE manufacture in America, and the introduction into the British market, of a new kind of cheese, of an apparently good quality, from a mixture of skimmed milk and lard, and also from skimmed milk and oleomargarine, is said to be progressing with great activity. This compound, which, we are told, closely resembles the best Cheshire and Derbyshire cheese, and is largely sold in this country as such, is said by chemists to be a wholesome food when made of the purest lard or bullock-fat; and oleomargarine cheese is said to be more nourishing than cheese made from lard. But there is the fear, as has already been pointed out, that other than bullock-fat may be used, and that there is nothing to prevent the manufacturer from introducing the fat of horses or pigs dying from disease into this compound. We agree in thinking that the attention of the Board of Trade should be invoked, to insist that this compound be sold under another name than that of cheese, and that the public at least may know when they are eating the one or the other.

THE HOSPITAL SATURDAY FUND.

THE eighth annual report of this fund shows that the amount collected, during 1881, was the largest that has yet been received—being an increase over the previous year of £1,540. The total amounted to £8,174; of this sum, £2,067 were derived from street collections, and £6,107 from artisans' collecting sheets. The amount distributed among hospitals, dispensaries, and convalescent institutions, was £7,000. The street collection was so successful last year, that the Council propose in future to carry it out upon a larger scale. This we regret to hear; for it is a branch of the work which is little, if at all, removed from an appeal to charity. The blind beggar who stands at one corner of the street, and the lady who sits at a table at another corner, equally appeal to the passers-by, and hope to receive alms from the rich and poor alike. If the artisan be not begging for himself, he gets the ladies to beg for him. The systematic collection made among the working men themselves is a far more satisfactory feature of the movement. What is wanted is an organised system of self-help, not a haphazard collection in the streets. A few years ago, representatives of this fund took part in the formation of the Metropolitan Provident Dispensaries Association, and we regret that the report before us contains no allusion to this important movement. The Council of the Fund have withheld a grant to St. George's Hospital, on the ground that they did not receive a sufficient number of "letters" in return for their last year's award. Thereupon the secretary of the hospital stated that they had received the full number that had been agreed upon at the time the fund was instituted. Still the Council felt aggrieved, and proposed to give £50 as an award, and to expend another £50 in making one of their members a Life Governor of the hospital. But the authorities of St. George's positively declined to accede to any such arrangement. There can be no doubt that, in coming to this decision, they were actuated by a wise appreciation of all the circumstances of the case.

FRACTURED RIBS IN ASYLUMS.

THE annual report of the Pauper Lunatic Asylum for the counties of Salop and Montgomery and the borough of Wenlock for the year 1881 contains an account of an inquiry held in that institution by the Commissioners in Lunacy into the circumstances attending the death of a male patient named Jones, who died there on April 11th from "exhaustion after mania, accelerated by fracture of the ribs and congestion of the lungs." The inquiry was deemed necessary by the Commissioners because another patient, also suffering from mania, had sustained frac-

ture of the ribs, and died in the asylum two months previously. In both cases the injuries had been detected during life, but in neither had the investigations of the coroner and visiting justices led to any definite conclusion as to the manner in which they were caused. The Commissioners, having read the records of the asylum bearing on the case, examined, on oath, the medical superintendent, assistant medical officer, the late chief attendant, and eleven attendants—all the persons, in fact, who had charge of the patient during his residence in the asylum. They also examined, but not under oath, three male patients. This extensive array of testimony, however, did not effectually clear up the case, but made it probable that the fractures, which involved five ribs, two of which had penetrated the pleura, were sustained in a fall during a struggle with an attendant, which happened six days before his death. The patient, who was a powerful and violent man, is alleged to have made an assault with an iron spittoon on an attendant, who, in order to save himself, rushed up to him and threw his arms round his waist, upon which they fell upon the floor together. No one witnessed this fall, from which the attendant seems to have sustained no injury. After it, however, the patient was noticed to be a little lame. The practical conclusions at which the Commissioners arrive are, that there was defective supervision of the attendants at the time of the accident, owing to a vacancy in the office of chief attendant; that the regulations for the guidance of attendants in the asylum demand supervision, especially with reference to reporting immediately, through the chief attendant, to the medical officers every act of violence, serious struggle, or heavy fall occurring among the patients, wherever they may be at the time; and that the attendant who had the struggle with the patient Jones, and in whose ward the other case of fractured ribs occurred, should be removed to a less responsible position in the asylum. The justice of the last recommendation was evidenced by the fact that, soon after this attendant was transferred to another ward, he was detected striking a patient, was at once summoned by the superintendent before the magistrates, convicted, fined the by no means extravagant sum of £20, and dismissed the service of the asylum.

THE DEFECTIVE SANITARY CONDITION OF THE LARGER INDIAN STATIONS.

Our Indian contemporary, the *Pioneer*, has a brief article with the above heading. In this article, the writer contends that such stations as Ferozshah and Meerut, which formerly had a good reputation as healthy stations, now rival Peshawar and Meerut, "of infamous repute for their insanitary condition." The forms of disease now prevailing at Ferozshah and Meerut are said to be "low fever, typhoid, and malarial fevers," forms of disease which may not be generally directly mortal, but which sap the strength of men and women and children without attracting the amount of official attention that is at once attracted by a large amount of mortuary statistics." This state of matters is due, he is sensible to the improper disposal of night-soil, which is scattered with its contents to contaminate not only the air, but also the water. There is, we fear, too much reason to believe that the above is a true account of the condition not only of the stations mentioned, but also of many others, and that a searching inquiry is loudly called for. When the old system of latrines imperfectly flushed with water was done away with, and the "dry earth" system substituted, it was regarded as a great improvement in cantonment and barracks sanitation, and was, without doubt, a great improvement. It is certain, however, that those who for years have been in favour of the dry earth system on the authorities, never considered that the old evils were merely to be introduced in a new way. When the subject of the prevalence of enteric fever in India was under discussion in the Section of Military Medicine and Surgery of the International Medical Congress, at Fribourg, in 1876, the paper read by the French representative, strongly insisted on the fact, in the first place, that in the country, that enteric fever in India is due to the filthy conditions of the country, and the knowledge in the country to be the cause of the disease, viz., fecal contamination of air, water, and food. It is, we think, not worth doubting, the statement given in the paper from which we have quoted the extracts, the remedy is easy

enough; there is no cause for the despairing cry with which the writer in the *Pioneer* concludes his article, that *omnia sanitas* must be added to the mournful category of the preacher.

CARBONIC OXIDE IN THE AIR.

At the ninth meeting of the German Society for the Study of Hygiene, under the presidency of the Duke Carl Theodor, at Fribourg, in September 1881, Dr. Max Gruber related at length some experiments he had made on dogs and fowls, in order to observe accurately the symptoms produced by the inhalation of small and carefully measured quantities of carbon monoxide. This object was carried out by means of Eulenberg's respiratory apparatus. It would appear that carbon monoxide may be continuously inhaled without producing any morbid symptoms. The dogs remained in good spirits, with normal appetites. Dr. Max Gruber also placed himself in the same apparatus, and read with a loud voice, on two separate occasions, for some hours, without experiencing any discomfort, except a little dryness of mouth. Dr. Gruber believes, as Eulenberg first demonstrated, that hæmoglobin charged with carbon monoxide is less stable than is hæmoglobin charged with oxygen, and that it undergoes disintegration at a lower temperature, and still more at body-heat. It is, therefore, probable that the body has a limited power of rendering this carbon monoxide harmless. Von Fodor has brought forward a new method for the estimation of the monoxide in the air, even when existing in very small quantities. The gas is first secured by means of a special apparatus, and then passed through a solution of palladium chloride. Most gases, when they pass down black palladium from a solution of its chloride; but, by isolating the carbon monoxide in combination with hæmoglobin, this test is thought to give warrantably accurate results. Dr. Gruber has also shown that sewer gas, has given carbonic oxide in a large amount, and that, in some cases, the occurrence of the carbon monoxide is due to the existence of broken gas-pipes in the neighbourhood of the houses.

INFANTILE MORTALITY.

THIS painful subject has of late received considerable attention at the hands of health officers, whose efforts to diminish the mortality in this direction are worthy of special commendation. It is generally rightly held to play an important part in the causation of disease among children that occurs in our manufacturing towns. According to the subject in the last report on the health of Ansonia and Birmingham, Mr. F. McIlwain, while recording for the past year a steadily falling among infants, admits that the rate in the district is still too high. He observes that, so long as child-bearing women are as ignorant, as many of them are, of the very rudiments of the principles of nursing and rearing of infants, so long will children be born only to die during the first year or two of their existence. How many children are victims to the feeding-bottle—"that utter abomination of child-rearing contrivances, when in the hands of a slavishly ignorant and uneducated mother"—he should not like to guess. A frequent cause of the deaths of these children has been shown that the "milky stuff" contained in them was utterly unfit for the child to consume. The same may be said of the many infants who perish from the want of clean and wholesome work. One of the most miserably painful sights that meets the eyes of medical men is that of a little child, who, owing to the want of proper feeding, is unable to take any nourishment, and is left to die a slow and painful death. When a child is born, it is expected to work a miracle, and to live for many years. But the fact is, that the nursing and rearing of children is a most important part of the training of the mother, and it is a pity that so many people are apt to consider themselves as being educated with the remark, "I am a mother, therefore I know my business." It is the duty of every man and woman, who comes into contact with the poor, to try and convince them that it is not enough to have a child

that children should die; and that if they were fed, clothed, and otherwise treated in accordance with those principles that regulate the health of children, the tables of infantile mortality would soon show most gratifying results.

RABIES IN PARIS.

IN his report for the past year on the subject of rabies in dogs, the chief veterinary surgeon to the Paris Prefecture of Police states that that disease has increased in an alarming manner. During 1881, 615 cases of mad dogs were reported, while 733 animals and 153 persons were bitten by them. Of the latter, 23 died of hydrophobia. In the preceding year the number of mad dogs was 297; of persons who received bites, 68; and of persons who died of hydrophobia, only five. In view of this increase, the Council of Public Health has submitted to the Minister of Commerce a new and more stringent code of regulations to be observed by dog-owners.

VACCINATION IN BENGAL.

VACCINATION continues to make steady progress in Bengal. The total operations performed during 1879-80 numbered 1,742,995, against 1,315,884 in the previous year, showing an increase of 427,111 cases. The number of persons operated on by the vaccine establishment, exclusive of the work done by dispensary vaccinators, was 654,898, against 567,623 in 1878-2; and that by licensed vaccinators, 1,024,452, against 625,439. The total number of successful operations was 1,689,590, against 1,251,936 in 1878-9; and the percentage of success in primary operations, exclusive of dispensary vaccination, was 98.05, against 98.49. In secondary operations, the ratio of success was 20.91, against 46.89 in the previous year; and it ranged from 16.45 in Calcutta and its suburbs to 94.23 in Eastern Bengal. The rate of success in dispensary primary vaccinations was 83.57, against 94.97; and in secondary operations, 55.81, against 77.57 in 1878-9. The sex of 1,654,210 vaccinated persons was registered; and of these, 867,115 were males, and 787,095 females, giving a percentage of 52.42 males to 47.58 females, being nearly the same proportions as in previous years. No record has, unfortunately, been kept of the ages of those who were successfully vaccinated. The system of self-supporting vaccination is being gradually extended throughout Bengal; for, as already stated, there was a considerable increase in the work performed by licensed vaccinators. In the metropolitan circle, the result was very satisfactory. The number of vaccinations in this circle rose from 294 in 1878-9 to 377, and the operations performed increased from 394,186 to 625,388, giving a percentage of success in primary vaccination of 99.75. In other circles also there was a satisfactory extension.

SCOTLAND.

THE death of Dr. John Brown of Edinburgh, the well known author of *Home Subseiva*, *Rab and his Friends*, and other works, is reported to have taken place on Thursday morning. He was 72 years of age.

GLASGOW DISTRICT LUNACY BOARD.

THE Glasgow District Lunacy Board are to be recommended by their Court of Management to purchase, for asylum purposes, the estate of Eastfield. This will involve an expenditure of £11,500. It is considered, however, that the property will furnish a most eligible site for new asylum buildings.

THE NOTIFICATION OF INFECTIOUS DISEASE.

THE report submitted to the Public Health Committee of the Edinburgh Town Council on Tuesday by the medical officer of health shows the value of the system of notification of infectious diseases, as now established and successfully carried out in Edinburgh. During the month of April, 1,386 cases were reported; this was the highest number ever reported in one month since the system was adopted. No fewer than 1,239 of these were cases of measles, which shows an increase, as

compared with 1,118 in March and 440 in February. Eighty-three were cases of scarlet fever, 52 were of typhoid fever, and 12 were of diphtheria. The measles epidemic is thus shown to have reached its zenith in April, there now being an apparent diminution. No fewer than 51 cases of scarlet fever are reported since May 1st, and 26 of these occurred within a very limited district at East Thomas Street. Suitable measures have been taken to arrest the spread of the disease. The mortality in Edinburgh for April was 19.88 per 1000 *per annum*, as compared with 22.07, the average death-rate of the same month for the previous five years. The death-rates in the three divisions of Edinburgh were: New Town, 15.06 per 1,000; Old Town, 23.98 per 1,000; and Southern Suburbs, 18.11 per 1,000. Thirteen per cent. of all the deaths were due to zymotic diseases, of which whooping-cough contributed 19 cases, while measles alone caused 24 deaths.

GLASGOW INSTITUTION FOR DISEASES OF WOMEN AND CHILDREN.

THE report submitted at the fourth annual meeting of the supporters of the Glasgow Institution for the Diseases of Women and Children showed that 408 women had been treated at the institution, which would involve about 7,000 consultations. Of the above number, 326 are reported cured and 24 relieved, while 3 are the subjects of incurable disease. Recently two beds have been added; and these are occasionally occupied by indoor patients, of whom there have been six dismissed cured or relieved. The outdoor cases have increased by 40 per cent. during the year, while 200 children have also been treated at the institution. It was pointed out that depending for their comfort on these 408 women were their children, who numbered 1,150; and from this a slight estimate could be formed of the utility of the institution. Dr. Bell read the medical report.

HEALTH OF GLASGOW.

THE return of the medical officer of health for the fortnight ending April 15th, shows that there were 514 deaths registered, representing a death-rate of 26 per 1,000 living. This rate is in excess of that of the preceding fortnight, and is due to a larger mortality from diseases of the lungs, the number of deaths from pulmonary diseases being 196, representing a death-rate of 10 per 1,000 living, and constituting 38 per cent. of the total deaths. There were 5 deaths from fever, 3 from enteric and 2 from typhus; and 41 deaths from the infectious diseases of children, viz., 32 from whooping-cough, 9 from measles, and 3 from scarlet fever. The most important sanitary event of the fortnight has been the admission of four cases of small-pox to the hospital, after an interval of eight months' entire absence of the disease. Two of the cases were emigrants passing through the city, and two came from Ireland. It thus seems that Glasgow is at present under a cross-fire as regards small-pox: on the one hand, from the Continent, through emigrants; and, on the other, from Ireland. All due precautions are being taken for preventing the spread of the disease.

IRELAND.

HARVEY MEMORIAL FUND.

A GENERAL meeting of the subscribers to this fund was held on the 3rd instant, in the King and Queen's College of Physicians, Dr. J. W. Moore, Vice-President of the College, in the chair. Dr. C. J. Nixon, one of the honorary secretaries, read the report of the Committee, which recommended that the sum collected—about £280—should, after payment of all expenses, be invested in the names of the King and Queen's College of Physicians and of the Royal College of Surgeons in Ireland; and that the Presidents of these Colleges should be requested to award the interest of the fund triennially for the best essay on any subject in physiology, to be selected by the candidate, and illustrated by original preparations or drawings. It was further recommended that the prize should be open to all students of the Dublin schools of medicine, as well as to all junior practitioners, under three years' stand-

At the inquest, Mr. Porter deposed that the wounds in both cases were of the same size, and had all the same clean edges. With the exception of the wound on Lord Frederick Cavendish's arm, which appeared to be a gash, and the abrasion on the right knee, due probably to his having fallen on his knees, all the wounds were punctured wounds. The weapons which inflicted them must have been long daggers or sharp knives—nine or ten inches in length—exceedingly keen and well tempered. They were such wounds as a bowie-knife might have inflicted. There is reason to presume that both these unfortunate gentlemen were attacked simultaneously in front and from behind.

ROYAL COMMISSION ON THE MEDICAL ACT.

THE Royal Commission held its final meeting this week, and completed its report, or reports—for we understand that, as we previously intimated, there will probably be more than one report. We trust, however, that the technical formalities necessary before the reports be made public will be quickly gone through; the profession has already been kept sufficiently long in suspense on the subject.

THE HEALTH OF THE POPE.

WE are enabled to state, with authority, that the rumours which have lately been circulated as to the illness of Leo XIII have no real foundation. Similar statements used to be made about this time in former years in reference to the health of Pius IX, and grave assertions were often published that the Vatican physicians strongly advised change of air as the only means of prolonging the life of that aged Pope. Leo XIII is a thin, ascetic, and delicate man, liable to slight temporary ailments, and with too sensitive a nervous system for all the brain-work he has to do. He is, in consequence, often tired and depressed, and unable to receive the many visitors who throng to see him; and it is well known that he dislikes receiving all and sundry, being, in this respect, just the opposite of his predecessor, who had the greatest pleasure in seeing his audience-rooms crowded with visitors. He is not, however, suffering from any organic disease; is free, just at present, from even temporary indisposition; and is probably quite as fit to bear his confinement to the Vatican and its grounds now as he was at the date of his election.

THE CLAIM OF THE UNIVERSITY OF LONDON ON GRESHAM COLLEGE.

IF the function of an university be twofold—that is to say, if it ought not only to confer degrees, but also to teach—then the University of London has but partially discharged its functions; for, as is well known, it has been, up to the present time, little more than an examining body. Convocation, at its meeting on the 9th instant, passed a resolution urging upon the Senate a course of action which, if successful, would seem practically to amount to nothing less than converting the University into a teaching body also; it has requested the Senate “to consider the desirability of urging the claims of the University before the City of London Livery Companies Commission, with special reference to Gresham College.”

The college owed its existence to Sir Thomas Gresham, who bequeathed the Royal Exchange and some adjoining hereditaments, subject to life interest to his widow, and to some contingencies which never took effect, in two moieties, one to the Corporation of London, and the other to the Mercers' Company, on the condition, amongst others, that the former body should pay £50 a year each to four persons to read lectures in divinity, astronomy, music, and geometry, and the latter the same stipend to three lecturers in law, physic, and rhetoric. By the same will he left his house in Bishopsgate “for every one of them, (*i.e.*, the lecturers) there to inhabit, study, and daily to read the said several lectures”. In 1596 a Gresham committee was appointed jointly by the Corporation and the Mercers' Company to administer his bequest, and the first lecturers were appointed.

The contention is “that Sir Thomas Gresham's foundation was intended to be the nucleus of an university”. As long ago as 1857, in his evidence before this charity commission, the lecturer in astronomy said:—“If Gresham College were to be restored to its original dimensions and formed into a college affiliated to the London University, it might be made of value for educational purposes in the city.” This suggestion was actually adopted in the report presented to the commis-

sion at that time, but no action was taken. Convocation, however, seems now to go beyond this, and to desire to apply the funds to a system of education to be administered directly by the University. At least this we gather from the tenour of the remarks made by Mr. Macdowall, who moved the resolution. The matter is now receiving the attention of the Senate, which has always shown itself the best guardian of the interests of the University; its action will be awaited with interest, not only by the graduates, but by all who are interested in the progress of higher education, and especially of scientific education.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council, on the 11th instant, Dr. G. M. Humphry, F.R.S., of Cambridge, a member of the Council, was readmitted a member of the Court of Examiners. At the same meeting the Jacksonian Prize was presented to Dr. William Alexander of Liverpool, a Fellow of the College, for his essay on the Pathology and Surgical Treatment of Diseases of the Hip-joint. Mr. Thomas Edwards of Llansaintffraid was elected a Fellow of the College, his diploma of membership bearing date May 8th, 1885.

A Report was received from the Court of Examiners, to whom it had been referred to “report to the Council whether, or not, it is desirable that all students rejected in the pass examination for the diploma of member should be placed in the same category as regards the time required to elapse before they can present themselves for re-examination”.

The Court having considered this resolution, it was resolved that the following be the report to the Council thereon, *viz.*: “1. That it is already provided by Clause 2, Section IX, of the Standing Rules that a candidate, referred at the pass examination for the diploma of member, may, if the Court shall so determine, be re-admitted to the examination within the period of six months after his reference; and that, in the opinion of the Court, it is not necessary to make any alteration in the regulations in respect of the power vested in Court for shortening the period of reference. 2. That, in the opinion of the Court, however, it is desirable that an additional Standing Rule should be enacted, giving to the Court, in cases where extreme ignorance is exhibited, the power of lengthening the period of reference from six to nine or twelve months, as the Court shall determine.” This report was accordingly adopted.

The Nomination Committee, in conference with the Committee on additional examinations, having met to consider the following resolutions of the Council, dated May 13th, 1880, *viz.*: “1. That, under the powers given by Section XIV of the by-laws, the Council do proceed, as soon as is practicable, to institute an examination in elementary anatomy and physiology, and in such other subjects as the Council shall from time to time determine, to be passed by candidates for the membership of the College at or after the expiration of their first year of study. 2. That it be referred to the ‘Committee on Examinations in Anatomy and Physiology’ to prepare, and submit to the Council for approval, the necessary regulations for defining and conducting such examination; 3. That it be referred to the Committee on By-laws to prepare the revised or new formulæ which will be required for the rearrangement of the payment of fees, by the institution of such examination;” and having considered the same, have agreed to the following report to the Council. The Joint Committee have to report to the Council that, however desirable, it is not practicable to institute an Examination in Elementary Anatomy and Physiology at the College without an additional charge to the students; but that, in the opinion of the Committee, it is desirable that, in lieu of the proposed Examination at the College, an Examination in Elementary Anatomy and Physiology should be instituted at the several recognised Schools of Medicine after the end of the first year of professional study; and that any student commencing his professional education on or after the 1st of October 1882, should not be admitted to the Primary Examination for the Diploma of Member of the College without the production of a certificate from his teachers, that he has satisfactorily passed the Examination in question at his Medical School.

This report was approved by the Council, adopted, and directed to be entered on the minutes.

We are given to understand that considerable discussion arose as to the report of the Visitors of the General Medical Council, the results of which cannot be made public, since the question has not yet been considered by that Council.

It was decided that the annual meeting of Fellows for election into the Council of the College should be held on the first Thursday in July.

to make special inquiries into all deaths of persons dying without medical attendance, otherwise uncertified deaths, and communicate with the coroner if necessary. The various duties of practitioners, medical officers of health, and coroner, together with the form of certificate, and many minor details in connection with the suggested amendments for registration of deaths, were then dealt with; Dr. Thomas concluding his paper by remarking that we should then cease to see, in the Registrar-General's returns, such headings as "deaths from violence, kind not stated," "manner not stated," "how or what kind not stated," not otherwise described; or that, in fourteen out of so many persons poisoned, the "kind of poison was not in any way stated;" and the term "uncertified death" would be a thing of the past. Some of the suggestions made might be effected by orders from the Local Government Board; but amendment in the law would be required for others.—Dr. J. MORTON said that the results of registration, originally intended for civil, and not for scientific purposes, afforded a mass of immensely valuable information, which was only now beginning to be properly utilised, and required improved methods, such as Dr. Thomas proposed. Whether the information afforded—as it must be, in the first instance, by the individual practitioner—reached the Registrar-General direct or through the medical officer of health, as Dr. Thomas proposed, was a matter of detail, so long as it was treated as confidential. He did not apprehend much difficulty, except in manufacturing towns, where there were masses of poor and much unqualified practice. Dr. Morton was of opinion that the classification of diseases adopted by the Registrar was faulty, in that it gave too much weight to local manifestations, and too little to constitutional states.—Dr. W. G. WILFORD said that he could corroborate Dr. Thomas's remarks as to the unsatisfactory character of many death-certificates, filled up and signed by medical men. He had for many years been medical officer of health in a country town of about 20,000 inhabitants, and had experienced much difficulty in making out his mortality bills from the registrar's returns, which were, of course, copied from the death certificates. Some of the reputed causes of death were so very peculiar, not to say amusing, that he soon learnt to recognise different practitioners by the style of their certificates. Some, for example, assigned "fever" as the cause of a large number of deaths, both of very young infants and very old people. One case, certified as "typhoid", in a woman of 75, proved to be "alcoholism". Pneumonia was frequently given as the cause of death in infants six months old. "Dropsy" or "ascites" were sometimes the only causes given. Not unfrequently he had noticed that the real cause of death was withheld, in order to spare the feelings of the friends of the deceased.—Dr. DOWSE concurred in the value of Dr. Thomas's paper, although he thought that too great blame should not be laid at the door of the general practitioner, in reference to the registration of deaths: for, in many cases, in country and general practice, it was not always an easy matter to state correctly the absolute cause of death; and he gave, as instances, deaths from scarlatina and diphtheria, where the patients, in some cases, die in twenty-four hours, from rapid failure of nerve-power, without any objective or characteristic signs being present by which the disease may, in the ordinary way, become recognised. He considered Dr. Thomas's plan for registration of great value.—Dr. POTTER proposed, and Dr. WILLOUGHBY seconded, the following resolution: "That Dr. Danford Thomas be requested to bring his views before the Parliamentary Bills Committee of the Association; and that the Committee be asked to endeavour to ascertain the opinion of the Government on the subjects submitted."

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of the above District was held, at Gravesend, on April 12th; J. C. ARMSTRONG, Esq., in the chair.

Conjoint Meeting.—A letter was read from the Secretary of the East Kent District, suggesting that a conjoint meeting of the two Districts should be held early in next session. This was cordially and unanimously adopted by the meeting.

The next District Meeting was appointed to be held at Rochester; and Mr. Nankivell was requested to act as chairman.

Papers.—The following were read.

Dr. William M. Ord read a paper on the Diagnosis of Thoracic Aneurysm; and showed a specimen of Aneurysm of the Innominate Artery, carefully prepared by Dr. C. E. Hoar.

Dr. Monckton gave a short address on Chorea, and its treatment.

Collective Investigation Committee.—Dr. STEPHEN MACKENZIE explained the views and objects of the Collective Investigation Committee.

Dinner.—Seventeen members and visitors dined together at the new Falcon Hotel.

CORRESPONDENCE.

THE TAX UPON CARRIAGES.

SIR,—Having seen a suggestion in the JOURNAL of Saturday last about increased tax on carriages (page 674), I took a copy of the petition and got it signed by upwards of thirty medical men in this town and neighbourhood. Will you kindly mention this in your next issue, as it may stimulate other towns to go and do likewise?—I am, sir, yours faithfully,

DE VERE HUNT.

Bolton, May 10th, 1882.

* * This example has been followed by many other medical men; and it will greatly assist the Parliamentary Bills Committee if it be extensively adopted.

THE ETIOLOGY OF INDIAN ENTERIC FEVER.

SIR,—In the last of Sir Joseph Fayrer's Croonian Lectures on the Climate and Fevers of India, published in your issue of the 6th inst., the author deals with the vexed question of the etiology of enteric fever. In the course of his lecture, Sir Joseph Fayrer quotes a passage from a paper on this subject read by me at the London International Congress, intended to show, from my own experience, that fevers with the intestinal ulceration characteristic of enteric fever existed both in India and in China previous to the year 1857. To this quotation, the author appended a note to guard himself against the inference of complicity with my heterodox doctrine on the etiology of enteric fever; but as the author does not state what my doctrine is, I ask you to grant me space to do so for myself. As a teacher of tropical medicine in a public institution, I think it due to the position I hold that there should be no misapprehension as to my views on a point so important, although I wish it to be understood that I have no merely controversial object in view.

I do not hold that a specific poison from the intestines of an infected person is a *sine quâ non* to the propagation of enteric fever in India, although I do not doubt that it is often so propagated, and it is quite certain that the facilities for such propagation abound in that country. I do distinctly hold that, as in Europe so in India, enteric fever is a fecal disease, modified, like almost every disease in that country, in its symptoms, progress, and morbid anatomy, by the all-pervading poison of malaria, whatever that may be. I cannot here repeat the evidence brought forward by myself and others of the extent to which pythogenic influences prevail in India, nor is this necessary, for the matter is beyond dispute; but I must confess I find it difficult to understand how those who acknowledge fecal impurities in air, water, and food, to be powerful factors in the genesis of enteric fever in temperate climates, almost ignore their influence in the country where they most abound.

Sir Joseph Fayrer, in the lecture under notice, quotes a passage from an official report of Dr. Marston on enteric fever in India, which has been carefully read by me. Any opinion put forward by a physician so competent, and so accurate a thinker as Dr. Marston, is worthy of respectful consideration from me, and this the report to which I refer had long before I read the quotation in Sir Joseph Fayrer's lecture. I confess, however, I cannot see the force of my friend Dr. Marston's arguments against the propagation of enteric fever by fecal contamination. For example, the proclivity of "new arrivals" to suffer from the disease; surely this is sufficiently explained by the fact that the "new arrivals" about whom Dr. Marston is thinking are young soldiers at the age most prone to suffer from the disease all the world over. Again, why should the fact that enteric fever extends over "vast areas" of India be taken to be an argument against its pythogenic origin, if it be a fact, as I contend it is, that pythogenic influences in the fecal sodden soil of India also extend over "vast areas"—to say nothing of the indisputable fact that the disease extends over "vast areas" in Europe also? Then again, in support of his argument, Dr. Marston says that "isolated cases" prevail in India. Is that fact peculiar to India? Is there a medical practitioner in Great Britain who does not see "isolated" cases every month in the year? I repeat I find it hard to find any valid reasons against the fecal origin of enteric fever in India based on such facts as those just given.

With regard to those "climatic causes" so much dwelt on by Sir Joseph Fayrer and those who agree with him, I venture to draw attention to enteric fever as seen in Italy, in a climate widely different from that of England. I have never heard it said that the disease owns a different parent in the two countries; but I have seen—and I insist on the significance of the fact—enteric fever originating in Rome as much modified in its symptoms and progress by the malaria for which that

women and children, has for over a year extended its benefits to the male sex as well. It gave relief to 220 in-patients and over 11,000 out-patients last year; and, as a further extension of the building is to be taken in hand this summer, there can be little doubt that, with efficient support, it will be adequate to meet the requirements of Hampstead, Kentish and Camden Towns. Moreover, the out-patient department is conducted on the principle of helping those who are willing to help themselves, all except the extreme poor being expected to pay a small sum to cover the cost of the drugs.

Thus, sir, the question arises, in the public interest, for the serious consideration of men of light, learning, and wealth, like Messrs. Ashmead Bartlett-Coutts, Burdett, and Levi, whether it would not be the more economical, efficient, and successful plan to endeavour to develop and expand the Great Northern and North-West London Hospitals, which are already doing good work, and have recommended themselves to the public, rather than to start a third and rival institution, with the certainty of crippling and the possibility of ruining all three.—Yours faithfully,

D. H. CULLIMORE,

Physician to the North-West London Hospital.

54, Welbeck Street, W., May 6th, 1882.

SIR.—In last week's JOURNAL Dr. Burnet complains that at the Camden Conference justice was not done to the Great Northern Hospital. I think if Dr. Burnet had been present he would not have felt justified in making such a complaint.

None of the speakers, so far as I know, spoke evil of the Great Northern or its work—as, indeed, why should they? The hospital has done, is doing, and doubtless will continue to do good work. Dr. Burnet says its borders are to be extended. This is surely a step in the right direction and cannot but be approved by every one, but especially by us who see so clearly the destitute condition of North London with regard to hospital accommodation. If, therefore, any speaker at the conference, inadvertently or otherwise, failed to do justice to the Great Northern, I will venture to express regret on his behalf, and to say for the Council, as a body, that we heartily recognise the good work of the hospital, and wish all success to its extensive scheme.

Does not Dr. Burnet fall into an error when he speaks of *subdivision* in connection with the proposed new hospital? What do we propose to subdivide? *Extension* is proposed, but not subdivision. Mr. Burnet will not ask us to believe that the Great Northern, even were it enlarged threefold, can supply more than a tenth part of North London. What is to become of the other nine-tenths?

The open secret of Dr. Burnet's letter is, that the success of the new scheme may possibly interfere with the financial prosperity of the Great Northern Hospital. With that view I do not agree. If the Great Northern or any other charitable institution shall do work of the highest kind at a reasonable cost, there is little fear of its wanting funds. How is it that George Müller of Bristol and Mr. Spurgeon at Stockwell receive such large sums annually, almost without the asking? It is because the public is convinced that every shilling given to the Bristol and Stockwell Orphanages produces a full shillingworth of the very best kind of work. If hospitals are to have full coffers they must set about convincing the public that money entrusted to them is equally well spent.—I am, sir, yours faithfully, GEORGE W. POTTER, M.D.

12, Grosvenor Road, May 9th, 1882.

ROYAL COLLEGE OF VETERINARY SURGEONS.—The thirty-ninth annual meeting of the Council of the Royal College of Veterinary Surgeons has been held under the presidency of Mr. George Fleming. During the discussion of the paragraphs of the report, the President stated that after September 30th, 1883, no man whose name was not on the register of the Royal Veterinary College could practise animal medicine or surgery under any title or name whatever in any of the three kingdoms, under the provisions of the Veterinary Surgeons Act, which received the Royal Assent last session. Mr. Wilson moved that the best thanks of those present, and the profession generally, be given to the president for the successful action he had taken in connection with the passing of the Veterinary Surgeons Bill, and the motion was carried unanimously.—The Chairman, in reply, said that his task of obtaining from the Government a recognition of the public value and standing of the profession had been simplified by the esteem in which it was held by the public at large. Privileges had been granted to them by the measure which it had been long necessary that they should obtain. The Act would place their profession in a position which it did not hold in any other country in the world. The benefits which the public and the profession would derive from the operation of the Act depended largely upon the exertions of the veterinary surgeons themselves.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE SUPERANNUATION OF POOR-LAW OFFICERS. DEPUTATION TO THE LOCAL GOVERNMENT BOARD.

A DEPUTATION from the Poor-law officers holding appointments in the metropolitan district waited on Tuesday on Mr. J. T. Hibbert, M.P. (Parliamentary Secretary), at the Local Government Board, with reference to the Instructional Letter to Boards of Guardians dated December 14th, 1880, on the subject of superannuation allowances of Poor-law officers. The memorial presented by the deputation urged that, as a matter of mere justice, persons holding office before the date of the letter should be exempted from its provisions; and, further, that the Civil Service statutes, referred to in the circular as the basis upon which to regulate the pensions of Poor-law officers, could not be deemed fairly applicable to them, because they had never been recognised as civil servants, nor enjoyed the privileges of that class. The memorialists submitted to the consideration of the Board that, if any amendment of the Act of 1864 were contemplated, there were two provisions that would be beneficial to the Poor-law service and equitable to its servants; the first being, that superannuation should not be permissive merely, and conditional on previous resignation, but also assured to the officer whose conduct had been satisfactory; and the second, that, in computing the length of service entitled to superannuation, the whole service, uncontrolled by the question of the last parish or union served, should be taken into account. The deputation, which was introduced by Mr. A. Pell, M.P., included Viscount Newport, M.P., Mr. Stanley Leighton, M.P., Mr. Brinton, M.P., Mr. Holland, M.P., and representatives from the officials of the Paddington, Holborn, Lambeth, Kensington, Stepney, Greenwich, St. Saviour's, Fulham, and Westminster Boards of Guardians. Sir John Lambert, K.C.B., the Permanent Secretary of the Local Government Board, was present during the proceedings.

Among the speakers were Mr. Aveling, Clerk of the Paddington Board of Guardians; Mr. Barker, of the Lambeth Board; Mr. Rutherglen, Clerk to the Kensington Board; Mr. Jones, one of the relieving officers of the Stepney Board; and Mr. Jones, Clerk to the St. Saviour's Board.

Dr. JOSEPH ROGERS remarked that he felt, when the circular was issued, that it would act very prejudicially to the interests of many Poor-law officers with whom he was acquainted. Poor-law officers, whether medical or relieving officers, or clerks, entered upon their duties at a very much more advanced period of life than the general run of civil servants; and they therefore laboured under corresponding disadvantages in the estimate of their superannuation allowance. He could not help thinking that the department had looked at the whole matter from the Civil Service point of view, and not from the point of view of the position which Poor-law officers occupied. They were under the control, not only of this department, but also of their respective boards of guardians; and what they asked was that their case should be more generally considered, and the disadvantages under which they laboured be more favourably regarded. One of the chief matters they had to urge upon the Local Government Board was that their length of service should be counted, whether rendered in one or in two or three unions. That concession they felt to be absolutely necessary, while it would result in the utmost advantage to the country at large. What, however, he wished to bring particularly under the notice of the department was, that some regulation should exist with regard to the officers appointed to the county and borough lunatic asylums. They were under the control of justices and county boards, though they were supported out of poor-rates, and their grievances were identically the same as those of the relieving officers and everyone associated with the administration of the Poor-law in this country. They were liable to get either something or nothing at the mere caprice of the justices sitting in Quarter Sessions, and he hoped that, when this subject came to be considered by the Local Government Board—and especially did he trust that this memorial would receive their favourable attention—they would not omit to bear in mind the case of this class of officials.

Mr. HIBBERT, in reply, said he had listened with great interest to the statements that had been made by the members of the deputation, and felt that what had been said was well worthy of the serious consideration of the Board. Personally, after having worked for a great many years as a member of a board of guardians in the North, he naturally felt a sympathy with the officers representing the Poor-law

The Hospital Committee of the Town Council have requested the Medical Officer of Health (Dr. Hime) and myself to make a thorough investigation, and report as to the sanitary condition of the hospital; and, if any defects should be found to exist, they will be at once set right. I may add that, before the present year, there has been in Sheffield no hospital available for the reception of non-pauper infectious cases; and it is very satisfactory to find that already a considerable number have availed themselves of the advantages offered by this hospital.—I am, etc.,

B. A. WHITELEGGE, M.D. Lond.,
Medical Officer, Sheffield Borough Hospital.

R.—I should feel obliged if you could inform me whether a parish medical officer could claim any fee on behalf of a medical practitioner who assisted him in a difficult instrumental midwifery case.—Yours, etc.,

QUEEN.

*. Boards of guardians may, subject to the approval of the Local Government Board, grant to a gentleman called to the assistance of a Poor-law medical officer, who has had a difficult case of instrumental midwifery, a fee. In some instances, the fees thus given have been fairly liberal—to wit, in each of two cases that occurred in the Strand Union and the Westminster Union Workhouses respectively. Dr. Hall Davis was awarded £5, the medical officer £2, his deputy £1, and the midwife an extra grant of 10s. These amounts were sanctioned by the Local Government Board. In order to secure payment, a letter should be addressed to the guardians, giving the details of the case; and these instances may be cited. Unless full particulars be given, showing the difficulties and dangers of the case, the central department may overrule any decision come to by the local board.

OBITUARY.

HENRY ALFRED HAMILTON LIGHTON, M.R.C.S.

WE regret to record the premature death of this promising member of our profession. He was the third son of the late Rev. Sir Christopher Robert Lighton, Bart., of Brockhampton, Herefordshire. In 1879, he joined Mr. Read, of South Kensington; in July 1880, he had a slight attack of hæmoptysis, and was advised to winter abroad. He accordingly went with Mr. Potter, of Queen's Gate Gardens, in his yacht to the Mediterranean, returning in May 1881, much improved. In October, however, his health began to fail, and he accompanied Lord Hemsley and his brother to Madeira, where they awaited his yacht, intending to cruise about. In November, he had another attack of hæmoptysis, and gradually grew worse until Tuesday, the 2nd instant, when he died. He was an M.R.C.S. Eng. and L.S.A., also B.A. of Cambridge, and had passed his examination for second M.B.; but, owing to ill health, had not been able to write a thesis, and take his degree. He was beloved by all who had the pleasure of knowing him.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology, at a meeting of the Board of Examiners, on the 4th instant, and when eligible will be admitted to the pass examination.

Messrs. Thomas J. Fletcher, Alexander G. Paterson, Edward H. Warner, Hugh R. Bramwell, William T. Prout, Theodore S. Wilson, Charles L. Lightfoot, Joseph Priestley, and Frank W. A. Godfrey, students of the Edinburgh School; William Washbourn, William E. Coleman, Arthur F. Voelcker, and Charles J. Arkle, of University College; George F. Collins, James P. Fenouillet, John Girvin, and Casper R. Laurie, of St. Bartholomew's Hospital; Gerald Cree and William E. Newry, of the Middlesex Hospital; Richard H. Castor, and Charles K. Ackland, of King's College; James D. Staple, of the Westminster Hospital; Frank C. Clarkson, of St. Thomas's Hospital; and Walter H. Dodd, of Guy's Hospital.

Four candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, making a total of 53 rejections out of the 220 candidates examined, including six who had an additional three months.

The following gentlemen passed on the 6th instant.

Messrs. William L. Braddon, Edward P. Mourilyan, Richard M. Ward, Melville McP. Hailey, and Thomas John, of Guy's Hospital; Thomas Clifford, William D. Richardson, Cuthbert U. Laws, and Frank Winter, of the Newcastle School; Charles E. Adams, George L. Wells, Sydney C. H. Moberly, and William L. Foster, of St. Bartholomew's Hospital; Robert W. Leeming, Robert L. Stacey Partridge, and Matthew W. Gutteridge, of the Edinburgh School; Alfred N. Darlington, Joseph H. Patrick, and Charles Greene, of the Birmingham School; Frederick B. Hulke, John S. Reed, and George M. Syme, of University College; Walter Basset and Edwin D. Duffett, of the Middlesex Hospital; Hormasjee E. Banatvala, of the Bombay School; Edward J. Lewis, B.A. Cantab., of the Cambridge School; Sidney J. Armstrong, of the Westminster Hospital; Percy Priestley, of the Sheffield School; Arthur M. Watson, of the Liverpool School; John W. Parry, of the Glasgow School; Walter Forrester Thompson, of the Leeds School; and Jenkyn Lewis, of the London Hospital.

Sixteen candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, including three who had an additional three months.

The following gentlemen passed on the 9th instant.

Messrs. George Stevenson, Charles Averill, Frederick A. Pring, Otto Wunderlich, Septimus M. Hebblethwaite, Ninian W. Woods, and Lovell Drage, of St. Bartholomew's Hospital; William R. Edwards, John A. Gillett, Thomas Wingrave, William G. Hall, and Edwin C. Thomas, of the London Hospital; William J. Lee, Frederick W. Westend, and Arthur R. Carver, of Guy's Hospital; James M. France and Howard D. Buss, of University College; Alfred H. Sturdee, of King's College; George D. Symes, of St. George's Hospital; and Thomas D. White, of the Middlesex Hospital.

Eight candidates were rejected.

The following gentlemen passed on the 11th instant.

Messrs. Francis S. White, Edmund B. Holland, James H. Walker, and Herbert Davison, of University College; Watkin L. Rhys, Thomas N. Swindlehurst, and George T. Cattell, of Guy's Hospital; Bernard Castle and William Spry, of St. Bartholomew's Hospital; George A. E. Roberts and Alfred Kirley, of the Middlesex Hospital; Arthur B. Blacker and Edward S. Sugden, of St. Thomas's Hospital; James E. Crisp and Richard Cordiner, of the London Hospital.

Thirteen candidates were rejected, including two who had an additional three months.

The name of Thomas Kenedy Dalziel, of the Edinburgh School, who passed on the 26th ultimo, was accidentally omitted in the list then published.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 4th, 1882.

Browne, William, Beith, Ayrshire.
Dawson, William Edward, London Hospital.
Priestley, John, Greenhays, Manchester.
Williams, John Worthy, 58, Acre Lane, Brixton.

The following gentlemen also on the same day passed their Primary Professional Examination.

Hadley, Wilfred James, London Hospital.
House, Percy William McW., London Hospital.
Scanlan, Arthur de Courcy, Westminster Hospital.
Stephens, Samuel, St. Bartholomew's Hospital.

UNIVERSITY OF DURHAM.—At the first examination for the degree of Bachelor in Medicine, held during the last week of March, 1882, the following candidates satisfied the Examiners.

Second-Class Honours.—Cornelius C. Caleb.

Pass-List.—F. M. Blackwood; Percy Brown, M.R.C.S., L.S.A.; Fred. Bryan; W. R. Edwards; F. W. Giles, M.R.C.S., L.S.A.; Thomas E. Gordon; F. Greenwood, M.R.C.S.; J. C. Grinling, M.R.C.S.; George Rome Hall; Alexander Harper; H. J. Hillstead; H. M. Hughes; A. G. Laidler; A. E. Larking; T. H. Openshaw, M.R.C.S., L.S.A.; J. S. Revely; G. W. Richards; E. W. Simmons; M. T. Wakefield; James Watson; S. Welch, M.R.C.S.; W. H. Wigham; G. G. D. Willett, M.R.C.S.

UNIVERSITY OF EDINBURGH.—The following candidates have passed the first professional examination for degrees in Medicine and Surgery.

A. M. Adams, A. Alexander, N. E. Aldridge, J. A. Ashcroft, James Anderson, John S. Archibald, Samuel Arnold, H. T. Barton, John B. Bawden, Robert N. Bell, David Berry, Robert Beveridge, Richard Blad, Walter C. Bluck, Frederick M. Blumer, Louis Z. H. Bouchet, W. F. Boycott, Alex. Brewster, Edward Bryden, C. G. Cassidy, Edward Chamberlayne, James A. Clark, James F. Cownie, Arthur L. Curtis, James H. Dave, Herbert J. Dring, George G. Eyre, Alexander S. Ferguson, Thomas L. Ferrier, Arthur M. Fraser, David Fraser, Thomas Fraser, Robert Fullerton, Thomas A. Fulton, J. W. Gainer, J. E. Gemmell, Walter M. Gossip, Walter D. Grieve, Felix O. Guerin, William P. Harries, James Hindle, Herbert Hirst, William A. Holmes, Robert S. Hubbersty, Hugh C. Hughes, Job Hughes, James Hunter, James Hutcheson, Theophilus B. Hyslop, George A. John, Aubrey Johnston, George F. Johnston (with distinction), James P. Johnston, John Jones, Arwid L. Kellgren, James Kerr, William Laing, Charles N. Lee, Edwin L. Lees, James A. Leishman, Louis H. Le Merle, William Little, Gerhardus S. Loubser, Reginald Lucy, William McCulloch, Alex. G. Macdonald, Henry C. McEwan, William C. McEwan, John McGibbon, Alistair Macgregor, Ian D. Mackay, William B. Mackay, John C. Mackenzie, William R. M. Kinnell, Murray MacLaren, Alex. R. Macmillan, Thomas Monies, Upendra N. Mukerji, Neil G. Munro, Albertus Mibrough, Walter B. Nisbet, John W. Pare, Alexander Paterson, Emmanuel Porter, James H. Pringle, John C. Robertson, A. H. Robinson, William L. Ross, George T. Sinclair, Horace Smith, William Spittigue, William H. G. Stephen, Benjamin D. Stewart, John R. Talbot, Mowbray Taylor, John T. Thompson, James B. Tierney, George J. E. Trotter, George A. Tullis, Edward Walker (with distinction), Thomas A. Watson, Frederick E. Wellby, Stephen E. Wernich, Alfred B. Whitton, Arthur Wood.

The following have passed the second professional examination.

George F. Alexander (with distinction), John Anderson, T. L. Bancroft, Theodore H. Barker (with distinction), W. H. Barrett, H. J. Barron, Minas M. Basil (with distinction), Basanta K. Basu, James A. Blair, John H. Brown, John N. Burns, George S. Cardew, James M. Caw, Edwin A. Chilli, Ronald Clark, J. A. Clayton, Horace Cocks (with distinction), Francis G. Connor, William Cotton (with distinction), James Craig, William Cumming (with distinction), James Dalglish, Thomas K. Dalziel, Archibald Donald, Alexander P. Drummond, William Duff (with distinction), H. A. Dumat, Thomas E. Dyson (with

VOICES, C. B., M.R.C.S., appointed Resident Assistant Medical Officer to the Township of *Maidenhead*.

WICKHAM, W., M.R.C.S., appointed Parochial and Sanitary Medical Officer to the Parish of Polmont, N.B., *vice* D. A. MacCarthy, M.D., resigned.

WINDLER, Bertram C. A., M.B., M.Ch. Univ. Dub., appointed Medical Officer to the Throat and Ear Hospital, Dublin, *vice* Wallace Beatty, M.B., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The large proportion of announcements of Births, Marriages, and Deaths in this column should be accompanied with the announcements.

MARRIAGE.

LITHGOW-CURZON.—On the 29th ult., at the Parish Church, Aldershot, by the Rev. F. Malim, T. G. Lithgow, L.R.C.P. Lond., of Farnborough, to Harriet Augusta, eldest daughter of Col. the Hon. E. G. Curzon, Assistant Adjutant-General, Aldershot.

DEATH.

LIGHTON.—On May 2nd, at Madeira, Henry Alfred Hamilton Lighton, B.A. Camb., M.R.C.S., L.S.A., of 128, Cromwell Road, South Kensington, third son of the late Rev. Sir Christopher Robert Lighton, Bart., of Ellastone, Staffordshire, and Brockhampton, Herefordshire, in his thirty-first year.

A CURIOUS occurrence is reported from Hynron, Dumfriesshire, which, according to the recent census, possesses a population of 416 souls. At one of the schools situated in the parish, no fewer than four sets of twins sat upon the forms. Arranged according to sex, two are boys, two girls, and the remaining four are "mixed". According to age, they are all above the average height and weight. All have blue eyes and light hair.

A SINGULAR LEGACY.—A patient, who had benefited by M. Olher's subperiosteal method, bequeathed to him his elbow-joint as a token of gratitude. The legacy proved a valuable one for pathological science, since the physiological process of renewal of the tissues could be followed almost step by step.

ROYAL INFIRMARY, GLASGOW.—The following gentlemen have been elected house-physicians and surgeons from 1st May 1882. *House-physicians:* Mr. H. W. White, L.F.P.S.G., and L.R.C.P.E., Mr. Wm. Gibbs, Mr. Robert Rentoul, Mr. J. W. White, Mr. Charles S. Young. *House-surgeons:* Mr. A. J. Engels, Mr. Hugh Sinclair, Mr. John Keay, M.B., C.M., Mr. Henry Oakes, Mr. John T. Davies.

THE DEVONSHIRE HOSPITAL AT BUXTON.—The additions made to this hospital by the governors of the Cotton District's Convalescent Fund are completed, and 100 beds have been allotted to the affiliated hospitals in the same proportions as those at the Barnes Convalescent Home, whilst 50 beds are kept for nominations by the governors under regulations to be adopted. The patients are to be maintained in the hospital at the expense of the Cotton District's Fund, subject to revision at the end of twelve months. Our infirmary has three beds placed at its disposal, and for the next year the cost of the patients whilst there will be borne by the fund. There is also at the disposal of the charity a bed in the child's sanatorium at Southport, free of charge, supported by the same fund, and one at the Barnes Convalescent Home at Cheadle.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of this association was held on the 28th April at Bethlem Hospital, Dr. D. Hack Tuke presiding. At the opening of the meeting the president referred to the attempted assassination on the 16th ult. of Dr. Gray, the Superintendent of the Utica Asylum, and a resolution of sympathy was unanimously adopted. The association then resumed discussion upon the subject of "Insanity as a Plea for Divorce," which had been introduced by Dr. Savage at the previous meeting. The interest of the debate centred round the recent case of Hunter v. Edney, in which the insanity prevented the consummation of the marriage, one or two other special cases being cited by Dr. Savage. As regards insanity before marriage it seemed to be generally allowed that the question was met by the common law, while with respect to insanity supervening after marriage it was felt that in the present condition of things it would be inexpedient to adopt in England a similar system to that existing in Saxony and elsewhere, under which insanity and certain other diseases were admitted as pleas for divorce. Dr. Weatherly then brought forward the subject of the "Supervision of single cases of Lunacy in Private Dwellings," which he maintained was insufficient and unsatisfactory, quoting in support of his views the statements advanced by him in his treatise on "The Care and Treatment of the Insane in Private Dwellings," and an interesting discussion followed. Papers were also submitted by Dr. Bower on "Employment" in the treatment of mental disease in the upper classes, and by Dr. Boyd on the "Laws relating to the admission of Pauper Lunatics to Asylums."

COMPARATIVE LONGEVITY OF THE JEWS.—M. Gustave Lagneau, in a memoir, "Sur les Différences Démographiques Présentées par les Juifs les Protestants et les Catholiques," presented to the Paris Academy of Moral and Political Sciences, states that in Prussia, in the Duchy of Baden in Vienna, and many other countries, the highest rate of mortality exists among the Catholic population. Among the Protestant it is less. The lowest rate is observed among the Jewish race, and in all countries this inferiority persists. The same proportion, in an inverse sense, exists with regard to births.

HEALTH OF FOREIGN CITIES.—A table in the Registrar-General's last weekly return supplies the following facts and figures, which afford trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities. According to the most recently received official weekly returns, the annual death-rate was equal to 33.4 in Calcutta and 28.4 in Bombay; cholera caused 82 deaths in Calcutta (showing a marked increase upon recent weekly numbers), and 46 fatal cases of measles were reported in Bombay. No returns have been received from Alexandria since the end of March. In twenty-two European cities, the death-rate averaged 31.3, and exceeded by no less than 9.4 per 1000 the average rate prevailing last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 60.0, and showed but a slight decline from the still higher rate in the previous week; the 770 deaths included 45 from typhus and typhoid fevers, and 35 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 27.0; measles caused 8 deaths in Copenhagen, and 7 fatal cases of diphtheria occurred in Stockholm. The death-rate in Paris, although lower than in recent weeks, was equal to 27.3; the 1177 deaths included 52 from diphtheria and croup, 37 from typhoid fever, and 25 from small-pox. The death-rate in Brussels did not exceed 22.3, although 5 deaths were referred to whooping-cough. The death-rate in Geneva, however, was equal to 29.3. In the three principal Dutch cities, the death-rate averaged 24.7; it was equal to 26.2 in Amsterdam, where the 170 deaths included 11 fatal cases of measles. The Registrar-General's table includes returns from eight German and Austrian cities, in which the death-rate averaged 31.4, and ranged from 24.6 and 27.5 in Berlin and Dresden, to 38.5 and 42.8 in Vienna and Prague. Small-pox caused 42 deaths in Vienna, showing a considerable increase upon recent weekly numbers; diphtheria was fatally prevalent in Berlin and Dresden. The death-rate was equal to 33.7 in Rome, 32.1 in Naples, 27.5 in Turin, and 24.7 in Venice. The returns from Rome and Naples related to weeks ending in December and January. Ten fatal cases of measles were reported in Turin. The annual death-rate in four of the largest American cities averaged 28.9, and ranged from 22.5 in Baltimore to 36.5 in New York; the high death-rate in New York was mainly due to the fatal prevalence of scarlet fever, measles, and diphtheria. Scarlet fever also caused 31 deaths in Brooklyn, and 25 deaths were referred to typhoid fever in Philadelphia.

REQUESTS AND DONATIONS.—Mr. Christopher Russell Brown, of Tredegar Square, has bequeathed £1,000 to the London Hospital; £1,000 to the Newcastle-upon-Tyne Infirmary; £500 to the Royal London Ophthalmic Hospital; and £200 to the City of London Truss Society.—"H. M." has given a third £500 to the Hospital for Women.—Mr. Alfred Kitching of Darlington, has bequeathed £100 each to the Darlington Hospital and Dispensary.—"O. Z. Z." has given £100 to the North Eastern Hospital for Children.—The Clothworkers' Company have given £100, additional, to the London Hospital; £25 to the East London Hospital for Children; £21, additional, to the London Lock Hospital and Asylum; and £21, each, to the Great Northern Hospital; the New Hospital for Women; and the North Eastern Hospital for Children.—Mr. A. C. Scrimgeour and Mr. J. A. Scrimgeour have each given £31 10s. to the Surgical Aid Society.—The Belfast Royal Hospital has received a donation of £50 from Mr. Henry Spence.—Mr. J. F. Symes of Axminster, has given £1,000 to the Devon and Exeter Hospital.—Mr. William Slocombe of Upper Holloway has bequeathed £900 to the Earlswood Asylum for Idiots; £800 to the Hospital for Incurables; £400 each to the City of London Hospital for Diseases of the Chest; the Royal Hospital for Diseases of the Chest; and the Brompton Hospital for Consumption; £300 to the London Fever Hospital; and the "residue" to the Hospital for Sick Children.—Mr. W. H. Ryder of Streatham, has bequeathed £500 each to the London Hospital; Charing Cross Hospital; the Royal Free Hospital; the Middlesex Hospital; and St. George's Hospital; £250 each to the Westminster Hospital, and the Brompton Hospital for Consumption; and £100 to the Evelina Hospital for Sick Children.—The Goldsmiths' Company have given £100 to the Middlesex Hospital; and £50 to the Great Northern Hospital.

May 1880

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to advertisements, changes of address, and other business matters, should be addressed to the Manager, at the Journal Office, 161A, Strand, London, and not to the Editor.

PROFESSIONAL ETIQUETTE.

SIR.—I should much wish to have your opinion as to whether the following conduct is becoming from one professional man towards another. On Saturday last, a patient of mine, whom I have been long in the habit of attending, was taken suddenly ill, and sent for me. I was, unfortunately, not at home, but in a few minutes I returned, and received the message requesting my attendance. I immediately visited the patient, who resides only a few doors from my house, and was then informed that a Mr. B. had just left. I may add that he would not have been sent for but for the fears entertained by the daughter of the patient. No medicine had arrived; and the patient, in reply to my inquiry whether she preferred my attending her or Mr. B., said she wished me to continue my attendance as before. I saw her again the same night at 9 P.M., and again the next morning at 11 A.M., when I was much surprised to find Mr. B.'s assistant seated by the bedside, examining the patient; whereupon I said to him, "Are you aware that this is my patient?" He replied that Mr. B. had been sent for the day before. I informed him that, as I was not at home when the message came, but arrived a few minutes after Mr. B. left the house, and by the wish of the patient, and my being her usual medical attendant, I took charge of the case. The nurse in attendance told me she would send to Mr. B., to say I had been, etc. After this explanation to Mr. S., he persistently endeavoured to claim the patient; and finally, after appealing to the patient whether she wished my services or his, and on being informed that she wished me to continue my attendance as before, Mr. S. reluctantly retired; but what astonished me most was to find, upon seeing the patient again in the evening, that Mr. S. had gone to the patient again in my absence, begging her to allow him to attend; he was, however, told that the patient desired to have no more to do with him. As this is not the first time I have been treated this way by Mr. B., any comment of mine would be superfluous; but, as I before said, I should like to have your opinion of such conduct.—I am, sir, yours faithfully,
April 6th, 1882. J. L. W.

Assuming Mr. W.'s statement to be strictly accurate as to the facts of the case, the conduct of Mr. B.'s assistant was indefensible, and in direct contravention of the recognised rules of the profession.

A. E. J.—There are two inebriate homes advertised in the JOURNAL, the only two at present licensed under the Habitual Drunkards' Act, 1879. That at Cannock, Staffordshire, is carried on by a member of the British Medical Association, Mr. F. J. Gray, and is conducted on strictly total abstinence principles. The Dalmatry Home Association hopes to be able to have another open during the present year.

MEDICAL MEN AND LIFE-ASSURANCE COMPANIES.

SIR.—About four months since, I received a visit from a gentlemanly individual, styling himself "Agent Superintendent" of an insurance company. He stated that he was authorised to call upon me, to ask me if I would accept the post of medical examiner for the town I reside in and a district of ten miles around. He stated, further, that the average amount paid to medical men in the neighbourhood had amounted to about £40 per annum. He would guarantee me that sum. As a per contra to this desirable addition to one's income, I should have to give the company the benefit of my insurance for a small sum. As my visitor seemed full of business, and told me further he had two or three lives waiting to be examined, I, without inquiry, underwent examination and paid my first premium. The same day, my visitor called again, with a new agent to be examined, who had also agreed to insure for a small sum, on the faith (as I afterwards found) of a similar representation. After waiting about a fortnight, and not receiving anything to show for my appointment, I ventured to write to the secretary at head-quarters in London. With great courtesy, that gentleman, without deigning a reply to me, forwarded my letter to my previous visitor, and in a day or two I received a letter of virtuous indignation from that individual at having dared to "impugn his veracity". However, four months have elapsed; and with the exception of the receipt of a gorgeous policy, I have not heard a word from anyone in connection with the office, and I have not been called upon to examine a single life. I am writing this as I hear other towns have been visited in a similar way, and perhaps the kind insertion of this may bring forward similar experiences.—I am, sir, yours obediently,
A YOUNG NORFOLK SURGEON.

PITTING IN CHICKEN-POX.

SIR.—In a case of apparent varicella in a female child, five and a half years of age, occurring lately in my practice, I noticed several distinct marks of "pitting" where the vesicles had been, on both face and body. I am not aware that pitting is a result of varicella, and the discovery has led me to believe that my case of varicella has been after all one of variola, though I am by no means decided about it. The case occurred contemporaneously with a number of others in the same locality; I have examined most of them, but can find no traces of pitting in any but this one, though several were more severe than this. The marks are very distinct, and apparently characteristic of modified small-pox. The child has been efficiently vaccinated. No cases of variola have been reported from this place for about three years. While suffering from the complaint, the child was able to go about, even outside. She has subacute bronchitis, with distinct evidences of inherited phthisis; and, since her attack of "varicella", has periodically vomited—about every second day—a quantity of clean healthy pus, with some mucus, but no traces of blood. I bring the case to notice chiefly with the view that it may prove useful, in epidemics of chicken-pox, to examine carefully in all cases not only during the course of the disease, but after convalescence, for any traces of the signs and consequences of variola, to determine which it may be, or if concurrent variola and varicella.—I am, yours, etc.,
G. H. J. DINSMORE, M.B., M.A.
Coundon, Bishop Auckland, April 5th, 1882.

*. Pitting does sometimes follow chicken-pox; and seeing that this disease was prevalent in the locality, but that there had been no small-pox there for three years, that the child went about during the illness, and that the eruption was mainly on the head and trunk, which we infer from the pitting having taken place there, we think there can be little doubt that the case was one of chicken-pox, and not small-pox.

DR. PATTERSON.—We have compared our summary with the full shorthand notes of Dr. Patterson's evidence, and we can find no inaccuracy such as that of which he complains.

THE ATTRACTION TO EDINBURGH.

SIR.—Will you allow me to offer an explanation to "Civis Acad. Edinensis" as to the "attraction" of the Edinburgh College of Physicians, which, to myself at least, is satisfactory. The popularity of the College cannot arise from any low standard of education or examination. Certainly, the course of study demanded by the College is as extensive as that required by any Scotch university; and, with regard to the examinations, the number of rejections (43 per cent.) shows them to be at least as rigid as any other examining board in the United Kingdom. The assumption that the large number of rejections are due to the great inefficiency of the candidates rather than to the severity of the examinations, is ungenerous. Surely, after upwards of twenty years' experience with 43 per cent. of rejections, the Edinburgh College must prove a very uncertain haven in which the plucked ones might find a certain rest. I know of more than one instance in which a "poor plucked" one at the Edinburgh College immediately passed at the Dublin College. Why, then, do the English students flock to the Edinburgh College of Physicians rather than to the London College? The Edinburgh College took the lead in granting the degree of Physician to the general practitioner. It is only natural it should still maintain it. It is true some mistakes were made at the beginning, but they were speedily rectified; at least, what the Edinburgh did for a few months, the London did for a year—admitted without examination.

In the Edinburgh College, the degree of Licentiate in Medicine is the first step to the Fellowship; whilst, in the London College, the Licentiates are as completely cut off from the higher grades as though they had no connection with their College.

With reference to the Scotch universities, it will, I think, be at once seen why the Scotchmen graduate in them, whilst the English go to the colleges. The Scotch universities admit to their medical degrees only their own pupils, and therefore require residence. These circumstances must necessarily exclude a vast number of English students, whilst no such exclusion exists in the colleges. A large number of English students would, from the expense, be precluded from leaving their homes, and taking up residence in Scotland. Others might prefer the advantages of attending the great London colleges and hospitals to any provincial school, however eminent. Both these difficulties do not apply to Scotch students. They are at home in Scotland, and must go to some university, or at least some university town, to receive their education. It is, therefore, natural they should graduate at their own university, and that few would go to the colleges for their diplomas.—I am, sir, yours truly,

J. ST. JOHN GAGE PARSONS, M.D. Edin. Univ., U.S., F.R.C.S. Eng.,
Licentiate of the Royal College of Physicians of Edinburgh.

Crofton House, Bristol.

SIR.—Your correspondent "R.O.L." is in error in imagining that I wrote with a view to depreciate the Edinburgh University degree, or indeed any Scotch qualification. I think if he had attempted to give "Civis Acad. Edinensis" the explanation he desired, it would have been keeping more to the point. However, perhaps he will permit me, as holding the L.R.C.P. Edin., to inform him that I did not have to pass an examination in chemistry. There are always more Englishmen in for this qualification than Scotchmen, for the well known reason that the latter graduate. Writing from London, I wonder at his saying that the Edinburgh M.R.C. is a training of at least four years; as if that is anything more than is required by the examining bodies here.

I maintain that the student who spends the whole of his time in London is practically more the master of his profession than the student who finishes in the North, and fritters away his time in attending lectures which will be of no value to his future patients. The experience to be gained in the infirmary is ignored in the mania to obtain a degree; hence, the student is taken at the most important and practical part of his career, still to plod over books. This is only what students themselves have told me.—I am, yours truly,
A. T.

SIR.—As I see so much discussion going on in your JOURNAL with reference to the examinations of the Royal Colleges of Edinburgh, I hope (as a Licentiate of those bodies) to be allowed to express an opinion as to their attractions to myself and others (not Scotchmen); and, in addition, beg to state, that I came across the Atlantic from one of the colonies, expressly to take these (much maligned) diplomas, considering them to be as good a passport into practice as I could have (judging from the men I met who possessed them).

The following reasons also obtruded themselves, viz.: 1. The superior teaching of the Edinburgh schools. 2. The excellent reputation of the Edinburgh diplomas everywhere out of London. 3. Taking the two diplomas at one set of examinations. 4. The smaller cost of the Edinburgh diplomas, than of those of corresponding bodies in England (the L.S.A. counts for nothing out of this country).

Having given my reasons, I hope others will come forward and do the same; and, if the eyes of the London corporations are opened thereby, it will be a blessing to many London students. I think the system of constant attack pursued by the London journals very unhandsome, unwarranted, and savours somewhat of jealousy. I can easily understand the annoyance of those "interested in London schools and corporations", at seeing many of their students flit away to the North, to pass their finals there. Had the London licensing bodies the courage to reform their present bungling and expensive modes of procedure, and adopt the conjoint scheme, with all its advantages, I think the exodus complained of would not trouble their peace of mind any longer. This same obstinacy is sending lots of our good men abroad to obtain university degrees of doubtful character, when they might be kept at home by a little pecuniary liberality (that is, by testing them in examinations, and not in time and money). The Scotch students can obtain the degrees of the universities with very little more trouble and expense than the licences of the corporations; hence the dearth of Scotchmen in the pass-lists of the Royal College of Physicians and Royal College of Surgeons at times. On looking through the *Medical Directory* for 1882, I was struck with the number of men possessing the M.B. and M.D. Edin, who also took the L.R.C.S. Ed. Can this be explained? Is it that the C.M. is not worth taking?—I am, sir, yours faithfully,
A COLONIAL.

SECONDARY SMALL-POX.

SIR.—I should feel very much obliged to you or any subscriber to inform me, through our valuable JOURNAL, whether varioloid, or secondary small-pox, after vaccination, of course modified, and therefore of a mild character, be infectious or propagable from person to person.—I am, etc.,
V.

*. Yes; highly infectious.

TRICYCLES.

SIR.—In the JOURNAL of May 6th, I see the use of the above strongly advocated by two of your correspondents. Will you kindly permit me to ask them, through the medium of the JOURNAL, how they find tricycles to answer in hilly districts.—Yours, etc.,
HILLY DISTRICT.

CLINICAL LECTURE

ON A

CASE OF CHRONIC CEREBRAL MENINGITIS:
CHRONIC ABSCESS OF BRAIN: LIMITED PERI-
TONITIS: OBSTRUCTION OF THE PORTAL
AND SPLENIC VEINS: AND ACUTE
CEREBRO-SPINAL MENINGITIS.

By A. HUGHES BENNETT, M.D.,

Assistant-Physician to the Westminster Hospital.

THE subject was M. M., aged 37, of no occupation. The father of the patient, who was otherwise a healthy man, was said to have had several attacks of temporary paralysis affecting the right leg and both arms. These seizures came on suddenly, and their effects lasted from a few days to several months. Otherwise, the family history was healthy. The patient himself, a gentleman of large property, appeared to have enjoyed perfectly robust general health all his life till the present illness. He was born in Australia, and remained there till a few years ago, engaged in active and healthy pursuits. Since his residence in England, he had passed his time in country and outdoor occupations, and had always been noted for his activity and strength, as well as for intellectual acumen. At the age of fifteen, on awaking one morning, the patient discovered weakness in one of his arms; this soon passed away. Since then, he had been liable to attacks of a similar nature. Being in his usual good health at night, next morning he would find one or more of his limbs on the left side weak. This paresis lasted from a few days to some weeks, and on one occasion as long as six months. The paralysis was not complete; and, when it affected the leg, did not prevent the patient from walking, but only caused him to be lame and drag the toes along the ground. When the arm was attacked, it was weak; and there was numbness, especially on the ulnar side. In the intervals between these seizures, he was perfectly well, and there was no trace of impaired motion. Even when the paresis was present, he could, as a rule, take a great amount of exercise; but on several occasions, when it was severe, he was completely laid up. He had never had syphilis or any other cerebral symptoms, and was not aware of having had "fits" or attacks of any kind.

About the middle of September 1880, the patient, being in his usual good health, was seized with a severe pain in the epigastric region, and with an illness which laid him up in bed for six weeks. This pain was extremely acute and continuous, so that he had to be kept more or less under the influence of opium. It appeared to be confined to a spot about the ensiform cartilage, was increased on pressure and after food, and was modified by position. There was a little vomiting; but no blood was ever seen in the ejected matter. The medical men in attendance believed the affection to be ulcer of the stomach. At the end of six weeks, the symptoms passed away; the patient became convalescent; travelled to London; and for the next three weeks, although generally weak, considered he was rapidly improving in every way.

On November 21st, the patient was seized with a severe pain in the epigastrium, which again compelled him to apply for medical assistance.

Present Condition.—The patient was very tall (said to be 6 feet 5 inches in height), of spare yet robust build, pale and somewhat thin from his recent illness. He complained of a severe dull aching pain at the ensiform cartilage. This was not influenced by pressure, but was increased after food, although not to a great extent. There was nothing to be seen or felt locally. There was no vomiting, nor other symptoms. All the organs were healthy; but the patient was slightly feverish, greatly depressed in spirits, and had a look of much anxiety and suffering. This condition continued without change during the next five days, the pain occurring in paroxysms of an extremely severe character, leaving during the intervals a dull aching sensation. On November 25th, the urine was found loaded with bile; and on the following day the patient presented all the usual appearances of jaundice. For the following three weeks, the condition remained much the same; and there was almost constant pain in the epigastrium, increased frequently by paroxysms of a very acute character. There were also griping pains in the abdomen, especially before and after a stool. The bowels were

constipated, and there was well-marked jaundice; no vomiting or headache; no oedema or anasarca; and the appetite was fairly good. The most careful and repeated physical examinations failed to detect anything abnormal. About December 19th, all the symptoms gradually began to diminish in severity; abundant bile appeared in the stools; the urine became clear; the yellow colour of the skin perceptibly faded; and the epigastric pain was much relieved. This general improvement so advanced, that in a few days the patient became quite convalescent, was able to sit up, and, with the exception of great weakness and emaciation, felt in good health and spirits. This continued till January 1st, when he was suddenly seized with an acute lancinating pain in his head, accompanied with feverishness and great depression, which lasted during the day, and which was finally relieved by a hypodermic injection of morphia. A few days subsequent to this, a return of his former complaint was observed; namely, paresis of the left leg. The extensors of the foot were paralysed; and, when the patient walked, he was very lame, and the toes dragged along the ground. The extensors of the thigh were also weak. All the flexor muscles seemed to be normal. The extension of the left hand was somewhat impaired, but otherwise the limb was unaffected. There was no loss of sensibility. With this exception, the general convalescence progressed favourably till January 6th, when the patient stated that he had a "fit". He said he had a repetition of this seizure on the following day. During the succeeding twenty-four hours, he had two more attacks, one of which was witnessed by Mr. W. L. Purves (who watched the case with me throughout), and who described it as a genuine epileptiform fit. There were sudden convulsions of all the limbs and face, and complete loss of consciousness, lasting for some minutes. Immediately afterwards, the patient was weak and depressed, otherwise well. Next day, there was distinct paresis of the right arm, and the face was drawn slightly to the left; no other cerebral symptoms. This paresis of the arm gradually increased till January 12th, when its movements were very feeble and imperfect, and the grasp of the hand was almost lost. The patient then was depressed and emotional, but his intelligence was perfect. There were now slight thickening of speech and hesitation in articulating. On the following day, the right arm was absolutely paralysed as to motion, but the sensibility was unaffected. Two days later, the right leg was found weak; there was considerable difficulty in articulation, and the patient spoke in a mumbling way. The movements of the tongue were sluggish; and, when protruded, it was pushed towards the left side. The face was distinctly drawn towards the left. In addition to the difficulty of articulation, there was evidence of partial true aphasia, as the patient had difficulty in selecting and recollecting suitable words with which to express himself; but he never employed wrong ones. His understanding seemed intact. Till January 17th, all these symptoms rapidly increased, when, in addition, he was attacked with severe pain in the back, with cramps and contractions of the legs. The patient was dull and apathetic, but appeared to understand what went on around him. His speech was now unintelligible. All the symptoms increased, and on January 22nd the whole of the right side was completely paralysed. Although the patient could not say a word, he appeared intelligent, and understood what was said to him. On the 28th, the patient was evidently becoming weaker, the sphincters began to be relaxed, and the catheter had to be used. From this date to February 8th, he gradually sank, became comatose, and died.

POST MORTEM EXAMINATION.—This was made by Dr. Goodhart, in my unavoidable absence; and the following is an abstract from his excellent report. *Head.* The cranial bones, dura mater, and sinuses were normal. The arachnoid and pia mater were thickened, and at the base much so; they were opaque, and their vessels were imbedded in thick white fibrous tissue. This induration of the membranes was symmetrical, except at the upper part of the right ascending parietal convolution, immediately adjacent to the longitudinal fissure, where there was a small patch of scar-like fibrous tissue in the pia mater, below which the cortical substance appeared healthy. The brain was of normal size; the surface was dry and greasy-looking, apparently the result of acute meningitis. The Sylvian fissures were adherent. The convolutions upon the right side looked normal; but on the left they were much flattened, and the sulci were indistinctly marked. On the surface of the left ascending frontal convolution, bordering upon the longitudinal fissure, appeared a rounded eminence, about half an inch in diameter, and of yellow colour, to which the dura mater and arachnoid membranes were adherent. A section parallel to the longitudinal fissure was made through this swelling, when it was found to communicate with an abscess below containing from an ounce and a half, to two ounces of thick, green, tenaceous, odourless pus. The cavity of the abscess was lobulated, and about the size of a small hen's egg. It occupied the white substance of the brain, immediately below the ascending

frontal and parietal and the posterior portions of the frontal convolutions. Above, it appeared to point at the eminence already described at the upper part of the ascending frontal convolutions; and below it reached very near the convolutions of the island of Reil. The interior of the cyst was smooth, and covered with flaky pus. That portion of the abscess which approached the cortex had no distinct cyst-wall; but the remainder was surrounded by a dense tough capsule about a millimetre in thickness. The outer layer of this appeared very vascular, and in some parts of it there were small extravasations of blood. This capsule separated readily from the surrounding brain-tissue, and could easily have been enucleated. The ventricles and ganglia were healthy, except that the latter were somewhat compressed on the left side. Otherwise, the brain was normal. *Spinal Cord.* A quantity of turbid fluid was found beneath the sheath. There was general injection of the vessels of the cord, and a quantity of yellow lymph was found in the meshes of the pia mater. The cord was soft, and the white matter streaky-looking from injection of the vessels. *Abdomen.* Above the umbilicus, the omentum was adherent to the abdominal wall. There were a number of tough fibrous bands of adhesions between the stomach and under surface of the liver. All the structures of the portal fissure were imbedded in a mass of dense fibrous tissue, making it a difficult task to dissect out the various channels. When this was effected, the portal vein was found to be completely obliterated by a firm organised fibrous thrombus, strongly adherent to the vein-wall. The splenic and mesenteric veins at their upper part were obstructed in a similar manner. The common bile-duct permitted bile to flow through it readily; and its walls were rugose-looking and dilated, but otherwise healthy. The gall-bladder was healthy, and no trace of stone was found in its interior. At the lower omentum was a regular plexus of minute veins, which made their way to the cardiac end of the stomach, and discharged themselves into enlarged oesophageal veins. Some also appeared to run backwards from the portal vein and communicate with the inferior vena cava. Another large plexus of veins passed from the sigmoid flexure to the internal abdominal ring, and blended with the spermatic vein, which was unusually large. The *Liver* was in structure normal. The branches of the hepatic artery were enlarged and thickened, and the branches of the portal vein were not discoverable to the naked eye. The *Stomach* was considerably mammillated, otherwise normal. The *Spleen* weighed six ounces, and was somewhat tough and bloodless. The artery was normal, but the vein could not be discovered. *Lungs.* There was some recent lymph in the lower portions of the pleural cavities on both sides. Both lungs were extensively affected with bronchopneumonia. The other organs and structures of the body were normal.

COMMENTS.—This case presents many features of pathological and clinical interest; but I shall limit my remarks to the following three general heads: 1. The lesion of the portal system; 2. The lesions of the nervous system; and 3. The relation existing between these two morbid states.

1. *The Lesion of the Portal System.*—Thrombosis of the portal vein, although by no means common, is a clearly recognised pathological condition, and a considerable number of cases have been recorded both at home and abroad. In the instance before us, this state was probably the result of a limited peritonitis, involving the structures lying in the portal fissure. After death, the tissues in this neighbourhood were thickened and matted together; hence, either by mechanical pressure or by inflammatory irritation of the venous wall, or possibly by both these causes acting together, the blood in the interior of the vessel during life had coagulated, and the clot had subsequently become organised, so as to form a complete obstruction to the vein. As a result of this pathological condition, certain symptoms are usually induced, namely, enlargement of the spleen, dilatation of the veins, diarrhoea, hæmorrhages, ascites, etc.; but, in this case, all these symptoms were entirely wanting. Here the only evidence of any abnormal state of the portal system was to be seen in the enlargement, and pressure, which for a time gave us the impression that the patient was suffering from portal hypertension. There were also lately no symptoms to point to any obstruction of the portal vein. This serves to show that, when the obstruction is produced gradually, the circulation must be established in other directions, so that the usual mechanical effects are prevented. In the healthy subject, the statement holds that there are no communications which pass directly from the interior into the liver, independently of the ordinary portal system. There are accessory portal veins. There are also numerous anastomoses between the portal system and the inferior and superior vena cava; but, in short, except in disease, there is a free anastomosis of all the vessels in this region of the body. When the main trunks of the portal vein are obstructed, these collateral branches enlarge, and thus establish the circulation. In the present case, this was actually discovered; and, as far

as a dissection of the matted tissues could be made, a number of these enlarged collateral branches were demonstrated. We may therefore assume, that it was owing to the successful re-establishment of the circulation that the absence of the usual mechanical symptoms was due. The jaundice during life was probably the result of pressure on the gall-duct by the inflamed and thickened peritoneum.

2. *The Lesions of the Nervous System.*—The patient, from the age of fifteen, had been constantly seized with attacks of temporary paralysis, usually affecting the left side of his body. He generally discovered these symptoms on awaking in the morning; and the paresis, in different attacks, lasted from a few days to several months—the patient during the intervals being in a perfectly normal condition. The movements of the limbs were not abolished, but were sufficiently impaired to cause great weakness of the left arm and hand, and dragging of the leg, and certain muscles seemed to be more affected than others. The patient was ignorant of having had any kind of fit. The nature of these seizures is not clear; but, from the fact that his father suffered from exactly similar symptoms, it might be urged that they may have been the results of epileptic attacks occurring during sleep, and therefore without the knowledge of the patient. On the other hand, after death, there was found old-standing meningitis, and more especially a patch of inflammatory thickening of the membrane over the right ascending parietal convolution. It is possible that these pathological conditions may have existed for many years, and given rise to occasional attacks of paralysis on the left side. Until five weeks before death, with the above exceptions, there had been no other cerebral symptoms. At this time, the patient was suddenly seized with violent pain in the head and feverishness, followed a few days later by epileptic attacks, subsequently by paralysis of the right side, including the face and tongue; followed by true aphasia; and, finally, by coma and death. On examination, an abscess was found in the left side of the brain, whose size and position was sufficient to satisfactorily account for the paralytic and functional symptoms on the right side of the body. These last, however, made their first appearance only five weeks before death; and, on inspecting the abscess, the question arises as to whether its age corresponds with the symptoms observed during life. To judge the length of time an abscess has existed, is often extremely difficult. When acute or subacute, there is no capsule surrounding it; therefore, when such exists, as in the present case, we may assume it to be chronic. Meyer states that the earliest appearance of a capsule is at the sixth or seventh week; and Huguenin demonstrated the distinct evidence of one not earlier than the twelfth week. In the patient under notice, the capsule was thick, dense, and well defined, and otherwise the abscess presented all the appearances of a chronic nature, and therefore must have existed at least for several months. As the earliest symptoms of any brain-disturbance were noticed for the first time only five weeks before death, we must assume that the abscess existed prior to that period, without producing any objective phenomena. The temporary attacks of paralysis, from which the patient suffered all his life, had apparently no connection with the cerebral abscess, as they affected the left side of the body; whereas the abscess was on the left side of the brain, and subsequently induced right hemiplegia. We are therefore left in doubt as to the date of the origin of the abscess. We can only assume that it must have existed at least some months, before there were any trace of symptoms resulting from it. Such cases are very rare; for, although it is not uncommon to find cerebral abscess having existed, apparently even involving a motor area, without producing sufficiently definite symptoms to permit a diagnosis being arrived at, still there are almost always some phenomena present pointing to impairment or alteration of brain function. In the present case, the most careful investigation of the patient and his friends failed to elicit the existence of any cerebral symptoms whatever, prior to the terminal changes occurring shortly before death. These final symptoms presented nothing remarkable, consisting as they did of impaired function of the left side of the brain, evidently due to recent extension of the cavity of the abscess causing pressure and altered circulation in the hemisphere. This was demonstrated by the morbid appearances seen after death, as already described. Upon the question of cerebral localisation, this case throws little light. Supposing the abscess to have existed for a certain period without producing symptoms, it only indicates that a slowly growing lesion, occupying the position of motor conducting fibres, need not of necessity cause paralysis. There is no evidence that, during the latent stage, any portion of the cerebral matter was involved; nor did it appear that any of the important ganglia were directly affected. The abscess was situated in the medullary portion of the brain, immediately below what we have recently been told are the motor centres; and, although it might be assumed that the nervous communications would thus be severed, yet, in this instance, no paralysis ensued. Later, we have pathological demonstration of extension of the cyst-wall, of softening of

the grey matter, and pressure on the convolutions and deep-seated organs, which conditions were accompanied by paralysis and other signs of functional inactivity. A small patch of cicatricial tissue was found over the upper part of the right ascending parietal convolution, close to the longitudinal fissure; and we know that all his life the patient was liable to altered motility of the left side, and especially of the leg. If it could be proved that these were cause and effect, this would support recent observations by Ferrier and others on cortical localisation.

3. *The Relation between the Abdominal and Cerebral Lesions.*—Two comparatively rare diseases—namely, obstruction of the portal vein, and abscess of the brain—having occurred in the same individual, the question arises: Was each of these lesions independent of one another? or, were they in any way related? Cases are on record in which abscess of the brain seemed to have originated as a result of abdominal disease; but these are very rare, and were usually of a pyæmic nature. We have seen that the first symptoms of abdominal disease began about five months before death. Although there is no proof of it, it is possible that the abscess originated at this time. If so, could the limited peritonitis and obstructed portal system have been its cause? Of seventy-six cases of abscess of the brain, collected by Sir William Gull and Dr. Sutton, in only three could the disease be traced to an abdominal affection; and in each of these there was a collection of pus in that cavity. Suppuration in any part of the body may occasionally lead to abscess of the brain, more especially if pyæmic in character. In the case before us, there was no evidence of any suppuration having taken place, either in the abdominal cavity, or in any other part of the body; and there never had been any appearance of blood-poisoning or other constitutional disturbance, sufficient to account for the existence of a cerebral abscess. It has been suggested that this lesion was of an embolic origin, due to the abnormal condition of the portal circulation. We can, however, scarcely imagine an embolus, filtering through the liver and lungs, capable of producing mechanical obstruction; and, if the particles were sufficiently minute to effect a passage, we have no reason to suppose they should create mischief specially in the brain, unless they were poisoned, which the facts of the case disprove. In this instance, the cause of the abscess is not apparent, and therefore its age is uncertain. There was no injury, disease of the ear, or symptoms of an acute cerebral attack, which are the most common causes. Of the seventy-six cases already cited, the abscess could be traced to disease of the ear in twenty-seven; to injuries of the head in seventeen; to lung-disease in ten; to surgical affections in nine; and in eight only was no definite cause ascertained. To such so-called idiopathic abscesses, we may add this one, as the data before us fail to establish either its cause or age. We, therefore, fail to prove any relation between the abdominal and cerebral symptoms.

The facts of this case, taken as a whole, seem to suggest the following sequence of events. The patient, in early life, without apparent cause, was afflicted with chronic cerebral meningitis, which, for many years, caused no symptoms except occasional attacks of temporary hemiplegia. The changes in the tissues and circulation, thus induced, may have afterwards been the starting-point of the chronic abscess, which existed for a long time without producing any symptoms. Five months before death, the patient was seized with an acute attack of limited peritonitis, involving the portal system, and subsequently causing thrombosis and obstruction of these veins. The constitutional disturbances, induced by the second attack of this illness, probably excited the recent acute action in the brain, in the shape of cerebro-spinal meningitis, and the extension of the already existing abscess.

FUNGOSITIES OF THE FEMALE BLADDER.—Dr. Atlee publishes, in the *Boston Medical and Surgical Journal* of March 30th, a case which is specially interesting at the present time, as Sir Henry Thompson has so recently, at the Royal Medical and Chirurgical Society, drawn attention to tumours of the bladder. Dr. Atlee saw his patient in September 1880; she was a lady, aged nineteen; she was obliged to pass urine every half hour, and the urine contained a large quantity of blood. An exploration of the bladder was at once advised, and submitted to, under the influence of anæsthetics. An ordinary pair of dressing-forceps was introduced into the urethra, opened, and withdrawn; this was done several times, and the urethra thereby fully dilated. On the introduction of the finger into the bladder, no calculus or distinct tumour was to be felt; but "about the fundus were a number of fungosities, or soft growths, some of them more than a half inch in length, and about one line in thickness." Dr. Atlee scraped them away with his finger-nail, and up to the date of the paper (March 1st, 1882) the young lady has remained perfectly cured. Dr. Atlee is particular to explain that the growths were not villous, but true fungosities, having anatomically the same fundamental structure as the mucous membrane from which they sprang.

REMARKS ON ACUTE SPINAL PARALYSIS.

By W. R. GOWERS, M.D., F.R.C.P.,
Assistant-Physician to University College Hospital, etc.

WE must first ask what we mean by "acute spinal paralysis". The term has become restricted to a narrower range of symptoms than it literally designates. Most acute lesions of the cord produce "acute spinal paralysis", but by the expression is commonly understood only those forms in which the paralysis is local in its distribution, and is accompanied by rapid muscular wasting. It thus includes only the disease with which we are familiar as "infantile paralysis", and the analogous affection which occurs in adults. Pathological observation has demonstrated that, in most cases, the symptoms are due to an acute inflammation of the anterior grey cornua of the cord; hence the term suggested by Kussmaul, of "anterior poliomyelitis". We may also, if we wish for a descriptive pathological name of still simpler character, call it "cornual myelitis". But it is important to bear in mind that these are pathological, while "acute spinal paralysis" is a clinical name, and they are not quite conterminous. The symptoms of acute spinal paralysis may depend on any acute process in the anterior cornua. They may occur, for instance, from hæmorrhage in this situation as well as from inflammation. We must, therefore, include under the term acute spinal paralysis, cases which are not myelitises.

The general symptoms of acute spinal paralysis are well known, since, as it affects children, the disease is familiar to all practitioners; and its characters in adults are nearly the same. There is an acute, or subacute, onset, with symptoms of a general illness. The paralysis is usually at first extensive, sometimes universal; but power gradually returns, except in a limited region, in which the muscles rapidly waste, and present the electrical reactions which characterise nerve-degeneration—loss of irritability to faradisation; preservation, and even increase, of irritability to voltaic electricity, with certain alterations in the mode of response to the latter.

Our knowledge of the nature of the process in the spinal cord is, perhaps, more meagre than in the case of any disease equally common. We know nothing of the way in which, in ordinary cases, the inflammatory lesion commences. Death during the early stage of the affection is extremely rare, and opportunities for examination have been so scanty, that there exists no observation on the state of the spinal cord during the first few days of the affection. It is possible, however, that more cases in children are fatal at the onset than is commonly believed, because the nature of the disease at this period may readily be mistaken. It is chiefly to general practitioners that we must look for the opportunity of further investigation on this important point.

It is singular that our knowledge of the causes of the disease is hardly more definite than that of its pathology. Even the causes which are recognised are not altogether beyond question. Hereditary tendency to nervous affections seems to have but little influence in its causation; most authorities doubt the influence altogether. I have myself been strongly impressed by two or three cases, in which other members of the families have suffered from other acute affections of the nervous system. This is a point on which a comparison of experience is very desirable.

The influence of age is well known, but the remarkable proclivity of children to suffer from the disease is quite unexplained. They do not suffer specially from other inflammatory affections of the nerve-tissues, although liable to certain inflammations of the membranes. The disease has been observed to come on a few days after birth. If the account given by the friends of one of my patients be correct, the disease came on, in her case, *in utero*. On the other hand, recent medical literature abounds with examples occurring in adult life. I have seen one case, in which the disease came on in a man of more than seventy years of age. After some rheumatoid pains about the neck and shoulder, he found the right hand weak; and certain muscles, especially the long extensors of the finger and thumb, and, to a less extent, the thenar and hypothenar muscles, rapidly wasted, and presented the characteristic electrical reactions. The hand also presented a well marked condition of myxœdema. I am not aware that this condition has been before observed in connection with the disease.

In young children, it is customary to refer the disease, like many others, to the irritation of teething. Is there the slightest ground for this? Here, again, we want more facts, which only the general practitioner can supply. We want to know the age and the state of dentition at the time of the onset. In a large number of cases, this information can only be given by those who have the charge of the patients.

in the early stage. Another cause to which the disease is commonly attributed is exposure to cold—sitting on cold stones and the like. That this cause is occasionally effective, can scarcely be doubted. One well marked case, in which the flexors of the hips and extensors of the knees were affected, occurred in a young lady immediately after sitting on a damp grass, during the menstrual period. But it is probable that the influence of cold has been exaggerated. Many cases are ascribed to slight exposure to cold, merely because no other reason can be given. In adults, again, the rheumatoid character of the pains which attend the onset may cause the disease to be ascribed to cold, although, as is well known, in spinal disease, pain of a rheumatoid character may have no rheumatic significance.

Another point in etiology which deserves discussion is, the relation of the disease to season of the year. An American physician, Dr. Wharton Sinkler, states that, on the other side of the Atlantic, three-fourths of the cases begin during one quarter of the year—between June and September. Of 149 cases he collected, 6 occurred in January, 1 in February, 11 in April, 6 in May, 18 in June, 34 in July, 43 in August, 9 in September, 6 in October, 7 in November, and 2 in December. In this country, a similar relation probably exists, since Dr. Barlow of Manchester found that, of 53 cases, 27 occurred in July and August. Hence it is clear that, whatever be the effect of cold and chills, the influence of heat in predisposing to the disease is still more potent. I have seen one case in the adult in which the disease was distinctly part of a slight attack of heat-stroke. It is very desirable that the influence of season in this country should be investigated on a still larger scale.

Among the symptoms of the disease which especially deserve attention and discussion, is the equivocal character of the symptoms which attend the onset. I venture to presume that there are few practitioners of much experience who have not, at some time, made a mistake in the early diagnosis of one of these cases. In children, the symptoms of general illness, the acute febrile disturbance, sometimes commencing with a convulsion, and reaching, as I have seen, a temperature of $103^{\circ} 5'$, suggest an acute specific disease much more than an affection of the spinal cord; and universal paralysis has been more than once regarded as merely general prostration. In adults, the rheumatic pains are usually the obtrusive initial symptom; and the disease has repeatedly, I had almost said constantly, been mistaken for rheumatic fever. In many cases, the error in diagnosis is never discovered. When the paralysis is found out, it is supposed to have occurred during the progress of a primary disease which never existed, the symptoms referred to it having really been those of the primary affection.

The local nature of the disease in etiology which I have purposely postponed, but which deserves discussion. The assumed relation to a primary disease is, however, a very common error; and the local nature of the disease is often overlooked during the early stages of the affection. The symptoms of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced.

A point in etiology which I would call attention to is the importance of the disease in the early stages of the affection. The symptoms of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced.

wasting. Thus, by finding that in some part of the paralysed region the irritability to faradisation is lost, we not only establish our diagnosis, but we can pick out and state which muscles will be ultimately affected and which will soon recover, and this before there is any other sign of difference than that afforded by the electrical examination. It may be asked. Is it safe to make an electrical examination at this early stage? Is there not danger of exciting a reflex irritation in the cord, and so increasing the damage? I believe that, if carefully done, it is perfectly safe. A very weak current will suffice, just sufficient to cause contraction in the healthy muscles; and, if necessary, the stimulation of the sensory nerves may be reduced to a minimum by employing the faradaic shock, instead of the current (which consists of a series of shocks, and is much more painful). For this, we move the hammer slowly with the finger, instead of allowing it to vibrate automatically. As an instance of the value of this test, I may mention the case of a lad, aged 16, who was seized with paralysis of both arms and legs, the onset being attended with acute fever. It was apparently due to lying with a cold wind blowing on the back, while heated after hunting. Examination showed that certain muscles of the left forearm and hand had entirely lost faradaic irritability, which was normal in the other muscles of the left arm and in both legs. Thus the diagnosis was established, and the ultimate localisation of the paralysis ascertained, although the verification of the inference was unfortunately prevented by the death of the patient, a few days later, from a cerebral complication.

The exact observation and record of the muscles affected is of great importance for scientific purposes; because we may thus obtain information, to be gained in no other way, of the anatomical arrangement of the nerve-cells representing muscles and movements in the spinal cord. Some interesting observations on this point have been published by Remak, and lately by Ferrier and Sturge; but we are still very far at the threshold of the subject. As an illustration of what I mean, and as evidence that the arrangement in the grey matter of the cord is rather of movements than of muscles, I may refer to a fact which I have several times noted. Duchenne has taught us that the pectoralis major is functionally two muscles. The upper clavicular part brings the arm forward, and is associated in this action with the serratus major, which brings the scapula forwards. The lower sternal part of the pectoralis depresses the raised arm, and, in doing so, acts with the latissimus dorsi. In acute spinal paralysis, one part of the paralysis is often affected without the other, and the physiological arrangement is reproduced in the paralysis. If the upper part be paralysed, so is also the serratus, and the latissimus escapes. If it is the lower part of the pectoralis which is affected, the serratus escapes and the latissimus is paralysed.

As a rule, after recovery of the less damaged parts of the cord has taken place, a certain amount of local paralysis and wasting persists, and is not altogether curable. This, when improvement has ceased, remains permanent, and is not, though less, although there may be an apparent improvement in the condition of the muscles, the occurrence of deformities. The only remedy of the muscular deformities of the arm is the use of the pectoralis major, which is not, though less, although there may be an apparent improvement in the condition of the muscles, the occurrence of deformities. The only remedy of the muscular deformities of the arm is the use of the pectoralis major, which is not, though less, although there may be an apparent improvement in the condition of the muscles, the occurrence of deformities.

Many of the symptoms of these cases deserve discussion. When the disease is first noticed, it is often in the early stages of the affection. The symptoms of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced.

Another point in etiology which I would call attention to is the importance of the disease in the early stages of the affection. The symptoms of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced. The symptoms which attend the onset of the disease are, in fact, very equivocal, and the diagnosis is often made only after the paralysis is well advanced.

nical congestion. I cannot but think that the damage to the cord would often be lessened, were the early treatment of these cases conducted on the principles which we apply to acute inflammation elsewhere.

Should not the internal treatment in the early stage be rather that for the morbid process than for its seat; be that for an internal inflammation rather than for a disease of the spinal cord, and therefore consist of aperients, diuretics, and agents which act on the vascular system, rather than nerve remedies? During the stage of recovery, there seems no reason to doubt that nerve tonics do some good; and on the value of electricity and skilled rubbing there is a fair agreement of opinion. When the disease was regarded as purely muscular, it was thought that electricity actually cured it in some cases. The proof that the seat of the disease is the spinal cord renders this opinion extremely improbable. Beyond doubt, the application of the voltaic or constant current to the muscles (to which their fibres will still respond, although insensitive to faradisation) improves their nutrition, lessens their wasting, and keeps them in a better condition to respond to any nerve-power over them which may ultimately be regained by the recovery of damaged cells and regeneration of degenerated fibres. Thus the ultimate state of the patient is better than it would be without electricity. It is desirable, therefore, to use such a current as shall cause slight visible contraction in the muscles. Unfortunately, children are often so much frightened by even a very weak application, that the needful strength cannot be employed without causing an amount of emotional disturbance, which may not unnaturally be regarded as doing the child more harm than the electricity does good. Here, again, we have sometimes to be content with a compromise. A weaker current than will cause contraction has probably some influence on muscular nutrition; and I think the best rule is to employ such a strength as the child will bear without much emotional disturbance, whether we can thus get muscular contraction or not. If care be taken to avoid alarming the child at the commencement, a current of some strength can often thus be employed.

Is the influence of electricity confined to the muscles? Does it aid the recovery of the spinal cord and nerves? Some believe that it does, and urge therefore that, in treating the muscles, one pole should be placed upon the spine; and the method is, on *à priori* grounds, a reasonable one. But the tendency of the disease to spontaneous improvement renders it extremely difficult to form an opinion on this point. For myself, after a careful comparative trial of the two methods of applying electricity, from the cord to the muscles, or to the muscles only, I have been unable to observe any superior advantage in the former method, which seems, even when a large spinal electrode is employed, to disturb children more than the application to the muscles only. At the same time, beyond the increased discomfort, there is no objection to the application of one pole to the spine.

How soon should electrical treatment be commenced? I cannot think it desirable to apply the voltaic current to the spine within one month of the onset; but it may certainly be applied to the muscles, with care, much sooner, at the end of ten days or a fortnight when the "reaction of degeneration" has become distinct.

ON SOME POINTS IN THE DIFFERENTIAL DIAGNOSIS OF INTRACRANIAL DISEASE, GENERAL PARALYSIS OF THE INSANE, AND TABES DORSALIS.

By THOMAS STRETCH DOWSE, M.D.,

Formerly Physician Superintendent of the Central London Sick Asylum.

PATHOLOGICAL and clinical experience during the past ten years, in reference to nervous disease, have convinced me that, in the pathology of the general paralysis of the insane, and in the pathology of tabes dorsalis, we have an association of changes which are still open to a vast deal of investigation.

The relationship of spinal to cerebral lesions in the general paralysis of the insane has been noted for many years; but I have failed to discover any sound pathological deductions as to why the two conditions should coexist to the extent which is invariably found. We are greatly indebted to the valuable labours of Westphal, Voisin, and Mickle, for much information upon this subject. To M. Pierret we are also indebted for bringing before the profession the head-symptoms in tabes, and the important part which the trigeminal nerve takes, by its reflex influence, in the production of certain transitory pareses of the muscles of the eye, of the face, and of mastication; and also the head-pains, which are sometimes met with, but which must not be confounded with the chronic inflammatory changes of the brain

which are found in the course of the general paralysis of the insane. I have seen such cases relegated to the class of tabes, when one might as fairly have classed them with cases of gross intracranial disease, or even of general paralysis, and where, in fact, the tabes was merely a manifestation of a more or less diffuse process of degeneration, extending over the entire nervous system, although the objective signs were by comparison more marked in the posterior columns of the cord. Erb says: "Naturally, in all such cases, the importance of the spinal becomes subordinate to that of the cerebral disease." I must admit that I have had several cases under my care, where, in the initial stage (and this is extremely important from a prognostic point of view), I have been unable to give a decided opinion as to whether my patient would remain tabetic, or whether he would suddenly merge into the insane paralytic. I will give an example.

Some time ago, I was called in consultation, by my friend Mr. Willis, of Hornsey Lane, to see a patient who might fairly be said to be suffering from tabes dorsalis. He had the signs, subjective and objective, of this disease: the flying lightning-like pains, which he called rheumatic; the dysæsthesia and anæsthesia of the lower limbs; absence of knee-reflex; the Argyle-Robertson pupil; and inability to maintain the equilibrium of the body with the eyes closed; and, in addition to these, he suffered from M. Pierret's head-symptoms—namely, pains in the head involving the regions supplied by the trigeminal nerve; but there is this noteworthy fact to remember, that, during these attacks of pain, the temperature of the head was always increased. Again, his *morale* had changed, and this is not common to tabes; for, instead of being as he was formerly, an even-tempered man, he had become liable to attacks of uncontrollable excitement, and during these attacks the articulation became so markedly defective that he could scarcely be understood; but at ordinary times there was no tremor either of the tongue or facial muscles. He was a strongly built, florid-complexioned, muscular man, aged 32, without any nervous history.

I will now describe another case which has a direct bearing upon the subject. John H., aged 48, came to consult me, at the Hospital for Epilepsy and Paralysis, on December 20th, 1880. He was a florid-complexioned, strongly built, muscular man. He had suffered from shooting lightning-like pains about the body for the past ten or twelve years; they affected chiefly the anterior and the inner surfaces of the thighs and legs; they would last for five minutes, or for six, twelve, or twenty-four hours. He said these pains were not so bad as they used to be. He thought "they had given place to weakness". At times, he had burning pains of the same character in the penis, which migrated to the rectum; and these were accompanied with great desire both to urinate and to defæcate. His mental powers had failed, so that he was unable to carry on his business. When any person was talking to him, he not only forgot what he was talking about, but forgot the presence of the person to whom he was speaking. For some time, he had been unable to preserve his equilibrium, and he would roll about in walking, and his friends would accuse him of being drunk. When at the theatre, he became very emotional, and was readily excited to cry or laugh, according to the nature of the performance. Upon examining the cranial nerves, the following signs were noted. The first nerve was normal; as to the second nerve (the examination was made by Mr. Mackinlay), the discs were pale, the left one most decidedly so; the arteries small. There was no retinal change, or change elsewhere in the fundus of the eye. Right eye, vision = $\frac{3}{8}$, and C. $\frac{1}{3}$ $\frac{2}{3}$; left eye, vision $\frac{3}{8}$, and C. $\frac{1}{3}$ $\frac{2}{3}$. With the best eye, he could read Jäger I at a foot without glasses; the pupils were unusually small. There was no marked limitation of the field of vision in either eye; the pupils did, however, contract very slowly and sluggishly when exposed to light. The third, fourth, and sixth nerves were normal. There was marked anæsthesia and analgesia throughout the range of the fifth nerve. The lateral movements of the jaw were performed with some slowness and difficulty. He was unable to whistle or send forth a full current of air. When he talked, the mouth became filled with froth. The labials were frequently reduplicated: he pronounced "Papa's performing pony" in this way, "Pap-p-p-a per-f-f-f-f-forming pony"; and, during articulation which required the exercise of labial and lingual co-ordinating power, the labial and zygomatic muscles acted without purpose. When he stood with the eyes closed, he became unsteady, and said that he felt trembling all over. The knee-reflex was scarcely appreciable. There was no ankle-clonus; no reflex of the feet. The cutaneous sensibility of the trunk was fairly normal. Muscular response was normal, both of sensation and motion, to the continuous and to the faradaic currents. There were deep-seated anæsthesia and analgesia of the lower limbs. From his own evidence, it appeared that on January 6th he completely lost his reason; and he remained in this state for a fortnight, and after this he began to improve. On July 8th, 1881, he again presented himself at the hospital,

have failed to discover any gross or microscopical lesion, or any anatomical changes (which could in any way be connected with the production of the symptoms peculiar to Landry's disease), with reference to the brain, medulla, and spinal cord; or to the sympathetic nerve, the peripheral nerve-trunks, or the muscles. (*Diseases of the Spinal Cord*, by Erb: Ziemssen's *Encyclopaedia*, vol. xiii.) On the other hand, it should be stated that Drs. Harley and Lockhart Clarke noted distinct degenerative changes, in parts of the spinal cord, in a case of acute progressive paralysis described by them (*Lancet*, 1868, October 3rd); and, in his book on *Diseases of the Nervous System*, published in 1881, Dr. Ross records pathological alterations in the grey nucleus of the cord, in a supposed case of this disease—a case, however, which he had not seen during life. With these exceptions, and perhaps that in which MM. Déjérine and Goetz discovered atrophy of some tubuli, with an increase of nuclei of the intertubular connective tissue in a single nerve root, I know of no published instances of the disease in which anything abnormal has been discovered in the nervous centres, which might be termed peculiar.

The absence of a distinct pathology suggested, doubtless, to Landry the idea that acute ascending paralysis is not a disease of the spinal cord, but is due to some intoxication, which evidences its pernicious influence through the motor tracts of nervous centres by some inappreciable physico-chemical change in the nerve-elements. This view, which, for want of a better, was adopted by Westphal, seems to gather some additional weight from the close analogy, which Dr. Harley has noted, between the symptoms of the disease and the physiological effects of woorara on animals.

On this question, it is plainly premature to give an opinion; and one must be content to look upon its pathology and etiology through the same misty cloud of ignorance as that through which we view the pathology of chorea, tetanus, hydrophobia, and some other affections which are characterised by strong perversion of nervous function.

The following case of acute ascending paralysis came under my observation in December 1879, and constitutes the only instance I have met; and, as far as I know, the only recognised instance of the disease which has ever occurred in Dublin. Although some of the details of the case are, I regret to say, lacking in that accuracy which I could desire, and which a more intimate knowledge, at the time, of the nature and main features of the disease would have enabled me to have supplied, I consider the following notes of the case worthy of notice.

CASE.—Helen M., aged 25, was admitted to the City of Dublin Hospital, under my care, on December 8th, 1879, complaining of great weakness of her legs, and of inability to walk or stand. When seen on the 9th, her aspect and position in bed presented nothing to warrant the idea that, within five days, she would have passed away. Her decubitus was dorsal, but easy, the legs lying extended in the natural position of repose. With great efforts, she was able to sit up; but she could not turn on her side without the nurse's assistance. The legs lay motionless, and she was unable to stir them or bend them in the least. There was a total absence of all rigidity or spasm on passive movement, or of fibrillary twitches. On testing the muscles of the thigh and leg by faradism, the electro-muscular contractility and sensibility seemed normal, or but little diminished. Sensation was unimpaired, and responded to the tests of touching, pricking, and of heat and cold. The superficial reflexes were not exaggerated. Examination of the spine failed to elicit any marked point of tenderness to firm pressure, percussion, or the hot sponge. The patient did not complain of the sensation of a belt around the waist, or of undue heat or cold—symptoms with which one is familiar in some cases of inflammatory affections of the spinal cord—though she referred to an uncomfortable feeling above the sacrum; and this, I take it, was but the expression of powerlessness of the parts below that point. There was no paralysis of the bladder or rectum during the first two days of her stay in hospital, and the urine was of normal reaction and specific gravity, and free from albumen. There were no bed-sores, and the nutrition of the limbs was unimpaired, the muscles being of equal size in each leg.

Thinking it possible that much of the symptoms could be explained on the theory of the case being one of hysteria—an hypothesis strongly suggested by the patient's emotional manner, and familiar and endearing mode of speech—I had her lifted out of bed by two assistants, for the purpose of testing her powers of standing and of locomotion. It was at once evident that she was totally unable to direct her legs in the very slightest degree, still less to stand or to walk. Her legs hung quite powerless, and, as if loose at the hips, they dragged after her as she was lifted out of bed and put back again, without the least attempt at spasm or rigidity. In fact, they reminded one forcibly of the limbs one sees in advanced infantile palsy.

There seemed on the patient's part every readiness to make the best effort in her power; and, although she was agitated by being lifted out

of bed, she offered no resistance. It was now plain that a very serious lesion of the motor tracts of the spinal cord existed; or, speaking more correctly, a serious disturbance of motility was present; and that the disease had advanced with great rapidity during the preceding four days—seeing that she had lost, during that time, all power of motion in the lower extremities and in the back.

The next two days evidenced still further progress of the disease upwards, as she lost—at first partially, and then completely—the power over the arms and hands. This was shown by her inability to draw the bedclothes up, or to arrange her night-dress, or to lift herself up in the bed. The spinal muscles also failed, and it required constant care on the part of the nurse to keep her propped up in bed. She could not lie down, owing to oppression of breathing.

On December 12th, the respiration was almost entirely carried on by the diaphragm. On the 13th, the paralysis involved the powers of deglutition; the pulse ran up to 136; and she sank on the 14th, with all the symptoms of asphyxia—the mind remaining clear till about fifteen hours before the close.

After the third day of her stay in hospital, it became necessary to draw off the urine, and the bowels became constipated—a condition due largely to the paralysed state of the abdominal muscles. The urine was at no time ammoniacal.

In seeking for evidence to throw some light upon this novel case, I made careful inquiries into her history. From herself, little could be learned, as she was completely silent as to her immediate antecedents; and, though her sisters were able to supply some facts, there was nothing, I regret to say, discernible, which could have acted as a predisponent or excitant of the disease, or which threw any light upon its nature. Though unmarried, it appeared she kept company occasionally for over a year with a man, who seemed to evince kindness towards her, and at whose hands she apparently received no ill-treatment. About a fortnight or three weeks before her present illness, she left her home in this man's company, and he helped her back three days before admission into hospital. On that occasion, her sisters stated, she was just able to stand, and, by the use of her arms, to drag her legs after her into the hall, but was unable to go upstairs. She remained at home three days; and, during them, she lost all power of moving her feet and legs. Though questioned closely by her sisters, she gave them no insight into the origin of her illness—if, indeed, it were in her power to do so. There were no appearances to warrant the idea of her having taken too much drink, or of having received any ill-treatment or hurt. When seen by me, there were no marks of blows or violence on any part of her body. She was well-nourished and well-formed, with fair muscular development, and without any evidence of either scrofula or syphilis.

The duration of the disease was somewhere between nine and twelve days, as it is probable she was complaining of some degree of loss of power before she returned home, three days before admission to hospital, and nine before death.

The indications for treatment were by no means clear, so that I directed my attention to supporting her general strength by light nutritious diet, and to giving her sleep, and to calming her emotional excitement. For this purpose, I gave her bromide of potassium, in fifteen-grain doses, three times a day, and sleeping draughts of chloral. The insomnia, however, was not readily overcome, as she needed rather large doses of morphia (hypodermically administered) before sleep was procured.

At the *post mortem* examination, which I conducted, with the assistance of my clinical clerk (Dr. Stuart Davis), twenty-four hours after death, there was noted nothing abnormal in the thoracic or abdominal cavities, with the exception of a cyst, of the size of a walnut, in the left ovary. The brain and spinal cord were carefully removed. Sections were made through several parts of both, but I could discover no gross or microscopical alterations of the nervous tissue, or in its coverings, which could be termed peculiar, or which could not be accounted for by the mode of death of the patient. As to the microscopical appearances presented by the spinal cord, I regret to say I am unable to speak, as, by a most lamentable oversight, the specimens were not placed in hardening fluid till decomposition had set in, and rendered them useless for microscopical examination. As, however, but negative results have followed most elaborate and careful microscopical examinations made of the nervous centres (by more skilled hands than mine), this was not a matter of so much regret as it would otherwise have been.

In conclusion, from a rapid review of the whole case, its gradual onset, its steady but rapid upward progression, its fatal termination by involving respiration and deglutition, and the absence of all irritation of the spinal cord or its coverings, there can be no doubt of its having been a typical example of Landry's disease, occurring in a woman.

the motor centres of the cerebrum has led to lesions in the anterior cornua of the cord. (Pitres, *Société de Biologie*, 1878. MacDonnell, Dublin Pathological Society, 1878.)

Immediately after the subsidence of the febrile symptoms, the keenness of the sensibility seems to be somewhat blunted, as though the nervous influence had been exhausted by the previous excitement; but it speedily recovers, and afterwards remains unchanged. Kennedy gave an account of certain cases in which complete recovery took place; but Heine and Duchenne both denied that these were true examples of this affection, and placed them in a separate category, under the title of "Temporary Paralysis." I am, however, satisfied that there are cases, probably much more frequent than physicians imagine, in which the regression is complete; and I have given instances, which differ in no respect from those which go on to atrophy and deformity, except in the slighter degree of the initial disturbance, and the fact that, after a brief period of paralysis, the regressive movement is carried to its full extent, and the child recovers, without any permanent traces of the attack. It is to be remarked that in all those cases where there existed facial paralysis, or paralysis of the muscles of the neck, these parts were the first to recover their power; and the same holds good of the muscles of the trunk, when they are affected together with the lower extremities; and that in all those cases some groups of muscles remained paralysed, and eventually became atrophied, while others recovered, and that they presented the electrical reaction peculiar to this form of palsy.

Heine asserted (and he has been followed by several other writers) that the true hemiplegic form of palsy never occurred in this disease; but I have seen it in thirteen cases, where the other diagnostic marks were distinct and incontestable. But, as explanatory of the cause of error, I may mention that it was persistent in both limbs of one side in only two cases; in the other it retired, leaving only one limb permanently affected. The crossed form, where the arm and leg of opposite sides are affected, is the most common form when two limbs are paralysed definitively, and was called by Heine spinal hemiplegia. It is the result of an attack affecting primarily either three, or it may be all four limbs (which occurred eighteen times), and which has receded from one or two, leaving the other on opposite sides definitively paralysed.* Of this I have five of the eighteen, the remainder ending in palsy of one leg only. I have not met with any case where there was a progressive increase of paralysis, or where an attack has recurred.

With regard to treatment and its results, I must confine myself here to stating, that hopefulness and perseverance will meet with a reward often exceeding expectation, especially if the treatment be commenced early, and the child's volition be called in to aid the efforts of art.

In conclusion, I may venture to offer a few remarks as to the manner in which the paralysis is brought about. It has been proved by Brown-Séquard, Tiesler, and others, that irritation of a nerve will produce lesion of the spinal cord; while the nerve-trunk, between the seat of irritation and the cord, presents no trace of any irritant action; so that it is quite easy to comprehend how any irritant impression upon a large surface, supplied by peripheral nerves, may cause a profound impression upon the centres to which they lead, just as we know that similar irritants affecting other peripheral nerves will cause convulsions, which are in young children often the expression of irritation of the motor centres (cortical) of the cerebrum.

That the great ganglion-cells of the anterior cornua are connected with special and peculiar nerve-fibres is probable, nay, almost certain; and, if that be so, then the explanation of the facts and peculiarities of this form of palsy is easy. The picking out of single muscles, or groups of muscles, for definitive palsy and atrophy, coincides with the picking out of certain ganglion-cells for destruction, amid others left sound; just as the groups of those vanished cells correspond with the enlargements from which the nerves to supply the wasted limb are given off. And an irritative inflammation, commencing in the cell as the focus of irritation, would, though it might spread readily enough to the surrounding parenchyma, still leave its greatest effect and most lasting traces upon the cell itself. Probably, the first effect of an irritation is to produce changes in the circulation of the nerve-centre itself, and thus involve the surrounding parts, to which the vessels so altered are distributed. At any rate, it appears from *post mortem* records,† that the parenchyma is largely involved early in the process; and, that it is through the instrumentality of the circulation is probable, not only from analogy, but also from the enlarged condition of the circumvascular spaces, which is a common characteristic of the *post mortem* conditions found in these cases.

Lastly, I would urge that the time has come when a greater degree

of generalisation may be profitably admitted in the study of this disease, which has hitherto been almost entirely subjected to analytical examination, a process so essentially needful for the distinction and verification of facts, in a new and unexplored field; but which, when once a sufficient number of facts and observations have been collected, serves rather to cramp and fetter the mind of the inquirer, who should then carry his researches into the wider fields of synthetical study, and ask what are the relations of the facts already known to other forms and manifestations of a different character.

A CASE OF SALTATORY AND GENERAL CLONIC SPASM TREATED WITH CONIUM.*

By E. H. JACOB, M.D.,

Physician to the Leeds Dispensary; late Resident Physician to the Leeds Infirmary.

THE patient whose case is described below has been under my notice twice; the first time, in the Leeds Infirmary (under the care of Dr. Eddison); the second, under my own care at the Dispensary.

J. E. A., aged 27, an iron-moulder, was admitted to the Leeds Infirmary on August 13th, 1878, and gave the following history. Four years ago, his foot was crushed by a stone. The next day, he was seized with a general shaking of limbs and body, which lasted about an hour. This was followed by similar attacks at intervals; but he was generally relieved by resting for a day or two. Eighteen months ago, he received a severe blow in the lumbar region from a crane, which was immediately followed by an attack of shaking. He continued to work, however, though the attacks became much more severe, till about four months before admission. For the last few days, he had had from one to four attacks a day.

On admission, he was fairly nourished, but looked pale. He complained of nothing but the attacks of trembling. These attacks appeared to begin with a slight quivering of one leg; this spread until the muscles of both legs were in rapid vibration. The abdominal muscles were tense, but not quivering. Generally the arms were involved, and occasionally the head. The shaking stopped temporarily if the limb were gently moved. The attacks came on occasionally at night, sometimes without awaking him. There was slight tenderness over the lumbar spines. His appetite was good; his bowels regular. The day before admission, he had two attacks, lasting one hour and half an hour respectively. Sometimes they lasted four or five hours; but he occasionally went eight to fifteen days free from them. He was kept in bed, and ordered half an ounce of conium-juice three times a day.

August 15th. He felt but little effect from the medicine, but had but one attack yesterday, lasting twenty minutes only (the shortest attack hitherto had been about fifteen minutes). He slept well. On August 16th, he had no more spasms. On September 7th, he was discharged, having had no more attacks. The *succus conii* had been continued in doses of six drachms.

I heard no more of this patient till the end of September last, when he was sent to the Dispensary, to be under my care, by Mr. Stamp Taylor, to whom he had applied for advice. He was then in a far worse state than when I had seen him before. He was pale and wasted, and was just beginning a spasmodic attack similar to those he had in the Infirmary. For the last month, he said, he had suffered from them from one to four times a day.

Beginning with tremor of the legs, the spasm grew more violent, till the patient fairly leaped into the air about eighty or ninety times a minute. His arms then became affected, but to a slighter extent than his legs; and sometimes his respiratory muscles joined in the general spasm, so that he breathed in short painful jerks. He declined to lie down, saying he had rather stand and jump if he had anything soft to stand on, as when he lay down "it shook him to pieces". He had been curious enough to count his leaps, and told me he had had thirty-one thousand in the last month. I gave him, on the spot, two drachms of tincture of conium, the only preparation which happened to be at hand; and ordered him half an ounce of conium-juice three times a day. The tincture of conium had no effect; but the attack passed off in about twenty minutes, leaving him much exhausted. There was some tenderness over the last two lumbar spines, and pressure there gave him a "sensation of cold". He did not know anything in particular which started the spasms, and no pressure-point could be detected.

October 7th. The medicine had had no effect. He had had one or more attacks every day. During the visit, the right arm and leg were shaking vigorously; but there was no leaping. He was ordered to increase the dose of conium till he felt the characteristic effects with which he was familiar, from his previous use of the drug.

* Read before the West Riding Medico-Chirurgical Society.

* When the hemiplegic form persists, it is probable that it is also produced by regression from one limb where three have been originally involved.

† See Report of meeting of Pathological Society of London, February 4th, 1879.

October 14th. The medicine, evidently a bad sample, had had no effect, physiological or other, though he had taken an ounce and a half for a dose. He was jumping vigorously, every muscle apparently in a state of clonic spasm, except the facial. He was given an ounce and a half of tincture of conium, but with no apparent effect. Half an ounce thrice daily of a fresh sample of conium-juice (supplied by Messrs. Harvey and Reynolds) was ordered.

October 21st. The medicine had a distinct physiological effect every time, and he had had no bad attacks—indeed, nothing but a slight occasional quivering; but he felt weak and ill. He was directed to continue the medicine twice a day.

October 28th. The shaking had entirely ceased; but he felt weak, and had pain in the back. He was ordered a tonic iron mixture, and a dose of conium occasionally if he felt any symptoms of spasm.

November 4th. He felt better, and had had no more spasms.

This case differs in many respects from the cases of saltatory spasm reported by Bamberger, Guttman, and more recently by Dr. Gowers. In previous cases, there was a history of epilepsy, chorea, hysteria, or some debilitating disease, but none of injury. These were cases of functional irritability of the spinal cord, similar to those we see in "spinal irritation" and many hysterical persons. But in the case described there were no indications of any organic disease in the shape of paralysis or affections of the sphincters; so that we must rather class it with the sequelae of spinal concussion, among that large, vague, and unsatisfactory collection of symptoms of which we hear much in railway trials for compensation. Some light is thrown on the pathology of cases as these by experimental physiology; but the conclusions are somewhat confusing. Division of the cord (in the rabbit) just below the lumbar enlargement causes repeated flexion of the legs, whereby we may assume the presence of a co-ordinating centre for the legs in that part; but electric stimulation of the cord above the sixth cervical vertebra also caused springing movements of the legs. This may account for the cases where the neck-muscles were involved; but there was no history of injury in my case other than in the lumbar region. Again, there is reason to assume the existence of a centre for co-ordinating reflex movements of the limbs in the medulla at the junction of the lower with the middle third of the floor of the fourth ventricle—indeed, close to the respiratory centres; but the implication of this seems unlikely in the above case.

Lastly, I would point out the necessity, when conium is prescribed, of securing a specimen which shall not be wholly inert, like two of those I tried; and of giving the remedy in sufficiently large doses to produce a distinct physiological effect. This is generally a slight feeling of heaviness in the eyes, slight staggering of gait, and a desire to lie down, which ought to be produced by about half an ounce of the succus. But it is absolutely useless to prescribe this drug, wherever obtained, unless the particular sample have been tested by its physiological action. While, however, a strong man will be only slightly affected by half an ounce of a good preparation, a much smaller dose will be sufficient for feebler organisations.

ON REFLEXES AND PSEUDO-REFLEXES

By A. DE WATTEVILLE, M.A., M.R.C.S. (Eng.).

Lecturer, Lecturer to St. Mary's Hospital.

THE question is still debated, whether the muscular contraction following the percussion of a tendon is a true reflex phenomenon or not. It is agreed on all sides that it ultimately depends upon a reflex action, since it is abolished by the destruction of the posterior roots. Those who do not regard the contraction to be a direct reflex hold that it is caused by the contraction of the muscular substance itself by the sudden stretching; and explain the integrity of the reflex loop necessary for its occurrence by assuming that the excitability of muscle to this particular stimulus is derived, like tenacity, upon a reflex influence from the cord, or rather from the brain, of this tenacity. The chief reason for regarding the contraction as reflex is that the time which elapses between the stimulus of percussion and that of contraction is too short to admit of a conscious act of volition being concerned in the cord in a manner implying, on the usually adopted measurements of the rate of nervous conduction, a nervous conduction of the period of latent contraction following the percussion of a tendon, and of the rate of nervous conduction, provided the nerves are as good as nerves, rather than of a reflex action, which would require a longer period of time to elapse between the stimulus of percussion and the contraction of the muscle. This is the chief reason why the contraction is regarded as reflex. In order, therefore, to determine the question, it is necessary to find a method of proof, of a nature which will enable us to measure the time of the reflex arc, and the time of the reflex arc, and with the same

method. In this way, the results are at least comparable. The absolute measurements may not be correct; but, if so, the error is the same in both series of results, and thereby eliminated. The point upon which I would draw attention in the annexed tracings, then, is the relative rather than the absolute duration of the periods recorded.

The method I used was one taught me by my friend Dr. Augustus Waller, and is the same as that by which he made the measurements recorded in his well known paper on "Tendon-reflex" (*Brain*, 1880). This method, the adequacy of which we independently proved by various tests, consists in recording both the instant of percussion and of muscular contraction by the same apparatus. An appropriate India-rubber bag is fixed over the explored muscle, and connected with an ordinary Marey's registering apparatus. The two events (percussion and contraction) are recorded by ascents of the lever; the interval between the points of ascent indicates the lost time of the muscle.* The lost time of the apparatus itself being (as ascertained by previous chronographic measurements) the same in both cases is thereby eliminated.

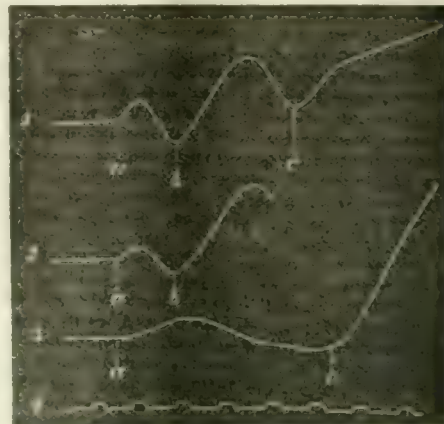


Fig. 1. line 4, time-tracing: fifty vibrations a second. Line 3, plantar reflex. At a, stimulation of the skin; at c, contraction of the extensor femoris. Line 2, knee-jerk (same subject). At a, percussion-wave; at b, contraction of the same muscle.

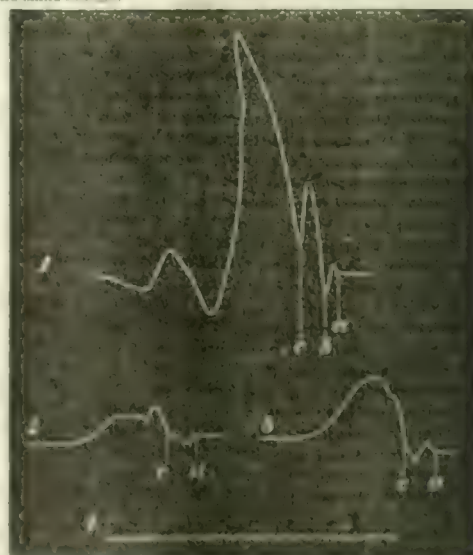


Fig. 2. Line 4, time-tracing: same frequency as in Fig. 1. Line 3, plantar reflex. At a, stimulation of the skin; at c, contraction of the extensor femoris. Line 2, knee-jerk (same subject). At a, percussion-wave; at b, contraction of the same muscle.

The method I used was one taught me by my friend Dr. Augustus Waller, and is the same as that by which he made the measurements recorded in his well known paper on "Tendon-reflex" (*Brain*, 1880). This method, the adequacy of which we independently proved by various tests, consists in recording both the instant of percussion and of muscular contraction by the same apparatus. An appropriate India-rubber bag is fixed over the explored muscle, and connected with an ordinary Marey's registering apparatus. The two events (percussion and contraction) are recorded by ascents of the lever; the interval between the points of ascent indicates the lost time of the muscle.* The lost time of the apparatus itself being (as ascertained by previous chronographic measurements) the same in both cases is thereby eliminated.

Though my researches are not yet completed, I have obtained results which may appear novel or definite enough to deserve publication.

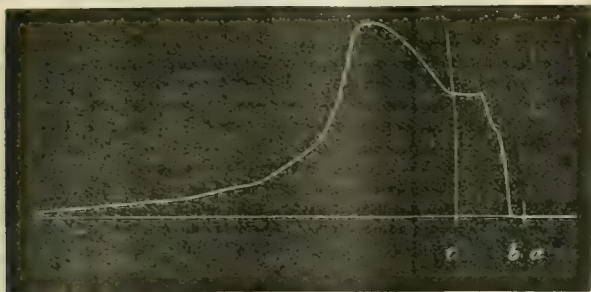


Fig. 3, medium rate of cylinder. Tracing from another patient of Dr. Broadbent's, suffering from obscure cerebro-spinal lesions; increased plantar reflex. Galvanic stimulation of the anterior tibial group of muscles (a) was followed by the usual latency and muscular contraction (b), which readily passed into a tonic spasm. If the current was sufficiently strong, there occurred, after an interval, a further contraction (c) of the anterior tibial muscle. (This tracing was obtained by Dr. Waller and myself in July 1881. All the other tracings bear the date of February 1882, and were taken in the wards of St. Mary's Hospital, with the assistance of my clerk, Mr. G. Callender.)

cation in a preliminary note. The tracings illustrate several facts.

1. The latency of the plantar reflex is about three times as long as that of the so-called "tendon-reflex." The latter, in my tracings, has the usual duration ascribed to it by most authors, viz., about .03 of a second.
2. The muscular contraction following cutaneous stimulation tends to run a more protracted course than that following percussion of the tendon.
3. In certain cases, percussion of the tendon is followed by a contraction, of which the latency and protraction correspond exactly to those characteristic of the reflex contraction excited by excitation of the skin.
4. In certain cases, the galvanic stimulation of the muscles also gives rise to a contraction occurring later, and running a more protracted course than that due to the electric stimulus.
5. In comparing the latencies of contractions of the extensor femoris, and of the gastrocnemius, following excitations at the sole of the foot, it must be borne in mind that the difference will be comparatively small, owing to the fact that the two muscles receive their nervous supply near the knee. The difference, likewise, between the latencies of knee-jerks following cutaneous excitations at the sole of the foot, and at the patellar tendon respectively, will be equal to the time taken by the transmission of the stimulus from the sole to the knee.
6. The possibility of true reflex contractions following a galvanic shock and a tap on the tendon is one of great importance in diagnosis, and deserves further consideration and elucidation.

I have investigated myographically the question of "crossed tendon-reflex." The tracings will be published on a future occasion; but I take this opportunity to say, that the latency of contraction in the opposite leg is absolutely identical with that in the leg percussed—a fact in itself sufficient to disprove the reflex nature of the phenomenon. Further, it is easily shown that a blow, given over the tibia or patella of one leg with the fleshy part of the hand, produces little or no contraction in that leg, whilst the opposite is adducted vigorously. It is plain, therefore, that the shock conveyed along the femur to the pelvis, and acting mechanically on the most favourably placed tendons, is quite sufficient to explain the facts—a view obviously forced upon us by the results of Prevost and Waller's experiments on rabbits.

In conclusion, I wish to advert to one difficulty attending the "direct-muscular" or "myotatic" theory of the knee jerk, and allied phenomena. Though its latency is too short to justify the reflex hypothesis, is it not too long to be readily reconciled with the accepted periods of latency to electrical and other direct stimuli? We know, on the other hand, that the time of latent stimulation of nerve-centres (cortical substance: Franck and Pitres, Richet, Bubnoff and Heidenhain) is much longer than of peripheral organs; whilst we have in the muscles themselves organs (end-plates), which stand, so to speak, midway, in some of their physiological properties, between a nerve-cell and a nerve-fibre. The solution of that difficulty (if it is one) might, therefore, be found in the assumption, that the excitation produced by the sudden stretching of a muscular fibre falls primarily upon its nerve-ending. None of the known facts, at least, militates against this view, which I throw out, more as a "working hypothesis" for future investigations, than as a scientific explanation of the phenomena.

Postscript.—As this communication is going through the press, my attention is called by Dr. Ferrier to a paper by Professor Westphal, in the current number of the *Archiv für Psychiatric*. With his admirable clinical perspicacity, the author therein describes cases, in which he has observed pathological exaggerations of several of the phenomena illustrated and measured in the above tracings—such as the double knee-jerk, the longer latency, the protraction of the reflex contraction. He has, moreover, seen in a case the knee-jerk follow cutaneous excitation, when percussion of the tendon had no effect—a fact which confirms my view concerning the second contractions exhibited in tracings 1 (Plates I, II). The concordance between my results—obtained independently, and by physiological methods—and those of so high an authority as Professor Westphal, is to me welcome and gratifying.

ABSTRACT OF LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND ZOOLOGY OF THE EDENTATA.

Delivered at the Royal College of Surgeons of England.

By W. H. FLOWER, F.R.S., LL.D.,
Hunterian Professor of Comparative Anatomy.

LECTURE III.—ANATOMY OF THE BRADYPODIDÆ, OR SLOTHS (continued).

THE teeth of both genera of Sloths are nine in number—viz., five in the upper and four in the lower jaw, on each side; but, in some foetal specimens of *Bradypus*, a minute tooth has been seen in the lower jaw, anterior to those usually met with, making the number equal above and below. No traces of milk-teeth have been discovered. All the teeth are similar in structure, single-rooted, with persistent pulps, and consisting of a central axis of soft vascular dentine, surrounded by a layer of hard dentine and a thin external coating of cement. The apex of the teeth is rounded at first, but, when they are brought into use, it wears into a cupped surface, with an irregular projecting margin formed by the hard dentine, which serves the purpose of the cutting enamelled ridges of the molar teeth of the more highly developed graminivorous mammals. In *Bradypus* (three-toed sloths), although the teeth differ in size, their cutting surfaces are all on the same level; but, in both species of *Choloepus* (two-toed sloths), the anterior tooth above and below is greatly enlarged, separated from the others, and assumes much the form of the canine of animals having the heterodont type of dentition. It differs, however, in the circumstance that the lower tooth, instead of passing in front of the upper when the mouth is closed, shuts behind it—so that these teeth are not really the homologues of the canines of ordinary mammals, but special modifications of the homodont type of dentition.

The face in both genera is short, and the lips simple and not very flexible. The tongue is short and soft, presenting a marked contrast to that of some other members of the order, which will be described in future lectures. The submaxillary glands have their normal proportions, and are slightly exceeded in size by the parotids, as in most herbivorous animals. The sublingual is very small. The stomach is very large and complex, formed in both genera on the same principle, though differing in the two in the details of its structure. In *Choloepus*, it consists of three main divisions of very unequal size. 1. There is a very large subglobular paunch, divided by an imperfect longitudinal septum into two compartments, the anterior of which is prolonged at its lower end into a curved conical caecal appendage. The posterior compartment, into which the oesophagus enters directly, is further divided by a horizontal ridge into an upper and lower pouch, the latter being the larger. 2. A very small sac is situated much as the psalterium of ruminants, and of similar form, having its convex border turned upwards or outwards; while, running along its short floor is a groove, bounded by muscular ridges, extending from the oesophagus into (3) a small elongated tubular cavity, curved into the convexity downwards, with muscular walls, and communicating by a narrow pyloric orifice with the duodenum. This corresponds in situation with the abomasum of the ruminants. Although there is this general resemblance to the stomach of the last-named group, there is a singular difference in the distribution of the hard cuticular lining. In the sloths, this extends from the oesophagus over both divisions of the posterior compartment of the paunch, but not into that which has the caecal prolongation, and passes through the

second stomach into the third, where it becomes very thick and rugous, and covers the whole inner surface, except a large oval patch on the convex border, over which the lining membrane is soft, vascular, and glandular. The three-toed sloths differ chiefly in the caecal prolongation of the paunch, being more elongated, and complicated internally by a number of longitudinal septa dividing it into deep cells; whereas in *Cholapus* it is quite simple. In both genera, the intestinal canal is narrow and simple, and without caecum, ileo-caecal valve, or any great distinction between large and small intestine—offering a remarkable contrast in this respect to other animals having apparently precisely similar habits and food, as the *Indris* among the Lemurs, and *Koala* among the Marsupials, in which the stomach is small and simple, and the intestinal canal, especially the colon and caecum, of enormous length and capacity. The liver, as in vegetable feeders generally, is small, but presents a remarkable difference in the two genera. In *Cholapus*, it is narrow and elongated, has an immensely developed Spigelian lobe, and a gall-bladder. In *Bradypus*, it is extended transversely, the Spigelian lobe is small, and there is no gall-bladder. The absence of this receptacle in one and its presence in another form of animals, apparently similar in habits and food, is worthy of notice in speculating on its function. But we must confess that there is still much to learn regarding the natural history of this very interesting group of animals.

The vascular system is remarkable for the *retia mirabilia*, or plexuses of small vessels, which surround the principal arteries of all the limbs. These, however, are not peculiar to the sloths, but are found also in many other animals of the order, as the anteaters and armadillos, and also in some of the Lemurs and the Monotremes. The trachea in *Bradypus* differs from that of all other mammals in being folded upon itself several times, in the upper part of the thorax, before it divides into the bronchi—a character not unfrequent in the class of birds. In *Cholapus*, it has the usual straight course. The brain is of simple character, with the cerebellum completely uncovered by the cerebral hemispheres, which have a few longitudinally disposed sulci. The corpus callosum is short, and wants the reflected anterior portion or genu.

The organs of generation offer many characters of interest, and appear in their general features to be alike in both genera. In the male, the testes are abdominal, placed close together on the fore part of the rectum. Vasa deferentia, at first much convoluted, pass directly down to their termination in the urethra, without any accessory glands or seminal vesicles in *Bradypus*; the latter are very large in *Cholapus*. The urethra is very short, and the penis quite rudimentary, only grooved below, and consisting of a pair of small cornuta cavernosa, the crura of which are not attached to the bone of the penis. Externally, there is very little difference between the male and female organs. A wide cloacal recess is divided in both by a narrow hairless septum, which can scarcely be called a perineum, having the orifice of the rectum behind, and of its uro-genital canal in front—the small clitoris of the female being replaced by the scarcely larger penis of the male. This opening in the female leads to a short recess or vestibule, into the anterior part of which the short wide urethra opens; and behind this, in the virgin state, a pair of small apertures, only large enough to admit a small probe, which pass upwards side by side through a considerable thickness of solid tissue into the uterus. The latter is a simple elongated cavity, having an obtusely truncated upper extremity, near which, on each side, a short Fallopian tube enters. In the uterus which has borne young, its cavity becomes continuous with the uro-genital canal by a transverse orifice of considerable width; though the process by which this change takes place, from the double to the single orifice, whether by absorption of the intermediate tissue, or by the enlargement of one and obliteration of the other channel, is not known. The foetal membranes of the two-toed sloth have been fully described by Professor Turner. The placenta is completely deciduate, as in man and the higher primates. It is, however, the termination of pregnancy, large in proportion to the size of the uterus, occupying three-fourths of the entire surface of the chorion, being cone- or bell-shaped. It is subdivided into about thirty lobes, not scattered like the cotyledons of mammals, but more or less closely aggregated together, each lobe being irregularly discoidal in shape, and of varying size. The non-placental portion of the chorion is lined by a decidua reflexa, into which vascular villi project. There is no trace of urachus, nor remains of the sac of the allantois, nor of the umbilical vesicle. The fetus is enveloped in a very perfect *epitrichium*—a thin, translucent, membranous bag—above the crown of which is a rounded hairy covering, composed of stratified epithelial cells. This, which has been fully described by Walker, not only in the sloth, but in certain other mammals, is formed by a lifting up of the outer layer of the epidermis, by the growth of the hair. It is completely adherent to the skin at the margin of the lips, eyelids, nostrils, and anus, etc. It appears to be constantly found in foetal mammals. The *epitrichium* is its representative in the human fetus.

THERAPEUTIC MEMORANDA.

PAPAW IN THE TREATMENT OF CHRONIC ECZEMA.

THE so-called papaine, the partially purified extract obtained from the papaw tree, was recommended at the International Congress last year as a solvent of diphtheritic false membrane. I have lately been using it as a local application in old-standing cases of chronic eczema, more especially of the palm. As it is used in the West Indies to soften tough meat, I thought it might be of service in cases the chief feature of which is thickening and hypertrophy.

It would occupy too much space to discuss the method of action here; it will be sufficient to say that it is supposed to digest certain substances by means of a special ferment. Roughly speaking, it may be said to resemble pancreatine. I have had such marked success with it, that I recommend it to the profession as a remedy worthy of trial in cases which often resist all the ordinary modes of treatment.

The following brief notes of a case recently treated may be of interest. Mrs. R. was sent to me by Dr. J. E. Pollock, last June. She was suffering from severe chronic eczema of both palms, which completely resisted the external use of tar, and mercury ointments of various kinds and strengths, as well as a six months' course of arsenic, and was only slightly relieved by prolonged soaking. On April 18th, I ordered 12 grains of papaine and 5 grains of powdered borax, in two drachms of distilled water, to be painted on the parts twice daily. When seen on May 9th, the hard horny masses of heaped-up epidermis, which were present on April 18th, had entirely disappeared from the skin, covering the heads of the metacarpal bones, leaving its texture quite normal. The fissures of the central portion of the palms had quite healed, and the cuticle was softened and pliable, though still showing signs of roughness.

The patient stated that the application produced only a slight pricking and tingling sensation. No internal remedies were given. The borax was added with the view of checking fermentation, and supplying the alkali required in order to obtain the full action of the drug. In some other cases of chronic eczema and psoriasis, the same benefit has followed in as short a time as in the case above mentioned.

MALCOLM MORRIS, 63, Montagu Square, W.

CLINICAL MEMORANDA.

MILD SCARLATINA.

MILD scarlatina is a valuable subject for consideration, both on public and professional grounds. The differential diagnosis between scarlet fever and rotheln is comparatively easy when a case of either comes under observation in or before the eruptive stage; but, after this period, the difficulty of diagnosis increases. It is manifestly of the first importance that care should be taken in framing a diagnosis; on the one hand, that a serious disease may not be regarded as a less serious one, and hence neglected; on the other, that a too hastily expressed opinion may not imperil our own diagnosis and reputation, or that of a professional brother.

In preparing a paper on Rotheln, recently read before the Harveian Society of London, I was much struck with the value that the temperature affords in framing a diagnosis between rotheln and its congeners, scarlet fever and measles. To prevent any misunderstanding on the part of the public, all cases of scarlet fever, whether of mild or malignant type, should be called scarlet fever: for the terms, "mild scarlatina," "scarlatina," and the like, lead to the belief that neither care nor quarantine is obligatory; hence severe sequelae, and extension of the exanthem.

It is important, also, to realise that rotheln, as Dr. Cheandle has demonstrated, "exists not only in the slight and unimportant form generally recognised, but as an eruptive fever of considerable severity, which may assume a dangerous and even malignant type."

Even mild cases of undoubted rotheln have come under my notice, associated with a transient albuminuria, and profuse haemorrhagic discharges, followed by a prolonged convalescence, debility, and anæmia.

H. CRIFFS LAWRENCE, L.R.C.P. Lond.

SURGICAL MEMORANDA.

FRACTURE OF THE LEG.

IT may be of interest to report a fracture of the leg, which possessed a few remarkable features. The fracture was the result of indirect violence, having occurred during a fall; and yet (1) the fracture of the tibia was compound and comminuted; and (2) the fracture of the fibula was nearer the malleolus than that of the tibia; both of which conditions, I believe, are somewhat unusual.

KENNETH W. MILLICAN, Kington, Warwick.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE
HOSPITALS AND ASYLUMS OF GREAT
BRITAIN AND IRELAND.

DEVON AND EXETER HOSPITAL.

CASE OF SUBARACHNOID HÆMORRHAGE, WITH HÆMORRHAGE
INTO THE PONS VAROLII.

(Under the care of HENRY DAVY, M.R.C.P., M.B.Lond.)

[Notes by A. G. BLOMFIELD, M.D., House-Surgeon.]

H. I., aged 40, had been a soldier (in the Royal Horse Artillery), and was invalided five or six years earlier, after sunstroke in India. His general health had been good. On December 29th, 1881, the patient got up about 7.30 A.M., and went into a fellow-lodger's room to ask the time; while looking at the watch, he suddenly fell against the wall, and slid on to the floor. He was lifted on to the bed, and then "mumbled out" that he "had never felt so queer in his head before". Soon after this, he recovered, and, before 8 A.M., he went to his work as sweeper at the neighbouring barracks. About 10 A.M., he was found by one of the soldiers lying unconscious, and, at 10.45, he was brought to the hospital by the ambulance.

On admission, the patient was a fat, thick-set, unhealthy-looking man. He was quite unconscious, passed urine involuntarily, and foamed at the mouth; breathing was noisy and stertorous, and the pupils were very minutely contracted. There was no apparent facial paralysis, and both his legs were straight, motionless, and rigid. The arms, forearms, and hands were extended, and very rigid. At irregular intervals, spasm in the muscles of the forearm and hand drew the hand backwards, so as to form an angle with the back of the forearm; at the same time, the ends of the fingers and the thumb were flexed, giving the whole hand a claw-like appearance. The spasm lasted a few seconds, and then slowly relaxed. These clonic spasms gave a somewhat epileptic character to the attack. The pulse was full and rapid, the artery appearing thickened and tortuous at the wrist. A small amount of urine was drawn off, and was found to be loaded with albumen (one-fifth or one-quarter). When the patient was first seen, a diagnosis had to be made between "uræmic coma" and "meningeal apoplexy". It is true that the "complete unconsciousness with the apparent paralysis", the "stertorous breathing", and the "minutely contracted pupils", might have indicated poisoning by opium. The history of the attack, however, negated such a conclusion, whilst the "rigidity" and "spasmodic movements" such as above described, are well known to occur in meningeal apoplexy. They have also often been found in uræmic coma with convulsion; and, in fact, a diagnosis between these two conditions is made with difficulty. The history of the attack pointed strongly to cerebral hæmorrhage, and the minutely contracted pupils would then probably have indicated implication of the pons Varolii. The presence of albumen in the urine was not of great value. Dr. Wilks (*Diseases of the Nervous System*, page 84) writes that "the majority of such cases (i.e., meningeal apoplexy) in my experience have occurred in Bright's disease, and have been attributed to uræmia." Its presence, however, made a diagnosis of uræmic coma possible, and was, therefore, important as regards the treatment. With regard to the treatment of such cases, it is always rational to adopt that which may be curative; and especially is this the case when the diagnosis lies between the two conditions, to neither of which can such treatment do any harm. There is still no question that bleeding gives the best chance of recovery in cases of uræmic coma; whilst it is still a disputed point, with many, as to whether this old-fashioned treatment of cerebral hæmorrhage was not as scientifically sound as it was often practically useful. It was determined, therefore, to bleed the patient, although the diagnosis arrived at was that of "meningeal apoplexy, with probable implication of the pons Varolii". At noon, Dr. Blomfield took sixteen ounces of blood from the arm; but, as no improvement followed, the bleeding was discontinued. The patient continued in much the same state as that described. It was, however, noticed that the frothy mucus which escaped, did so from the right angle of the mouth; the right buccinator muscle appeared paralysed, but the blowing out of the cheek was on the left side. The patient's temperature commenced to rise about 5 P.M., and, at 8 P.M., it was 103.6°. He died at 11 P.M.

The *post mortem* examination was made sixteen hours after death. After opening the skull, and removing the dura mater, it was evident

that an extensive hæmorrhage had taken place into the subarachnoid space. The vessels on both sides of the brain were very full of coagulated blood; but, on the right side, blood was extensively effused over the surface of the brain, had passed into the sulci between many of the convolutions, and had extended to the base of the brain as far forwards as the optic commissure, forming clots in these situations. The arachnoid membrane was much thickened, and, on the upper part of the right parietal lobe, it was adherent to the pia mater, opaque, and dotted here and there with spots of a yellow colour. On removing the arachnoid, it was evident that one of the vessels of the pia mater had given way in the neighbourhood of the fissure of Rolando, near where this joins the posterior branch of the fissure of Sylvius. The pia mater was raised, and with it a clot of blood about the size of a bantam's egg. The brain-substance underneath this clot was crushed into a pulp; a very small part of the clot, extending through the crushed brain-substance, had passed into the right ventricle, and crushed the right corpus striatum superficially. The other ventricles of the brain were entirely free from clot. The brain-substance itself seemed normal. A small clot about the size of a split pea was found to occupy the middle of the pons Varolii. This clot, no doubt, accounted for the contracted pupils. The left kidney was large; one part was markedly granular, the capsule and the cortical substance tearing away together when the former was removed. The right kidney was large, red, and congested; but the naked-eye appearances of both kidneys were not so abnormal as one expected them to be. The liver was healthy. The other organs were not examined.

It is of interest to note that, after his death, Dr. Davy found that the patient had been under his care in the Exeter Dispensary. He was admitted on October 18th, 1881. The note then made was: "H. I., a soldier, suffers from headache; swelling of feet. Chancres eleven years ago." On October 25th, the note was: "Urine, specific gravity, 1005; no albumen." He was much benefited by treatment, and had not attended for some weeks previously to his admission into the hospital.

YORK COUNTY HOSPITAL.

DISLOCATION OF THE FEMUR BACKWARDS, REDUCED, EIGHT WEEKS
AFTER THE ACCIDENT, BY MANIPULATION UNDER ETHER.

(Under the care of Mr. JALLAND.)

[For notes of this case we are indebted to Mr. W. JEFFERSON, House-Surgeon.]

W. A., aged 20, a farm-labourer, was brought to the hospital on December 17th, 1881. He stated that, eight weeks previously, while leading a horse attached to a corn-drill, he stumbled and fell, the drill passing over his leg, from ankle to hip. He at once jumped to his feet again, but immediately fell down, his injured leg giving way under him. He was carried home, and was seen by two surgeons, who, it was said, pronounced him to be suffering from a broken ankle; and for this his leg was put into splints. After he had remained under treatment for eight weeks without improvement, he was brought to the hospital. He complained of no pain whatever. On examination, the injured limb was seen to be somewhat atrophied; it was quite useless; there was an inch and a half of shortening, and the foot was inverted. There was no flexion nor adduction of the thigh. The patient stated, however, that, immediately after the injury, his thigh was flexed and adducted, so that the knee on the injured side rested on the thigh of the sound one. On looking at the gluteal region, it was found that the great trochanter was an inch nearer the anterior superior spine than its fellow of the opposite side. On further examination, the hand being laid over the buttock and the leg rotated inwards, the head of the femur could be felt to start up close to the tuber ischii; and it was evident that it was lying over the large sacro-sciatic notch, the bone being dislocated out of the acetabulum. The manipulation necessary to elicit this caused no pain.

On the day after his admission, the patient was placed on a low couch, and ether was administered. Mr. Jalland now strongly flexed the thigh on the abdomen, and made its lower end to describe a circle, in order that any adhesions that might have formed should be broken down; there, however, appeared to be none. The thigh was now flexed, adducted, and then extended—rotation outwards being at the same time kept up. This combination of movements was gone through several times; and, though the head of the bone could be got on to the edge of the acetabulum, yet, on the extension being made, it always slipped back. After various modifications of the above had been tried, the thigh was again flexed and adducted. An assistant now placed his fist under the great trochanter, while, with his disengaged hand, he pressed firmly down on the anterior superior spine—the leg being now rotated outwards, and extended slowly. The length of the

limb acted as a lever, the fulcrum of which was the fist; and the head of the bone at once slipped into the acetabulum with a snap.

The patient was put to bed, and a long outside splint applied for a week; after which time it was taken off, and a plaster bandage applied, and he was allowed to get up on crutches. On January 17th, the patient walked out with a perfectly movable joint.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 16TH, 1882.

SAMUEL WILKS, M.D., F.R.S., President, in the Chair.

Report of the Morbid Growth Committee on Dr. Bedford Fenwick's case of Intrathoracic Tumour.—Dr. COUPLAND read the report, which stated that the growth was a lymphoma, or lympho-sarcoma. The reporters were of opinion that the growth originated in the mediastinal glands, and only involved the lungs secondarily.

Report of the Morbid Growth Committee on Mr. Startin's case of Xanthoma.—The report, which was read by Dr. R. CROCKER, verified the correctness of the diagnosis. The reporters had also examined cases shown by Dr. Mackenzie. The two sets of cases brought out the remarkable fact that the disease was either congenital or developed in early life, and that it affected in each series several members of the same family. In one case, there was a peculiar affection of the joints of the fingers, which it was impossible to bring into relation with the skin-trouble. The group of cases which occurred below puberty differed widely in certain clinical points from the cases which occurred above; one remarkable difference was that, in the former class, the eyelids escaped.

Stomach in Hemorrhage, in Cirrhosis of Liver.—Dr. NORMAN MOORE said that the stomach showed numerous hemorrhages into the mucous membrane. Some of these were covered with epithelium, but in some the clot was quite uncovered. The stomach contained half a pint of altered blood, and there was much more in the intestines. The patient was a man aged 48, who died in St. Bartholomew's Hospital of cirrhosis of the liver. The liver was examined microscopically, and was found to contain an extraordinary increase of connective tissue. In most parts, the fibrous capsule of the lobules was four times as thick as all the other elements of the lobule taken together. The spleen weighed nineteen ounces. This was probably the variety of cirrhosis in which hematemesis was most frequent.

Oxalic Acid Poisoning.—Dr. NORMAN MOORE also exhibited the stomach of a servant-maid, aged 24, who had taken several ounces of oxalic acid, and had died in about four hours. The skin about the mouth was natural; the tongue was whitish. The epiglottis was grey, the fauces and pharynx of a pink and grey tint. The lower part of the oesophagus was grey, and the mucous membrane was detached in parts, and everywhere wrinkled. The stomach was distended with dark blood. On washing out the blood, no abrasion was found. The mucous membrane generally was of a brownish colour, with darker lines along the course of the vessels. The mucous membrane of the duodenum and jejunum was of a greyish tint, but was not wrinkled. Below the jejunum, the mucous membrane of the intestines was not altered, but was covered by an abnormal quantity of mucus. The large intestine contained a quantity of solid faeces. There was no peritonitis. The larynx and trachea were natural. The case was exceptional in the length of time between the taking of the poison and death, and in the large gastric hæmorrhage.

Stomach from a Case of Poisoning by Cyanide of Potassium.—Dr. NORMAN MOORE said that the specimen was obtained from the body of a man aged about 28, who was found dead in his bed in a hotel. He had swallowed about half a tumbler of a saturated solution of cyanide of potassium. He had no vomit, and lay as if asleep. The stomach and oesophagus, when fresh, were of a peculiar reddish brown, and were very much wrinkled; but there was no hæmorrhage, and the mucous membrane was nowhere detached. The intestines were quite natural. All the cavities of the heart contained imperfectly clotted blood, and the lungs were engorged. The brain was quite natural.

Specimen of a Case of Pharyngeal Cancer.—This specimen, also, was shown by Dr. NORMAN MOORE, who pointed out that the ulceration was at the upper edge, and was associated with a small fungoid tumour. The larynx was natural. The specimen was from a man aged 29, who died of cancer of the pharynx, in about the fourth week of the last illness. The tumour was a small, whitish, ulcerated mass, and the ulceration of the larynx was not far more extensive than is commonly seen in this country. German writers referred to this as a comparatively common complication. Dr. SOUTHEY said that he had seen ulceration of the larynx far more frequently in

Vienna, and in Germany generally. He was, at the time, inclined to attribute the frequency to the mode of treatment, very small quantities of stimulants being given. Now, when less stimulant was given in this country, it was worthy of notice that laryngitis had become more common.—Dr. NORMAN MOORE, in reply, said that the President's remark probably conveyed the truth; in the Bâle epidemic, laryngitis was comparatively frequent.

Chondro-sarcoma of Breast.—Mr. BOWLBY said that the patient was a woman aged 40. The tumour, which had been in existence about a year, when first seen, had attained the size of an orange. After removal, the periphery was found to be soft, but towards the centre was a zone of firm tissue, containing masses which consisted partly of cartilaginous tissue; this had in some parts undergone calcareous and mucoid degeneration. The tumour recurred, and the patient died in about six months. He believed that the case was more rare than might, from the works of Rindfleisch and Billroth, and others, have been supposed.

Renal Calculus undergoing Disintegration.—Dr. RALFE showed a specimen of renal calculus which had been passed in a state of disintegration, after it had been lodged in the right kidney for upwards of three years, and which latterly had given rise to so much pain and constitutional disturbance that the question of nephrotomy was entertained. The calculus, which showed signs of erosion on its surface, was reduced to a mere shell. The patient at first had been placed on alkaline treatment, with a view of dissolving the stone; subsequently, recourse was had to the plan recommended by Dr. John C. Murray (of Newcastle) of giving the patient considerable quantities (five to six pints daily) of soft water, i.e., filtered rain-water. Occasional doses of turpentine and opium were also employed, for the relief of attacks of colic and hæmaturia. After some months, pieces of grit and scales began to pass with the urine; and finally, at the end of two years, the shell of the calculus was expelled. Dr. Ralfe thought that sufficient attention had not been paid to Dr. Murray's suggestion, for the employment of soft water to effect the disintegration of calculous deposits in the kidney, or indeed to the whole question of their solution by chemical agencies.

Conclusion of a Case of Filariæ Hæmato-chyluria.—Dr. STEPHEN MACKENZIE reported the conclusion of the case exhibited to the Society on October 18th, 1881. The particulars of the case were recorded in the last volume of the *Transactions*, page 668. It was then calculated that there were nightly from thirty-six to forty millions of embryo filariæ in the patient's blood. On October 20th, 1881, he went out in wind and rain without an overcoat; and, on the following morning, had a severe rigor, followed by vomiting, and pain in the head, epigastrium, and right hypochondrium. For the next few days, his temperature remained high, coughing produced pain in the right side, and there were some pain and swelling about the left shoulder. On October 22nd, the number of filariæ in the blood had very much diminished, and, after that date, none were ever discovered in the blood or urine; the latter fluid ceased to be chylous, but the quantity of blood and albumen in it increased. Double pleurisy came on, and the swelling about the left shoulder resulted in an abscess in the vicinity of the sterno-clavicular articulation. This abscess was opened. Another abscess subsequently formed in front of the left shoulder, and was opened; in neither case did the pus contain any trace of filariæ. The pyrexia persisted, and the physical signs of empyema (on the right side) appeared on December 9th. After a temporary improvement, cystitis set in, and the patient became progressively weaker, and died on January 10th, 1882, a little less than three months after the initial rigor. At the necropsy, there were found empyema on the right side, pleurisy on the left, acute cystitis and suppurative nephritis in an early stage, and wedge-shaped patches of yellowish-grey appearance in the cortices of the kidneys. The abdominal lymphatics (which were dissected by Mr. E. H. Fenwick) were found to be enormously dilated. The thoracic duct was dilated up to a point three or four inches above the aortic opening of the diaphragm; at that point it became impervious, and was lost in a mass of inflammatory material; about four inches above this point, it could be again traced, and was still impervious, but, at its termination, it was pervious. The iliac, lumbar, and renal lymphatics (not especially the left iliac and left renal) were greatly enlarged. Scattered about the left renal lymphatics, and occupying the lymph-sinuses, were numerous lymphatic calculi; no filariæ were discovered in them. The various organs of the body were examined microscopically, but no filariæ were encountered. During the life of the patient, Dr. Mackenzie formed the opinion that, in the initial rigor, or shortly afterwards, the patent filariæ, which had been lodged in the receptaculum chylæ and congenous lymphatic trunks, had become dislodged; that one or more reached the thoracic duct near its termination, and there excited inflammatory action, which resulted in the abscess

described above, and that the double pleurisy was an extension from the inflammation of the thoracic duct. He thought that the enormous dilatation of the abdominal lymphatics found after death made it probable that the parent worms had lodged there, and on the whole confirmed the diagnosis. No trace of the parent or of the embryo filariae had been met with, but all the clots had not yet been examined; it ought, however, to be remembered that three months elapsed between the final disappearance of the filariae from the blood and the necropsy, and that the parent worms probably perished in the inflammation they excited. As to the mode in which the chyle had reached the urinary tract during life, the evidence was inconclusive; but Dr. Mackenzie thought that the dilated and varicose condition of the renal lymphatics (especially of those on the left side) favoured the theory that the communication had been established at this point, either between the blood-vascular and lymphatic systems at their entrance into the kidney, or by some rupture of the lymphatics of the kidney itself. He thought that the hæmaturia, the severe lumbar pain early in the case, the great dilatation of the renal lymphatics, and the presence of calculi in the renal lymphatics on the left side, combined to make it probable that the communication between the lymphatic and urinary systems occurred in the kidney and not in the bladder. But few necropsies on these cases had ever been made, and in none had the channel of communication been absolutely demonstrated. Microscopic examination of the kidney and bladder had thrown no light on the subject in this case, where however the chyluria had ceased for three months. In China many persons whose blood was infected with embryo filariae remained in good health, but this case showed that such persons lead a precarious existence, and that serious illness or death result from what must be called an accident of the disease.—Mr. J. HUTCHINSON, jun., said that, in a coati dissected in the Zoological Gardens, the parent worm was found in the right auricle; the animal died of pneumonia and pleurisy.—Dr. STEPHEN MACKENZIE observed that in the canine species the parent worm was commonly found on the right side of the heart: the disease was exceedingly common among dogs in China.

Congenital Absence of Radius.—Mr. SHATTOCK showed two dissected specimens from a case illustrating this condition. In this case the biceps muscle also was absent: this fact suggested that the muscle was developed in connection with the radius.—Mr. R. W. PARKER showed two living specimens in whom this condition was present. In one case the radius, thumb, and index finger, and the corresponding carpal and metacarpal bones on both sides were absent; in the other, the radius, thumb, and index fingers, and corresponding carpal and metacarpal bones, and also the tibiae on both sides, were wanting; the foot on each side was adducted on the leg. He pointed out that these cases of so-called "club-hand" depended upon a wholly different condition from so-called "club-foot." He believed that the latter condition was produced by uterine malposition, but that the "club-hand" was due entirely to the want of development of the radius.—Mr. SHATTOCK referred to a case he had shown to the Society, in which the deformity was present on both sides, but the radius was absent on one only; this seemed to show that the deformity could be produced without absence of the radius.—Mr. HENRY MORRIS said that just such a deformity was produced after excision of the radius.—In reply to the President, Mr. PARKER said that it was impossible to say whether the biceps were absent in his case, but it was not very evident; the humerus was ill-developed, and both the deltoid and biceps were not to be felt.

Pssammoma of Spinal Cord.—Mr. J. HUTCHINSON, junior, showed a specimen of this form of tumour. He said that the patient was a woman, who had suffered from constant pain shooting round the abdomen, and flexion of the thighs on the abdomen; great wasting resulted, but her mental faculties were not disturbed. At the necropsy there was found, about seven inches from the upper limit of the spinal cord, a small lobulated tumour, which had pressed on and caused atrophy of the nerve-substance. The microscopic examination suggested, as usually happened in pssammomata, an epithelioma, in which partial calcification had occurred.

Miliary Aneurysms in Cerebral Hemorrhage.—Dr. TURNER showed drawings and specimens which illustrated the mode of production of cerebral hæmorrhage. The arteries were atheromatous, were affected with periarteritis, and presented well-marked aneurysmal dilatations; in the aneurysm, the middle coat was atrophied; the inner coat was greatly thickened and fibrous-looking. In some specimens, the aneurysmal dilatation was caused in great part by the bulging of the intima, without much increase in the calibre of the vessel; this probably showed an early stage in the formation of an aneurysm. Another specimen showed, he thought, a stage in the production of an aneurysm by an extension of periarteritis to the intima; this caused softening of the wall of the vessel, and on this dilatation supervened. He could trace no connection between the atheroma of the inner coat, which

was widely existent, and the formation of the miliary aneurysms. This quite bore out Charcot's view, but Dr. Turner differed from him in attributing but little importance to the changes in the middle coat. In the lung and kidney in these cases, similar changes had occurred in the vessels; so that the periarteritis, which in the brain led to aneurysm and hæmorrhage, was a disease which had affected the arteries of all the viscera.

Simple Stricture of Pylorus.—Dr. TYSON said that the patient had suffered for several years from menorrhagia. There was a large fibroid tumour of the uterus, and a simple stricture of the pylorus, with great dilatation of the stomach. He believed that the stricture was congenital.—Dr. NORMAN MOORE suggested that the pyloric stricture might be submitted to the Morbid Growths Committee.

Carcinoma of Kidney.—Dr. SHARKEY showed drawings and specimens designed to illustrate the development of carcinoma of the kidney from the epithelium of the Malpighian tufts and convoluted tubules. The new growth was obtained from a woman, who died in St. George's Hospital. It was an instance of epitheliomatous group. The growth had probably originated in the left ovary; the kidneys, which were not evidently diseased on naked-eye examination, showed, on microscopical examination, a very early stage of new growth; from the internal surface of the basement membrane of the Malpighian capsules, columns of cells, some round, some columnar extended. Where the process was in an early stage, it was possible to trace the development from the capsular epithelium. Similar changes had occurred in the convoluted tubules. He thought the case of great interest, as demonstrating the development of carcinoma from the epithelium of an internal organ.

Card Specimens.—Mr. S. G. SHATTOCK: 1. *Filaria Immitis* in the Right Side of a Dog's Heart. The specimen came from Japan. The right auricle was filled by a large clot, from which projected a large number of cordlike bodies—the parent worms. The coagulum contained abundant microscopic filariae. 2. *Casating Tubercle* in the Tibia of a Pigeon.

Dr. B. G. MORISON: *Acute Inflammation of Tricuspid and Mitral Valves in a Dog.*

After a few words from the PRESIDENT, congratulating the members upon the work of the past year, the Society adjourned until next Session.

OPHTHALMOLOGICAL SOCIETY OF GREAT BRITAIN.

THURSDAY, MAY 11TH, 1882.

WILLIAM BOWMAN, F.R.S., President, in the Chair.

Report on the Structure of the Growth at the Corneal Margin, exhibited in situ by Mr. Mason at a former Meeting.—Dr. BRAILEY had examined the growth microscopically, and found that it was chiefly composed of fibrous tissue, through which numerous oval or angular nuclei were distributed; it appeared to have been covered by a layer of epithelial cells derived from the conjunctival epithelium. He considered it to be a fibroma which had grown in the most superficial layers of the cornea. From the microscopical characters, recurrence was not anticipated, and none had up to the present time occurred.

Disease of the Optic Nerve in a Case of Retinal Hemorrhage.—Dr. BRAILEY said that the patient was a man, aged 50, who presented a retinal detachment at, and just below, the macula. The refraction was highly myopic, and the vitreous body contained numerous floating opacities. The optic disc was cupped centrally and had a myopic crescent at its outer side; vision only amounted to counting fingers, and was entirely absent from the upper part of the field. The detachment was attributed to a new growth, and the eye was excised; it was then found that the detachment was due to a colourless liquid in the subretinal space. The optic nerve was much thickened owing to a new formation of fibrous tissue within it; the fibrous growth contained large cavities, not unlike those which in myxomatous tumours of the optic nerve contain mucous tissue; in this case, they did not appear to contain this mucous material. The diagnosis of sarcoma was based on the position of the detachment, and the age of the patient. The eye had been affected with glaucoma.—THE PRESIDENT asked whether the fundus could be well seen, and, being answered in the affirmative, inquired why sarcoma was diagnosed.—Dr. BRAILEY said that the diagnosis was made chiefly on the peculiar position of the detachment.

Extreme Tortuosity of the Arteries and Veins of the Retina.—Mr. BENSON (Dublin) showed drawings of the fundus oculi from a young woman, aged 17. The veins and arteries were very large and tortuous in both eyes; there was no evidence of past neuritis, nor excessive tortuosity of the temporal or radial arteries; there were some hypermetropia and convergent strabismus; a successful operation for squint was not followed by any alteration in the retinal vessels.—Dr. STEPHEN MACKENZIE said that the case was analogous to the cases of tortuosity

of the veins which had been shown to be rather a peculiarity than a disease.—Mr. NETTLESHIP had seen two cases in which a remarkable tortuosity affected the veins, but the arteries were not affected. One of these cases was that of a medical student who had no error of refraction, and no disturbance of vision. In reply to the President, Mr. Nettleship said that the tortuosity seemed to be entirely confined to the retinal vessels.

Sympathetic Iritis occurring Thirty-two days after Enucleation of an Eye for Accident.—Mr. SIMEON SNELL contributed an account of a case of this nature. It was that of a man, aged 26, injured whilst working, on September 26th, 1881, by a piece of steel. The cornea and lens were wounded. He was seen soon after the accident, and careful examination appeared to negative the presence of a foreign body in the eye; atropine drops and a cold pad were ordered. On the twenty-eighth day after the accident, the lens was evacuated through an upper corneal incision. This gave relief, and the subsequent history was briefly as follows. The injured eyeball was painful at times, but inflammatory signs subsided, and the eye commenced to shrink. The sound eye suffered only from sympathetic irritation. The enucleation of the damaged organ was always rejected, until December 9th, on which day it was excised. A piece of steel was found in the lower ciliary region. Little change was apparent in the remaining eyeball, but he complained of "mist" in front of the eye at the end of about a week; there was no evidence of neuro-retinitis, and a weak solution of atropine, three weeks or more after enucleation, produced wide dilatation of the pupil. On January 9th, 1882, one drop of a 1 per cent. solution of eserine was inserted. He complained of pain and discomfort on the following day, and when seen on January 11th, there was severe iritis; this subsided under atropine and rapid mercurialisation. He made a satisfactory recovery, and could read Jäger 1. Eserine was used in consequence of an observation at a recent meeting of this society on its value in sympathetic irritation. Did it excite the outburst of iritis in this case? The iritis occurred thirty-two days after enucleation, and one hundred and six after the primary injury.

Sympathetic Inflammation after Enucleation of an Injured Eye.—Mr. W. ADAMS FROST said that the patient in this case was a girl, aged 9. The cornea and sclerotic on the left side were wounded. Enucleation was advised, but the consent of the parents could not be obtained until the thirty-fourth day. The right eye at that time and for a week later showed no symptoms: but on the fifty-sixth day after the accident dimness of vision came on, and a week later there was *keratitis punctata*. The patient was treated with mercury and atropine, and recovered with normal vision.—Mr. SHADFORD WALKER (Liverpool) remarked that in both these cases mercury was given; he wished to know what there were any clinical grounds for this line of treatment.—Dr. C. E. FITZGERALD was anxious to elicit the opinion of the Society on enucleation. At the International Ophthalmic Congress Dr. Waltham had brought forward a series of propositions, to which he desired the Congress to subscribe; this was not done, but if the conclusions drawn from such cases as these were correct, then it became a question whether enucleation ought not to be performed in every case of severe injury. He had lately had a severe case of sympathetic ophthalmia forty years after the injury had been inflicted; he enucleated the eye, and found bone in the sclerotic. The other eye was now the seat of serious sympathetic inflammation. He had found in some recent cases that the globe contained micrococci, which were in greatest number near the wound.—Mr. CRITCHETT said that one difficulty he felt in such cases was, that a comparatively slight injury of one eye might lead to an inflammation of the other eye. In one case, this sympathetic ophthalmia was so severe that the eye was lost, while the injured eye recovered; such a case as this made him hesitate sometimes to advise enucleation. The position of the injury was an important point; if the ciliary region were injured, it was perhaps advisable to advise enucleation at once, and if it was comparatively deep, to obtain the consent of the patient and his friends to the enucleation of an eye which had not been injured. He had not himself seen several cases where the sympathetic ophthalmia came on after enucleation; indeed, he had observed enucleation was an actually some preventive. An interesting question was agreed for a meeting of going merely to the eye, or to the ciliary body. Mr. CRITCHETT said that an enucleation was followed by the ciliary nerve, and that, when the nerve in the other eye was severed late, it was due to the mild type of the inflammation. He suggested that the clinical symptoms in the sound eye were later than in the injured eye. If the eye were excised early enough, it was possible that sympathetic ophthalmia would very rarely occur. It was a question, however, to decide what should be done in any particular case, and it was impossible to lay down any hard and fast rule. The President said that he thought the enucleation of the patient, whether or not great care could be taken, was one of the points to be

considered. Among the poor, where it was impossible to be sure that directions would be carried out, it was in many cases to the manifest advantage of the patient to remove an eye, which, in a patient where careful nursing was possible, might be saved. In some cases in private practice, he had not removed eyes which had suffered severe wounds, and had been gratified, after a year or more of careful tending and care, by a very complete restitution of vision. Where enucleation had been performed, the after-treatment was most important; it was desirable to keep the patient under care and regimen for at least two months, until it was perfectly evident that the eye could bear the light without distress.—Mr. ADAMS FROST had given mercury merely because he had seen it do good in serous iritis.

Bony Tumour of the Conjunctiva.—Mr. ANDERSON CRITCHETT said that the patient was a young girl, aged 18. Midway between the corneo-sclerotic margin and the external canthus was a growth, about the size of a pea; it was slightly movable, and had been noticed three days after birth; it had enlarged rather rapidly during the five years before she came to St. Mary's Hospital. It was embedded in, and adherent to, the subconjunctival tissue, but had no attachment to the sclerotic. Microscopical examination showed large lacunæ, with canaliculi, situate in a homogeneous matrix.—Mr. SPENCER WATSON had met with a somewhat similar case. The patient was a boy, who had a small tumour at the upper and inner side of the globe. After removal, it turned out to be an ivory exostosis, and a few Haversian canals were seen under the microscope; the tumour was in part cartilaginous.—Mr. SHADFORD WALKER had had a similar case of a bony tumour, which lay under the conjunctiva; it indented, but was not attached to the sclerotic.

Detachment of the Vitreous Humour.—Mr. SWANZY (Dublin) said that the patient was a farmer, whose general health was good, when, in October 1881, the sight of the left eye rapidly failed, and in a week disappeared. About a week later, the other eye began to fail. On January 10th, 1882, vision in the left eye was reduced to perception of light. Immediately behind the lens, and in contact with it, was an opacity of a greyish colour, which somewhat resembled a detached retina, and was movable only at one small part. Vision in the other eye was good, but the ophthalmoscope showed some small retinal hemorrhages. It was thought advisable to remove the left eye, and the opacity was then found to be due to a total detachment of the vitreous humour, which lay in contact with the ciliary body and the surface of the lens. The vitreous chamber was filled with a clear fluid; the vitreous membrane contained some blood-corpuscles and pigment. Mr. Swanzy discussed various hypotheses, which might help to account for this condition, but was unable to give any satisfactory explanation.

Primary Tubercle of the Iris.—Mr. SWANZY also related the case of a girl, aged two years, who presented a small white tumour on the surface of the iris; there were also two other minute tumours on the iris. The diagnosis of tubercle was made, and the eye was removed; microscopical examination showed a round-celled growth, with giant-cells, thus confirming the diagnosis. Five months afterwards, the child was still in good health. The family history showed that various members of the family had suffered from tubercular diseases. Mr. Swanzy referred to a case, published by Deutschman, where a child remained in good health six years after the enucleation of an eye in a far more advanced stage of the disease.

Tubercle of the Iris.—Mr. MILES (Manchester) showed drawings and a micro-photograph, from a case of tubercle of the iris, retina, and choroid. The eye was removed; and, on section, the anterior chamber was found to be filled by a mass of tubercle, which extended back to, and implicated, the base of the ciliary processes. The retina contained two tubercles; at these points, the structure of the retina was almost entirely replaced by the new growth.

Case of Symplophos.—Mr. J. G. MACKINLAY: Total Symplophos of Lower Lid, cured by Peale's operation, performed six weeks earlier.

Mr. McHARDY: 1. Transportation of Skin from inner side of arm, to replace skin removed, with an epibulbar, involving the inner third of the lower eyelid: operation, June 1881. 2. Half of a Cataractous Lens, which was almost black when removed from the eye of the patient, whose right eye contained a cataract which appeared to be growing black.

Mr. CRITCHETT: New Test-Types.

Mr. ANDERSON CRITCHETT: 1. A case of Nuclear Cataracts, treated by marginal incision. 2. A case of Nuclear Cataracts, in which soft and modes of operating had been adopted.

Mr. LANSKY: Drawings of two cases of Rupture of Choroid from external injury.

Mr. A. J. SAMPSON: Exophthalmos, with none of the Carcinic and Thyroid phenomena of Graves's disease. The patient was a woman, aged 44; she had gone on three occasions from blindness, which was

apparently due to obstruction. Prominence of the eyeballs was first noticed in May 1881. In November, there was extreme proptosis; the thyroid was not enlarged; there was no cardiac palpitation, except on exertion; and arterial tension was rather above the normal. She had slowly but steadily improved under treatment, which consisted in the application of the continuous current to the cervical spine, combined with the administration, at various times, of arsenic, ergot, digitalis, and (latterly) iron.

Mr. JULER: Improved Refraction Ophthalmoscope.—The chief novelty was in the attachment of the mirror, which was provided with an universal ball-and-socket joint, and could thus be turned in any direction. Other advantages claimed were simplicity of construction, and a moderate price.

The PRESIDENT said that it had been determined to hold a discussion on sclerotomy, and that June 8th had been appointed. Several papers had already been promised, and with these the discussion would open; it was desirable that gentlemen desirous of contributing to the discussion should communicate with the secretaries. After some conversation, it was agreed that if an adjournment was necessary it should be to June 9th, for the convenience of country members.

REVIEWS AND NOTICES.

ON CHOREA AND OTHER ALLIED MOVEMENT DISORDERS OF EARLY LIFE. By OCTAVIUS STURGES, M.D., Physician to the Westminster Hospital, etc. London: Smith, Elder, and Co. 1881.

THIS work, although small in actual size, is a *multum in parvo*. Besides containing a mass of valuable and carefully arranged facts and observations, the reflections advanced thereon supply much food for thought and study. As a scientific medical production, it is one which will command attention and respect, on account of the evident experience and ability of the author in the accumulation of material, and of the suggestive and logical argument he founds upon the data at his disposal. Although the treatise deals largely with theoretical questions, these hypotheses are deduced from a rational basis, namely, from the consideration of a large number of cases which have come under the author's own observation, and from the collection of authenticated examples in the practice of others. These facts are presented to the reader in detail in an appendix, and constitute a valuable and practical addition to our knowledge of the subject. Upon these are founded the author's views on the pathology of the disease; and his opinions are advanced and maintained in so able and scholarly a manner as to be worthy of the most careful consideration.

One of the most prominent features of the work, and which all the facts and arguments are brought forward to support, is the view upon which the author strongly insists, that chorea is essentially a functional disorder. Considerable stress is laid upon the statement that we must not look for anatomical changes as a cause for this disease, but that the whole course and symptoms of this affection show it to be simply perverted function of a transitory nature, leaving no permanent traces behind it. Upon the correctness of this view depends in great measure the whole question of the etiology and pathology of chorea. It is unfortunate that Dr. STURGES has not laid down an exact definition of what he understands by "functional disease", as opposed to that due to "structural change"; as these terms are vague, capable of various meanings, and a distinction between the two is often only a matter of verbal discussion.

We quite agree with the author in believing that there has not yet been demonstrated any gross material lesion which constitutes the essential cause of chorea. That various morbid processes have been discovered in the nervous centres of those who have died from or with this disease, is certain; thickenings, softening, emboli, etc., in various situations have been detected, but these do not seem to us to prove that these abnormalities are the necessary primary cause of the disease. There is no constancy either of the lesions themselves or of the situations they occupy. Considering the comparatively small numbers of necropsies, and the extreme divergency of results, there is nothing to prove that the occasional anatomical changes found are not the result or complication of chorea, rather than its cause. It may even be admitted, and it is doubtless true, that such anatomical lesions may be the starting point of the disease, but this does not necessitate that they are its primary origin. A tumour, hæmorrhage, and other morbid states of the brain may give rise to epileptic convulsions; but these, if the exciting, are not the essential, cause of them, as the attacks may exist without discoverable change in the nervous centres. These lesions only excite the condition which leads to the epilepsy. In the same way, we can imagine that emboli or other morbid conditions may indirectly

cause chorea by inducing those changes which lead to it. That they are not the true essential cause, is proved by the fact that they exist in the nervous centres without chorea, and that this disease is often present without discoverable structural changes. The affection thus appears to be due to some condition of the nervous system which has not yet been anatomically demonstrated, which may be occasionally induced, like epilepsy, by a tangible lesion, or, at all events, is sometimes associated with it, but for which such is not essential. While admitting this, are we justified in calling such a disorder a functional one? We confess we look with distrust upon the term. It is difficult to define, it is misleading, and apt to be misunderstood. In the popular sense, it comprises those diseases for which no adequate structural change can be discovered. Such a distinction is surely unscientific, as it is fluctuating, and varies according to the progress of knowledge, and what is functional to-day may be found to be organic to-morrow. Dr. Sturges very ably endeavours to show that chorea may conveniently be termed functional, because the whole course and progress of the affection indicates perverted natural action, which after a brief period returns to its normal condition, leaving no traces behind. Such a definition applies to many diseases, including those we call organic, these last being demonstrable by an anatomical lesion in addition to modification of function. According to the above theory, the only distinction between the two is that in functional disorder this is not to be detected. Because changes cannot be ascertained after death, this is no proof that they have not existed during life; they may be too minute for us to determine, or their traces may have disappeared. Vascular alterations, for example, may have been present which are subsequently not to be traced. These could not be strictly called functional, in the sense of being unaccompanied by physical changes. If they be so termed, because of their being temporary modifications of a normal act, the same would apply to almost all affections of a slight nature, and thus to draw a distinction between health and disease would be impossible.

The fact is, that in many disorders we simply do not know what is their cause. In these, to our senses, all structure appears normal; but it seems only reasonable to assume that the definite alteration in function must be represented by some modification in structure, even if it be temporary. It is true that this is not gross, neither is it visible or tangible; and we may even admit that, from its slight nature and transitory character, it may never be capable of detection. At the same time, it seems impossible to disassociate altered action from altered structure. Doubtless much can be said on both sides of what perhaps is a mere verbal controversy; and Dr. Sturges has urged a place for functional diseases with such ability, as almost to persuade us to adopt his views.

The question of the connection between chorea and rheumatism is discussed; and Dr. Sturges shows that his own cases and those of other observers seem to indicate that, in the large majority of instances, there is no necessary relation between the two. In children, especially, it is comparatively rare for rheumatism to have been present at all in choreic patients; and even when it has existed, there is no evidence that the one disease is the essential cause of the other. It is admitted that acute rheumatism, more especially in adults, may give rise to chorea, just as it does to other nervous disorders due to the vitiated state of the blood, but such cases are rare. In the young, pain is a well known exciting cause of chorea, and this may explain the connection. Even when chorea and rheumatism are associated, the exciting cause of the former is the same as when it occurs alone, namely, psychical disturbance. In short, Dr. Sturges, while admitting that in a small percentage of cases these two affections occur together, and that in a few instances the one may actually be the exciting cause of the other, denies that there is any necessary relation between the two: that chorea usually exists without rheumatism, and that the latter, when present, is not the essential cause. These points, we consider, the author fully establishes, not only by his own cases, but by the statistics of others.

Another important question is fully entered upon, namely, the relation of abnormalities of the heart with chorea. The author maintains that the irregularities of action and the functional murmurs which are frequently associated with the disease are symptoms of chorea itself, and not due of necessity either to anæmia, rheumatism, endocarditis, or other pathological conditions. While admitting that effusions of lymph are occasionally found on the cardiac valves after death, it is urged that this is the result rather than the cause of the heart complication. This seems to be borne out by the fact that, in the large majority of cases, the symptoms are innocuous, and altogether disappear with the chorea, leaving no traces behind. Again, the author points out that the occurrence of cardiac alterations bears a strong relation to the age of the patient, and not to the severity of the disease; as, the more youthful the sufferer, the greater the prevalence of these disorders, and

as age advances the rarer they become. This fact is distinctly opposed to their origin being due to endocarditis, and points rather to the participation of the heart in the general muscular disturbance of the body. The irregularities seem to be best explained by muscular derangement of the organ, and the murmur by paresis and relaxation of the papillary muscles of the same nature as affects the remainder of the system. The conduct of the heart is thus in accordance with the successive modes or differentiations of the muscular disorder. It is unorthymical and irregular in early childhood, accelerated in youth, and left undisturbed in old age.

As a fatal disease, it is shown that chorea is rarely to be feared. The few who die of this disorder are females at the age of puberty. Exclusive of this sex and period of life, chorea may be said to be unattended with danger to life. In these exceptional cases, there are usually complications in the shape of disturbed intellect. It is pointed out that if rheumatism has little share in the production of chorea, it has some relation in the association of fatal cases.

The various pathologies are passed in review, as well as the different anatomical conditions supposed to originate chorea. In reflecting upon these, the author maintains that there is no morbid condition we know that is capable of producing the symptoms of this disorder, and that it is difficult to conceive of any diseased state anatomically demonstrable capable of giving rise to them. As structural change fails to account for chorea, he bases the origin of that affection on functional disturbance, as has been already indicated.

Such are a few of the more important points discussed in this interesting little work. We refer our readers with every confidence to the original, in the perusal of which they will find substantial information and food for profitable reflection.

THE DISEASES OF THE SPINAL CORD. By BYRON BRAMWELL, M.D., F.R.C.P.E., Lecturer on the Principles and Practice of Medicine in the Extra-academical School of Medicine, Edinburgh, etc. 8vo. Pp. 300. Edinburgh: MacLachlan and Stewart. 1882.

IN the whole range of medicine, there is perhaps no branch which has undergone more extensive changes, or made greater strides in advance, than that of our knowledge of the structure, functions, and diseases of the spinal cord. The histological researches of Lockhart Clarke, the experimental discoveries of Brown-Séquard, and the more recent pathological observations of Charcot, Erb, and others, have completely revolutionised our conceptions of the whole subject, or rather they have instituted information on these matters, which to the last generation were utterly unknown. Even so late as twenty years ago, the teachings of our text-books and the instruction from professorial chairs on special diseases of the spinal cord were of the most elementary nature. The notions of its structure were of the vaguest character, the knowledge of its functions were uncertain and conflicting, and, as a consequence, the diagnosis and prognosis of its diseases were most imperfect and unsatisfactory. Of late years, this confusion has in great part been cleared up, owing to our improved knowledge of the anatomy and physiology of the nervous centres; and, if much requires yet to be accomplished before we can congratulate ourselves on having overcome all difficulties, enough has been done to save nervous disorders from being the *bête noire* of the profession, and to render them at the same time an interesting and profitable study.

The work before us, just published, brings before its readers a complete résumé of all the recent investigations on the subject both at home and abroad, and may be said, in a word, to lay before the profession, within a moderate limit, all the knowledge we at present possess concerning the pathology of the spinal cord; those, therefore, who desire to be informed, in concise and clear terms, of this difficult and complicated subject, cannot do better than carefully study the book under notice.

The treatise may be looked upon, as indeed the author states in his preface, that it is an abridgement of a work. It pretends to place before the student and the practitioner all that is known of the subject it undertakes to discuss. Considering the enormous difficulties to be encountered in the task, this has been carried out in a masterly manner, and evidently by one who has thoroughly and practically acquainted himself with all the details of the inquiry. Such a work it is a pleasure to review in the true sense of the term, as it deals with the description of facts, rather than with the expression of opinions. Our only wish be least arrived at by the study of the contents.

The first part, beginning with a description of the anatomy of the spinal cord, and, afterwards, considering the complicated problems there involved, it must be admitted that nothing can be clearer, nothing can be more intelligible, than the manner in which the whole question has been dealt with. This is further illustrated by a series of most excellent

diagrams, so numerous and so simple as to indicate to the merest tyro the ideas the author means to convey. Were we disposed to be hypercritical, we might assert that these explanations were too good and too explicit, and that future researches might modify some of our present notions, in the same way as present discoveries have nullified former statements, advanced with equal confidence. At the same time, it must be remembered that this work only professes to indicate our most advanced and recent knowledge as accepted at the present day; and the graphic method adopted by the author, if it may be accused of being somewhat too arbitrary, is undoubtedly the most successful means of demonstrating to the understanding what would otherwise be a perplexing and confusing problem.

Next is discussed the pathological condition of the cord; and this is done in an equally clear and convincing manner. Dr. Bramwell, while continuing to employ the diagrammatic method to explain his views, supplements it by what constitutes one of the chief attractive features of his book. This consists of a series of exquisitely artistic chromolithographs of original sections of the cord in health and disease, prepared and drawn by himself. We have never seen anything more beautifully displayed; and we congratulate the author on the successful manner in which they have been executed. They illustrate, from actual specimens, all the chief lesions of the spinal cord, and render to the senses a picture of easy comprehension of what, a few years ago, was a profound mystery.

A suitable method of case-taking is next detailed, and the author very properly lays considerable stress upon the importance and necessity of a systematic procedure in this particular. In the same chapter is included a general summary of symptoms, diagnosis, prognosis, and treatment.

Finally, the work concludes with a brief account of the special diseases of the spinal cord. The author explains that this is a supplementary chapter; and we venture to think that, in a future edition, its value would be enhanced if this section were more extended and complete. At present, it fulfils the object the writer has in view—namely, to illustrate the physiological and pathological phenomena as the result of disease; but we look forward in hope, at no distant date, to a more elaborate clinical disquisition on the subject.

In this, as in all other books, there are matters of detail to which exception might be taken; but these for the most part are questions of opinion to which considerable latitude must be given. The work, as a whole, we can strongly recommend to our readers. It is evidently the outcome of experience, labour, and thought. Although simple, clear, and concise, it brings before the profession a complete and exhaustive statement of one of the most difficult and complex problems in the whole range of medicine.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

LIME-JUICE.

THE increasing use of temperance-drinks is a matter for great congratulation; and it is especially in summer that the introduction of wholesome, agreeable, and refreshing beverages of a non-alcoholic character deserves continued encouragement. Some objection is entertained to many of the somewhat medicated syrups of hypophosphites which have been popularised, but which are not always necessary or desirable for habitual table use by persons in vigorous health. Among the various beverages which are free from all objection may be mentioned different kinds of fruit syrups and juices, and especially, perhaps, lime-juice made from sound fruit, free from musty flavour, and unadulterated by sulphuric acid or any other artificial combination. Mr. Deane, of Albemarle Street, has introduced a lime-juice which he guarantees, and which is certified by chemists and physicians who have tested it, and which we find, to be free from adulteration, and pleasant to the taste. In flavour, brightness, and quality, the "Spécialité Lime-Juice" appears to be all that could be desired, and it belongs to a class of beverages which can be freely used.

PARASITIC PNEUMONIA OF DOGS.—Dr. Courbin of Bordeaux detected small worms in the alveoli of a dog's lung by microscopic examination. Some were free, some were encysted. The post mortem examination established pneumonia as the cause of the animal's death.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 20TH, 1882.

THE LEGAL RIGHT OF MILITIA SURGEONS TO RETIRING ALLOWANCES AND PENSIONS.

WHENEVER a material grievance is sought to be removed, it is of essential importance that sufficient relevant facts and arguments in favour of its discontinuance should be clearly notified. It is from a non-compliance with this requirement that numerous grave abuses have been endured, and many significant reforms delayed for years longer than they otherwise would have been.

There can, we presume, be no doubt that the hardships to which the older surgeons of the Militia have been subjected by recent regulations, in being deprived of their retiring allowances and pensions, is a very sore grievance. Their claims have been well and clearly stated in the petition submitted on their behalf to the Minister at War by Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee of the British Medical Association. In the remarks concerning their ill-treatment, in this JOURNAL, we have further dealt with the subject on its purely equitable grounds. Their legal rights to these allowances and pensions, which depend upon statute law, have, however, perhaps hardly yet been pointed out in that adequate manner in which we believe they should be, to satisfy the War Office and Parliament that the militia surgeons have an unimpeachable lawful title to these payments. In this respect, the adverse reply of Sir Campbell Bannerman, until recently the Financial Secretary to the War Office, on behalf of Mr. Childers, addressed to Mr. Hart, on the subject of these claims, which we recently published, seems to call for critical discussion in respect to the points of law raised. With this view, we have instituted a careful examination of the Acts of Parliament relating to the pay of the Militia, and other statutes referring to this portion of the army, which directly and indirectly relate to militia surgeons, and other publications concerning them; also the rules of interpretation for the construction of statutes; and have submitted them to legal opinion. We now offer the following remarks on this part of the subject.

Upon looking into about fifty Acts of Parliament upon the above-mentioned claims of the militia surgeons, we find that provisions were made up to 1874 for the payment of these allowances and pensions, at the rate of six shillings a day, to such of these surgeons who had faithfully served in the Militia for twenty years, and were rendered unfit for further service therein by age or infirmity. In 1871, by Order in Council, all jurisdiction over the Militia which was vested in or exercisable by the lords-lieutenant of counties reverted to the Crown; and on this account, and for other considerations, it was enacted by the Militia Law Amendment Act of 1874, 37 and 38 Vict., c. 29, that Her Majesty might, by Royal Warrants, Orders, and Regulations, give directions as to the pay and other matters of the Militia, in the same manner as in the case of the regular forces; and that, after the passing of that Act, the Militia Pay Acts should cease to be of any force as Acts of Parliament, but should have the same effect as if Her Majesty had, immediately after the passing of that Act, embodied the provisions thereof in a Royal Warrant; and that the Militia Pay Acts should mean the Militia Pay Acts 1868 and

1869, as continued by the Expiring Laws Continuance Act 1873. By a Royal Warrant dated July 19th, 1876, it is stated that nothing contained in that Warrant "should be held as giving to any medical officer of the Militia a claim to any pension or retiring allowance granted to medical officers of Her Majesty's forces."

The reply on behalf of Mr. Childers to the petition will thus appear to be neither very strong nor logical. In answer to Sir C. Bannerman's assertion that, until 1829, militia surgeons belonged to the permanent staff of militia regiments, and were, like other members of this section of the army, granted pensions on retirement under the Annual Pay and Clothing Acts, we venture to submit that, although this statement may be true, neither in these statutes nor in the one passed in 1824, 5 Geo. IV, c. 33, referred to in the petition, nor in any other statute, is there anything to imply that they belonged to the permanent staff.

We are further informed by him that the Pay and Clothing Act, 31 and 32 Vict., c. 76, merely secures to militia surgeons employed before 1829 the pensions granted to them under former Acts; and he adds that under neither of these last mentioned statutes are these surgeons entitled to any retiring allowance or pension on retirement on account of age or infirmity, and that there is no other statute which gives them this right. Now, the language of the latter Act entirely contradicts the former portion of this statement; for by the twentieth section of such it is provided, after reciting that certain allowances have been granted, in pursuance of former Acts, to militia surgeons who have been rendered unfit by age or infirmity for further service: "Such allowances shall be issued and paid during the continuance of this Act, in like manner and subject to the same restrictions as the allowances granted by this Act to adjutants who shall by age or infirmity be rendered unfit for further service." It is quite clear, therefore, that other surgeons than those employed before 1829 were receiving allowances and pensions; and it was intended by this statute that they should still be paid. Again, not only under these two statutes, but by virtue also of several other annual Acts of Parliament, as we have before mentioned, the militia surgeons are entitled to allowances and pensions; and it is surprising that Sir C. Bannerman should appear to ignore these statutes.

As the words of the numerous statutes which entitle surgeons to these payments are explicit, their plain and ordinary meaning should be adhered to; but, supposing these words were obscure or ambiguous, even then, according to the rules laid down by eminent jurists and judges upon the interpretation of legal language, or what is called upon the continent legal hermeneutics, such Acts of Parliament would be construed in favour of the payments referred to. Thus Vattel, in his excellent treatise upon the *Law of Nations*, aptly states that the reason and motive of the law that has led to the making of it, is one of the most certain means of establishing the true sense, and great attention ought to be given to it when it is required to explain an obscure, equivocal, or undetermined point, or to apply it to a particular case; while Domat, one of our leading European writers upon the civil law, justly says that laws intended to favour particular individuals ought to be interpreted with all the liberality to which their interests are justly entitled in an equitable point of view, and should not be severely interpreted, nor be applied in a manner calculated to prejudice the persons intended to be favoured. The same principles have been enunciated in our judicial tribunals, and those of all civilised countries. In the case of "*Regina v. Skeen*", it was decided in the Court for the Consideration of Crown Cases Reserved in 1859, that, if the words of a statute were susceptible of a reasonable and also an unreasonable construction, the former must prevail; and Mr. Justice Keating gave a decision to the same effect in the case of "*Boon v. Howard*", in the Court of Common Pleas in 1874.

Again, it must be admitted that, while the provisions of the Militia Pay Acts ceased to be in force as statutes after the passing of the Militia Law Amendment Act of 1874, but merely existed as declaratory statements in Royal Warrants, the right of the militia surgeons to their allowances

Now we pass to the very remarkable experiences of Keith, as recorded by Yandell. They may be stated thus. In 230 ovariectomies done in fourteen years, without antiseptics, the mortality was nearly one in seven; but in the five years immediately preceding the use of the spray, the mortality was only one in ten and a half; and in the last year before using the spray, there was but one death in twenty-one cases—"the mortality was steadily diminishing all that time". In the first eight cases under antiseptics, there were two deaths, and then there was a run of eighty without a death. "The solutions used at first were not very strong. As we went on, and got to operating in the hospital, we began to use them strong", and went on to use the regular 5 per cent. solution. Then high temperatures—104° to 107°—never observed before antiseptics, were very often observed, and were explained by the absorption of carbolic acid. And death with convulsions and bleeding from the kidneys was regarded, no doubt rightly, as evidence of carbolic poisoning. And then Dr. Keith found that he himself was poisoned by the carbolic acid, and suffered from bleeding from the kidneys until he gave up the spray. Since March 1881, he has not used antiseptics in ovariectomy, "in the proper sense of the word. Sometimes I do use very weak carbolic solutions, but not as spray; at other times, I use water alone". Since leaving off the spray, and including twenty-six other cases done without it, Dr. Keith says: "I have had but a single death in a total of fifty-two cases done without antiseptics."

All this affords ample material for serious reflection. If in Switzerland antiseptics have been followed by a remarkable diminution in the death-rate, if Dr. Keith had one run of eighty cases treated antiseptically without a death, is an occasional death from carbolic acid poisoning (which may, perhaps, be avoided by not using solutions unnecessarily strong, or by the use of some other agent) to justify a surgeon in operating without more than ordinary protection against infection? What does recent experience in London say on this point? Has the mortality after ovariectomy in our large hospitals been smaller of late years than it was before? If so, can the diminution be explained by the increasing experience of the operators? On this point, the registrars of our general hospitals may give some important evidence; and in the special hospital which may still be regarded as the head-quarters of ovariectomy—the Samaritan—the experience of the year 1881 should afford an array of important facts. In that hospital, the patients are very much of the same class of life, and are treated under very similar conditions by three operators of large special experience. Two of these surgeons use the spray of carbolic acid in every operation of a strength of 1 in 40, and follow out in the strictest manner all the precautions of the Listerian method. The third, after gradually diminishing the strength of the spray till water alone was used, gave it up altogether. Here, then, were the "comparative observations made under similar conditions with and without spray", proposed by Mr. Spencer Wells, carried out under singularly favourable conditions. And what has been the result? We have been informed that the committee has expressed a strong opinion against the performance of ovariectomy for the future without full antiseptic precautions; and the experience of 1881 would seem to justify this recommendation, however objectionable it may be to admit of any interference by a committee of laymen in practical details. Still, if in the same institution, at the same time, by operators of equal experience, the same operation with antiseptics is followed by a mortality of about 7 per cent., and without antiseptics by one of about 30 per cent., the fact deserves very serious consideration, and is rendered additionally important by the apparently contradictory results of experience in Switzerland and in Edinburgh which have now led us to direct the attention of our readers to the matter.

DR. MEYMOTT TIDY, Lecturer on Chemistry and Forensic Medicine at the Leaden Hospital, has been appointed, on the nomination of the President of the Royal College of Surgeons, Scientific Analyst to the Home Office in cases of poisoning, jointly with Dr. Stevenson of Guy's Hospital, nominated by the President of the College of Physicians.

DR. BARNES, who for some years held the office of Physician to the Seamen's Hospital (late *Dreadnought*), has been unanimously elected Consulting Physician to the hospital, in the room of the late Dr. Budd.

AT the request of the President of the Royal Medical and Chirurgical Society, Mr. Watson Cheyne and Mr. E. M. Nelson will, at the close of the next meeting on Tuesday, May 23rd, exhibit Dr. Koch's specimens of the bacilli of tubercle, and other pathogenic bacteria.

IN consequence of the increase of the number of students of medicine and natural science in the University of Cambridge, it has been found necessary to add to the new museums further provision for the teaching of these subjects; accordingly, rooms are to be built for the study of morphology and histology. A professorship of animal morphology was founded by a grace of the senate passed on May 11th.

THE list recently published of the nine new baronetcies conferred by the Government will have caused some disappointment to members of the medical profession, who have good reason to think that the claims of medical science of such distinction have recently been much overlooked. We might have expected to find more than one name of men who have rendered inestimable service to humanity by their discoveries and work in surgery and preventable medicine in this list; and it is with some disappointment that it will be noted that seven of the nine are purely political creations.

INTERNATIONAL MEDICAL CONGRESS.

THE Executive Committee held their final meeting on the 15th instant; Sir J. Risdon Bennett, F.R.S., in the chair. The Treasurer presented the balance-sheet of receipts and expenditure, signed by the auditors, Dr. Pitman and Professor J. Marshall, F.R.S., from which it appeared that about £9,030 had been received, and £8,730 expended—leaving a balance in hand of £300; which the committee directed to be handed over to Dr. S. Wilks, F.R.S., Treasurer to the Association for the Advancement of Medicine by Research. The Treasurer stated that 3,180 entrance fees had been paid, amounting to nearly £3,300, besides subscriptions from 1,105 persons, amounting to more than £5,700; and that £1,200, which had been promised as a guarantee fund in case of need by 126 subscribers, had not required to be called upon. It may be added that the volume of abstracts prepared for use at the sitting of the Congress, and the four volumes of *Transactions* published after an interval of less than five months, a copy of which has been presented to every member, cost about one-half of the whole amount received. The meeting terminated by the passing of a cordial vote of thanks to the Honorary Treasurer, Mr. W. Bowman, F.R.S., and the Honorary Secretary-General, Sir W. Mac Cormac.

THE METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

A MEETING was held at the Mansion House on the 26th ult., under the presidency of the Lord Mayor, to make known the principles of the Metropolitan Provident Medical Association, and to help in extending self-supporting and self-governing provident dispensaries throughout London. The meeting was addressed by some leading philanthropists and medical men, and it is evident that the association is making steady, if not rapid, progress. Eight provident dispensaries have been opened. Two of these were previously in existence, and have been transferred to the association in order that they might be enlarged and worked under its rules. One was only opened last month, so that it has supplied no returns. But the other seven have a total of 8,353 members, and the total yearly subscription of members amounts to £1,512 13s. The income of the Croydon Dispensary is already very nearly sufficient for its maintenance, and it is believed that the Lamb's Conduit Street and other branches will soon become self-supporting. The statement speaks hopefully of the enterprise; and the Association believe that ere long they will be able to provide suitable medical attendance and medicine for the working classes, in every district of London, on the principle of mutual assurance, by means of their dispensaries.

DISCUSSION ON SCLEROTOMY FOR GLAUCOMA.

AT the last meeting of the Ophthalmological Society, the President, Mr. Bowman, announced that a discussion on Sclerotomy would be held on June 8th. This operation, we may remind our readers, has been strongly recommended in recent years as a substitute for iridectomy in glaucoma. In 1867, the operation was foreshadowed by Wecker, who held that if, in iridectomy for glaucoma, an incision could safely be made in the sclerotic without removing any iris, that would be the best course. In the following year, Stellwag carried this advice into practice in two cases. The theory upon which the operation was recommended and performed was, that the efficacy of any operation for glaucoma depended on the interposition between the lips of the wound of a layer of new and more porous tissue, and that such a layer was only to be obtained when the scar lay in the sclerotic. This, which came to be known as the "filtration scar" theory, was severely criticised by Schweigger; and, at the International Congress in London last year, Professor Schoeler reported experiments on animals which appeared to disprove it. (The discussion will be found at page 596 of our last volume.) The operation itself has varied much in the hands of different surgeons. Stellwag, and, later, Quaglini (*Annal. d'Ocul.*, 1871) made a peripheral wound with an iridectomy knife; Wecker performed a subconjunctival operation, and, fearing prolapse of the iris, left the central third of the sclerotic undivided. In England, the first writers on the subject were Messrs. Bader (*Ophthalm. Hosp. Rep.*, vol. viii) and Spencer Watson; the latter, in a paper read before the Clinical Society in 1876, advocated its employment in acute glaucoma; but, as a rule, operators seem to have confined the operation to chronic glaucoma in its various forms. A very full summary and bibliography of the subject has been published by Mauthner in Knapp's *Archives* (vol. vii). It is proposed in the discussion to deal, firstly, with the various manners of performing the operation; secondly, with the forms, stages, and complications of glaucoma to which the several methods of performing the operation are applicable; and, thirdly, with the *rationale* of the treatment. Should such an explanation be forthcoming, it would no doubt throw much light on the two former heads of the discussion.

CASE OF POISONING BY CARBOLIC ACID.

AN extraordinary case of poisoning has just occurred at Stonehouse. From the evidence, it would appear that a child, about six months old, being weak and delicate, was taken by its mother to the Royal Marine Infirmary to see the doctor. The little patient was seen by the surgeons, who prescribed confection of senna in half-teaspoonful doses, and a lotion of carbolic acid and glycerine—one part of the former to five of the latter—to be rubbed into the head. The prescription was taken to the dispensary by the father—a bandsman in the Royal Marines—who received a box containing the confection, and a bottle of lotion, both, it is said, without label or directions of any kind. On reaching home, he appears to have been in doubt—in the absence of any definite information or instruction—as to what should be done with the preparations which had been placed in his hands. He consulted his wife, and they not unnaturally came to the conclusion that the mixture in the bottle was to be taken, and that the thick stuff in the box was an ointment to be rubbed into the child's head. This was accordingly done, the unfortunate mother holding the child whilst her husband poured down its throat a quarter of a teaspoonful or more of the poisonous lotion. The result may be imagined: the child was terribly burnt about the mouth and throat, and, after lingering on in agony until the following day, died in great suffering. At the inquest, the fatal termination was attributed to "exhaustion and natural causes." The dispenser said he was not in the habit of labelling medicines, and had no labels with the words "for outward application only." The witness is described as giving his evidence in such an unsatisfactory manner, that he was severely rebuked by the coroner and some of the jury. In summing up, the coroner said the case had assumed a very serious aspect, and, if the medicine were the cause of death, they

would have to determine whether it resulted from misadventure or from negligence amounting to manslaughter. After a long consultation, the jury returned a verdict of "Death from natural causes," and expressed their regret that the medicine had not been properly labelled. Regarding the case from a purely medical point of view, we must confess that the verdict appears open to question. It is difficult to account for death on the theory of "exhaustion and natural causes." A quarter of a teaspoonful of the lotion would contain from three to four minims of carbolic acid, and this would surely prove fatal to a delicate child less than six months old. It is well known that, even in adults, very serious symptoms have been produced by a dose of from six to seven drops. A daily contemporary, commenting on the case, says: "Such a transaction cannot be called an accident; some one must be grievously to blame. This occurred in a Government establishment, supported by ample funds. If it had occurred in a small chemist's shop in the poorest part of the town, what an outcry would have been raised!" In these strictures it is difficult not to concur.

SALE OF POISONS.

WE commend the following story, which we extract from the *Colonist* newspaper of April 18th, to the attention of our home authorities and legislators. It purports to be a report of an inquest on a man who committed suicide by drinking half a pint of laudanum. A witness deposed: "I keep a drug-store near to the residence of the deceased. I received an order from a child, in the deceased's handwriting, and with his signature, for half a pint of laudanum, which I supplied—believing that it was to be used for some scientific purpose. Subsequently, hearing that the deceased had taken laudanum, I went, and found him sleeping. I tried to arouse him by means of smelling salts and shaking, but could not do so. I tried to give him an emetic, but he could not swallow. I then sent to the police-station, and some officers came and removed him in a cart; and I did not see him again." This is a graphic story of the free and open sale of poisons. The description of the supply of the drug, the feeble and unavailing efforts made to counteract its effects, and the carting of the patient to the hospital, cannot be improved upon by any comment of ours.

GAS IN LIVING-ROOMS.

THE discomfort experienced in apartments where gas is used for lighting may be attributed to two causes: first, to the vitiation of the air by the disengagement of the products of combustion; secondly, to the enormous quantity of heat developed during combustion, as well as to the notable quantity of carbonic acid and of watery vapour which are given off. The hydrocarbons of gas likewise yield much carbon. The use of heating by gas should be adopted only with great caution in all rooms which are habitually lived in, because existing apparatus only burns the gas in an imperfect manner, tends to vitiate the air, and induces considerable humidity, especially when the external air is cold and damp. Where gas is used to warm living-rooms, the gas-pipes should be carefully and completely ventilated. Gas-fires assuming to be so arranged as to dispense with flues for carrying off the products of combustion are scientifically faulty.

PROSECUTION UNDER THE BIRTHS AND DEATHS REGISTRATION ACT. ON Friday, the 12th instant, at the Thames Police-court, before Mr. Chance, Mr. Thomas Gray, of 12, Mountague Place, Poplar, surgeon to the Poplar Union Workhouse, was charged, at the instance of the Medical Defence Association, with having, on March 28th, issued a false certificate concerning the death of Minnie Lucy Wadsworth. Mr. Fiddham, solicitor to the Association, who prosecuted, stated that the defendant had in his employ an unqualified assistant, named Bell, who attended the child from the commencement of her illness to her death, on March 26th, she not being seen by any other person. On March 28th, the mother applied for a certificate of the death, and received one signed by the defendant, in which he stated that he attended Minnie Lucy Wadsworth, that he last saw her on March 26th, and certified the cause of death as pertussis. Mr. Mountagu Williams, who appeared

for the defence, said that he could not deny the facts, but his client had erred in ignorance of the law. Although the assistant, Mr. Bell, had no legal qualification, he had had great experience, and patients were safe in his hands. There had been no intention on the part of the defendant to deceive. Mr. Chance said that it appeared to him that a serious offence had been committed by the defendant, and inquired whether Mr. Pridham was content to accept a plea of "Guilty." Mr. Pridham replied in the affirmative, stating that his clients had no vindictive feeling in taking up these prosecutions, their object being merely to establish important matters of principle. Mr. Chance said the case was clearly made out to his mind, but, as the prosecution was not pressed, he would impose a penalty of £5 and £2 2s. costs.

SPREAD OF TYPHOID FEVER.

ANOTHER instance of the spread of typhoid fever through the agency of milk is recorded by Dr. Fenton, in his last report on the health of Coventry. The outbreak occurred in the latter part of last year, the medium of infection in the first instance being some water obtained from a local well, which had become polluted by leakage from an imperfect sewer. The matter was further complicated by the use of this water in a dairy, and subsequent infection, by means of the milk, of families in other parts of the city. Dr. Fenton fears, from his experience in this case and from inquiries in others, that due precautions were not taken in the examination of premises prior to their registration as dairies, and he rightly suggests that they should be all re-examined as early as possible.

PROTECTING INFLUENCE OF VACCINATION.

DR. J. H. RAYMOND, Health Commissioner of Brooklyn, furnishes the Brooklyn *Eagle* with the following interesting statement regarding the first hundred cases of small-pox that have come under the observation of the Health Department since the 1st of January last, which, he considers, should set at rest all questions as to the utility of vaccination.

"From January 1st to February 26th, there were reported to the department 112 cases as small-pox cases. Of this number, 98 were found on examination to have the disease, and 14 not to have it; and 2 cases reported to be chicken-pox proved to be small-pox. Of the 14 cases that were examined and found not to have small-pox, one was scarlet fever, 4 chicken-pox, 3 measles, one German measles, and 5 were cases of skin-disease. Of 100 who had small-pox, 45 had never been vaccinated, 27 of whom died. Eight others had pale, indistinct, and imperfect marks of vaccination, and were probably never vaccinated—using the term as it should properly be used. Of them four died, so that we may say that 53 had never been vaccinated, or that 31, or 58 per cent., died. Of the 47 who had been successfully vaccinated, 6, or 12 per cent., died. Twenty-four of this number were adults, who had not been vaccinated since infancy; 3 of them died. Of the 23 who were supposed to be protected by vaccination, 20 had a mild attack of varioloid; one aged 3 years, who had been well vaccinated in infancy and again later, died; two children, aged respectively 5 and 8 years, members of the same family, and having good marks of vaccination, died. The youngest person attacked was three months and the oldest sixty years old."

A LUCKY ESCAPE.

AN interesting case, showing the caprices of scarlet fever poison, is mentioned by Dr. Robertson in his last annual report on the Penrith Rural District. A pauper woman, who had a family of four children, occupied one small damp room, with one bed for her four children and herself. The eldest child, a girl of about twelve years of age, took scarlet fever; she had a profuse rash, and smart fever for a few days, and was attended by the parochial medical officer during the period of a week before Dr. Robertson heard of the case. This girl continued to sleep with the other three children and her mother, none of whom had ever had the fever. At the expiry of a week, from the appearance of the rash, the girl was removed to the hospital, where she made an admirable recovery, and not one of the family subsequently took the fever. Dr. Robertson adds, that he has repeatedly seen cases of scarlet fever removed from a bed in which other children have also been sleeping, and one night had been passed with the rash fully out,

and still no infection conveyed to the others. He has, however, never seen a week pass, with such overcrowding, and no ill results follow.

FILTRATION OF WATER.

THE recent controversy as to the action of filters, originating with so high an authority as Dr. Frankland, has made disclosures which are somewhat disquieting to the householder who reposes a simple faith in filters as a means of purifying the drinking-water supplied by public companies from the "moving organisms" which are so frequently found in it, and figure so strikingly in the official reports. The faith in charcoal filters has been very urgently impressed upon the public mind, without due stress being laid upon the fact that fresh filters and stale filters made with this material differ widely as to their powers; and now comes Professor Frankland, whose authority is of the highest, to inform us that his experience has been that "myriads of minute worms were developed in the animal charcoal and passed out with the water when these filters were used for Thames water, and when the charcoal was not renewed at sufficiently short intervals." This unpleasant but instructive information has further elicited a counter-statement from another gentleman, who resents Professor Frankland's announcement, but who does not refute it, only adding the additionally unsatisfactory one that "he has practically proved that animalculæ emanate quite as much from another filter as from one containing animal charcoal." This "other filter" is one which has been regarded as the best of modern filters, and is so reported by the eminent chemist in question. The result is to confirm the dictum to which physiologists and physicians have always been more disposed to attach capital importance than chemists, that it is of the highest necessity that the first causes of impurity and of the breeding of lower organisms should be kept away from the water; and that drinking-water should be from the first of absolute purity, and springing from a pure source. The notion of allowing impurities to be introduced into the sources of our drinking-water, and trusting to artificial contrivances to filter them away, is radically wrong. We must keep our sources undefiled; for, once sewage has been mixed with water, or germs of disease introduced into it, and the art of the chemist is really unreliable in endeavouring to free it from such pollution, or even to detect in all cases the germs which are the elements of danger. In the well known and well-observed epidemic at Reigate, it was shown that the presence, in an enormous reservoir under repair, of one man suffering from typhoid diarrhoea, sufficed to pollute an enormous body of water subsequently admitted to such an extent as to raise an extensive but thoroughly localised epidemic. It is hardly probable that in this case, serious and convincing as was the physiological test unwittingly applied, the art of the chemist would have discovered any traces of excess of organic ammonia in the vast body of water so triflingly but yet so fatally polluted.

PHYSIOLOGICAL SCHOLARSHIPS.

A VALUABLE addition to the encouragements and facilities for physiological study has been made at Owens College, Manchester. The Charity Commissioners, as trustees of the fund bequeathed by Mr. Robert Platt some years ago for the foundation of certain scholarships in connection with the study of physiology at the College, have prepared a draft scheme for the management and regulation of this fund, which scheme, unless opposition be offered, will receive final approval a month hence. By its provisions, the whole of the funds accruing from the legacy are vested in the College authorities. There are to be maintained out of the yearly income under the trust two scholarships, to be called the "Platt Physiological Scholarships," each of the annual value of £50, or of such less sum as the income shall pay. The authorities may, however, in case of accumulation of existing funds, or accretion of fresh capital, raise the value of the scholarships to £100, or some lower figure if the additional income will not warrant such an increase. Each scholarship will be offered for competition in alternate years, care being taken that one of them may be open in each year.

They can be competed for, in addition to Owens students, by persons who do not attend the College laboratory; but one condition of tenure is that the holder shall, for the first year, study in that laboratory, and, in the second, in such other laboratory in Europe as the Council shall determine. Students will be examined by three professors, in human physiology, comparative anatomy and histology. In case the scholarships, or one of them, are not, for some satisfactory reason, bestowed in any year, the Council have the option of giving two exhibitions, value £15 each, at the end of the summer session of the medical department of the College, together with the £50 scholarships, these being entitled respectively the "Junior" and "Senior" Platt Exhibitions. Any residue of income may be applied to the purchase of instruments and appliances for the purposes of physiological research, or for the encouragement, by prizes or otherwise of students engaged in the pursuit of medicine. Such encouragements for biological students are much needed in this country.

UNIVERSITY COLLEGE, LONDON.

ON Wednesday last, May 17th, the distribution of prizes in the Faculty of Medicine, University College, took place; the Earl of Kimberley, President of the College, being in the chair. In reading the report, the Dean, Dr. Roberts, announced that the medical department of the College was in a highly flourishing state, 106 students having entered during the session. The prizes and certificates were distributed by Mr. J. E. Erichsen, F.R.S., formerly Professor of Surgery, who stated that it was probably the last opportunity he would enjoy of counselling those just about to start on the arena of life, and of bidding those who had been unsuccessful not to be disheartened; for, in learning by such experience the deficiencies which had caused them to fail, they may have gained what would be of greater future profit to them than a pocketful of medals. The conquerors, on the other hand, must follow up their victory, and never rest, or failure must, sooner or later, overtake them. To be prompt in abandoning effete ideas, and in learning new truths, was never more needed than in the present day of perpetual progress in intellectual development. Lord Kimberley, in proposing a vote of thanks to Mr. Erichsen, expressed his satisfaction in finding that several students, who obtained high distinctions, were natives of the British Colonies. Nothing proved more clearly the widespread utility of such an institution as University College. He also dwelt upon Mr. Erichsen's reference to the great changes in modern ideas, and the astonishing discoveries of new facts of benefit to mankind, during the present century. But, important as it is to be conversant with the most recent discoveries, the welfare of the nation, and of every individual, must still depend on the practice of the old virtues of kindness, honesty, patience, temperance, and perseverance.

MALARIAL FEVER.

OWING to the very small number of cases in which necropsies have been made on the bodies of persons, the subjects of malarial fever, a peculiar interest attaches to the very thorough and careful examination made in Dr. Stephen Mackenzie's case. The patient, who was a young bombardier, was shown to the Pathological Society in October of last year. He then seemed in pretty good health, but every night his blood swarmed with the embryo filaræ. It was calculated that somewhere about forty million embryos circulated in his blood nightly, while by day they entirely disappeared. It was found that, by evening his halberd, by morning his temperature rose, and the next day it fell, and also be reversed. How the embryos vanished, whether they were particularly destroyed, or whether they lay hid in the pulmonary vessels, as Dr. Patrick Manson supposes, was a mystery; and a mystery it still remains: for all signs of the malaric disappeared after a rigor, from which the patient recovered three months before his death. The fatal result was due to exhaustion after a double pleurisy, empyema, and pneumonia. At the last meeting of the Pathological Society, a dissection of the thoracic and abdominal lymphatics from this case was shown. All the vessels were greatly dilated, and the thoracic

duct was occluded for some distance. At the same meeting, Mr. Shattock showed a beautiful specimen of adult filaræ, involved in a large clot in the right auricle of a human heart. The parasites projected from the clot in every direction, looking like long coiling strands of whipcord. The progress of our knowledge of this curious and interesting disease has been retarded by the facts, that, of the countries in which it is most prevalent, in India it is difficult, and in China it is well nigh impossible, to obtain leave to make a *post mortem* examination.

SAMARITAN FREE HOSPITAL.

THE Biennial Dinner Festival in aid of the Samaritan Free Hospital for Women and Children was held in Willis's Rooms, on Tuesday, May 16th. His Grace the Duke of St. Albans was chairman, and was supported by the President, Lord Leigh, and a distinguished company, making a total of one hundred and eighteen, including forty-six ladies. In the course of the dinner, the Secretary, Mr. Scudamore, announced subscriptions and donations to the amount of nearly £1,300.

OPENING OF THE HYGIENIC EXHIBITION AT BERLIN.

THE Grand Hygienic Exhibition of Berlin, which was to have been opened by the Crown Prince on the 15th instant, was, we regret to learn, completely destroyed by fire on May 12th. The conflagration, which was first discovered at a quarter to seven, and was favoured by a strong breeze, in less than three hours reduced the handsome wooden structure and all its valuable contents to a heap of smoking ruins. A number of wagons on a siding, laden with a variety of ambulance-appliances, which had just arrived at the exhibition from Vienna, were completely destroyed. The loss of three lives, which was reported at the outset, has not, we are glad to say, since been confirmed. The pecuniary loss, which must be very great, is, however, of small importance in comparison with the blow which such a disaster must inflict upon the advancement of sanitary science. The exhibition, which was contributed to largely by American and European States, had received comparatively few articles from England; but we learn that, conspicuous among the displays, was an admirable collection of hygienic apparatus of various kinds.

COMMISSION IN MEDICAL EDUCATION.

THE pages of our JOURNAL have, of late, contained intelligence from the various examining boards of new regulations made with the intent of benefiting the British and Irish public by the supply of future members of the medical profession more thoroughly educated than heretofore. The public judge of a young medical man by their own ideas of professional excellence; and they criticise sharply, since their health and interests are at stake. They distrust foreign degrees; and not without reason, for they fear that such qualifications may be obtained without adequate proof of any professional competency for practice. On the other hand, if patients take a fancy to one particular new doctor, they know very little about his qualifications, and often follow the lead of his rivals, looking for signs of higher value, are not to be had in any other respect. This leads to lower the public standard of examinations, prizes, and examinations; and, what is of more interest to ourselves, it is a great cause of dissatisfaction to many worthy and industrious young students who feel that they are totally debased in the fierce struggle for practice by old fellow-students who never deigned to exert themselves at their medical schools. In their disappointment, they may desperately wish that they had been educated under the old apprentice system. They admit the success of their less successful rivals; follow that the public are right in wanting confidence in the latter; and then all these public-spirited beginners, and would-be young medical men, join in exclaiming that examinations are useless, or are, at least, far too hard in the present day, and that they totally fail in their object. Many malcontents doubt that the examiners can uphold at all what the object of the examinations may be. On the other hand, the entire system of medical education is at the present day more highly organised than it ever was, great though may

be the room for improvement. Our medical schools have large staffs of active young demonstrators of anatomy, house-surgeons who can teach both clinical and pathological surgery, and members of the permanent staff who have taught for many years, and have had practical experience of the value of different methods of medical training, having lived to see how far students reared under each system have fared after qualification. It is only those in such a position who can be real authorities in medical education. They are almost unanimously of opinion that success under any method of technical education will ever mainly depend on the individual learner; but that an examination system is not only necessary, but ought even to be extended beyond its present limits. This fact was illustrated by the reply of over ninety per cent. of medical teachers consulted in 1880 by a subcommittee of the Metropolitan Counties Branch of the British Medical Association, with regard to a question bearing immediately on the discipline of a student's medical education; and the recent resolution adopted by the Council of the College of Surgeons urges the same principle. A student should spend two years in medical, surgical, and obstetric studies, after previous work at anatomy and physiology. These last two years must not be entrenched upon by any anatomical work undertaken successfully after one or more previous failures before the board of examiners. This appears to be rather despotic, but it must be necessary, otherwise it would not have been urged so strongly by competent men. Teachers admit that examinations cannot do everything that the public want; they cannot manufacture graduates endowed with an unusual amount of common sense, high social qualities, and the power of inspiring confidence. The examining boards can, however, enforce a due expenditure of time for the study of the scientific and the practical groundwork of medical education. The profession knows fully the evils of an imperfect knowledge of anatomy and physiology; and a fair education in those sciences is imperative. The public must at least believe in the thorough instruction of students in clinical work. In truth, independently of party opinions, both sections of professional education are required for the future doctor; both require time; and on no account must the time expended in the later part of a student's career be shortened by circumstances partly, at least, within his control. Hence the principle of this new feature in medical educational discipline is undisputably good; and it is remarkable that it has given rise to much adverse comment. It is only the unsuccessful student who will be the sufferer; and the unsuccessful student is, to a certain extent, a public enemy or a mild social evil. Two years' failure in anatomical examinations will at least imply the necessity of delaying the study of medicine and surgery for two years; and the sum of six years is not so very long for the study of such a profession as the medical. Students enter the medical schools when very young in these days, and they lose little by qualifying at twenty-three instead of at twenty-one. As for those who spend three or more years in unsuccessful attempts to pass anatomical examinations, it becomes a serious question as to whether they ought to continue in their medical studies at all. Lastly, ample allowance will be made for the cases of diligent students who might be unfairly obstructed by such regulations. If the resolution become law, those who recommended and those who enforced it must, on the other hand, bear responsibilities of no light character. The examiners have for several years treated physiology as a science in itself. In actual fact, it is a very complicated science, and much that is expected of a student will most decidedly be of no use to him in the practice of his profession. It will, in short, be most unfair to force a young man to spend several more months of his life in tutelage, simply because he is not proficient in deep questions of physics in relation to physiology, and shows ignorance concerning the construction of sphygmographs, manometers, or hæmadynamometers, and cannot clearly demonstrate different varieties of muscular contractions, etc., by means of somewhat complicated diagrams. Such difficulties have entailed defeat on many students during the past few years. Under the new regulation, the examiners will be much to blame if they continue to be too exacting in this respect. Lastly, now that teachers as well

as practitioners have urged strongly the importance of certificates of two years' instruction in medicine, surgery, and midwifery, let them be certain that the letter is carried out in spirit. Let them be sure that clinical instruction is readily given to clerks and dressers by the visiting staff. The afternoon walk round the wards must include instruction in the nature and treatment of the commonest diseases, and not only in the study of one or two cases where major operations have been performed, or where some remarkable thoracic disease can be puzzled out by auscultation.

GUY'S HOSPITAL BIENNIAL FESTIVAL.

THE Guy's Hospital Biennial dinner was held at Willis's Rooms on Thursday last, when Mr. Edward Cock presided at a large and enthusiastic gathering of the medical staff, and past and present students of the hospital. The health of the chairman was proposed in felicitous terms by Mr. Lund of Manchester. In responding, Mr. Cock said that he was able to boast that, wherever he went, he always found an old Guy's student to welcome him. Dr. Wilks replied to the toast of "The Acting Medical and Surgical Staff of the Hospital"; and, in doing so, referred to the growing constitutional government, which was now again raising the school and hospital to its proper position among the medical and surgical teaching bodies of the metropolis.

THE NOTIFICATION OF INFECTIOUS DISEASES.

IN view of the attention which this important subject is receiving on all sides, it may not be inopportune to place on record some of the sources of information of such diseases in a large and populous district where the system is not in force. An excellent example is afforded by Mr. May, health-officer of Aston Manor, in a recent report, which contains some interesting statistics on the subject. Early information of infectious diseases was sought for from medical men, householders, and school-board visitors. Information was thus received of 261 cases, concerning which it was deemed advisable to institute inquiries. This information was obtained from the following sources:—From parents and friends, 30 cases; medical attendant, 45; union surgeon, 21; neighbours, 67; school-board officers, 12; and from the death-registers, 86. The large majority of cases which occurred were heard of without any payment; but Mr. May states that a considerable number of them—53 out of a total of 192 cases of scarlet fever, and 33 out of 69 other cases—were only known from the registers after they were dead, and perhaps buried, instead of at the beginning of the outbreak.

SCOTLAND.

THE GLASGOW FACULTY LECTURESHIP.

THE third course of Faculty lectures is at present being delivered by Dr. D. C. McVail, who has been appointed the lecturer for this year. He has chosen for his subject the Physiology and Pathology of Respiration. His first lecture, which was delivered on the 5th instant, was taken up with an historical account of the development of the sciences of anatomy and physiology, in so far as these had relation to the respiratory function; and he also dwelt on the views held from time to time by the leading men of different eras. Considerable attention was given to those propounded by Bamberger in his celebrated essay, where it is assumed that the thoracic mechanism is, for all practical purposes, in its movements, comparable to the movements possible to parallel structures. The lecturer showed that this assumption is in many points unwarranted; that the thorax departs largely from the parallel form, the spinal origin of the ribs forming a considerable curve, and the sternum being very much inclined to the spinal column. This introduced mechanical difficulties in the movements of the thoracic walls, which have been got over by means of the provision made for the widening of the costo-cartilaginous angle. In the second lecture, the points discussed were, the manner in which the thorax reaches its greatest internal capacity, and the amount of mechanical force expended in making the respiratory movements.

ABERDEEN UNIVERSITY.

PROFESSOR ALLEYNE NICHOLSON gave his introductory address on Tuesday, May 9th, in the Anatomical Class-Room, Marischal College. Every available inch of space was filled with students, who gave the new professor a warm and most enthusiastic reception. The lecturer, besides giving a general sketch of zoology and its relations to cognate sciences, referred to the four great epochs in the history of zoology, as represented by Aristotle, Linnæus, Cuvier, and Darwin. He also paid a high tribute to the work of Professor Owen. All the classes are well attended, and we believe the number of students who have begun medicine this summer is larger than on any previous occasion; so that this augurs well for the continued prosperity of this school.

THE GLASGOW INSTITUTION FOR THE DEAF AND DUMB.

The annual meeting and examination of the pupils of the above institution was held on the 4th instant. The report, which was read and approved, showed that the total number of inmates on the roll for the past year was 140, exactly the same as for the previous year. Of these, 21 left in the course of the year, and had found suitable employment in various ways. The usual Government examination was held, with very fair results. The ordinary income of the institution for the past year was £3,011, and the expenditure £2,835; so that its financial position is at present satisfactory. While the old system of teaching is not entirely given up, the lip-style of reading is now an established feature in the course of training at the institution; and at present fully two-thirds of the pupils are found more or less capable of getting benefit from this method of instruction; and one of the most pleasing features of the examination was the skill of the pupils in lip-reading.

THE LATE DR. FYFE JAMIESON.

In order to commemorate the worth of Dr. Jamieson, whose death we recorded lately, it is proposed to raise a sum of money such as will yield a sufficient sum annually to found a scholarship, or obtain a gold medal, to be competed for in the department of anatomy in Aberdeen University, where Dr. Jamieson was demonstrator. A large and representative meeting has been held in Marischal College, where it was resolved to proceed with the collection of subscriptions for the above object. Subscriptions may be intimated to Dr. Mac Gregor, Union Street, Aberdeen.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending May 6th, it appears that the death-rate in the eight principal towns during the week was 23.7 per 1,000 of estimated population. This rate is 2.3 above that for the corresponding week of last year, but 0.4 below that for the previous week of the present year. The lowest mortality was recorded at Leith, viz., 15.6 per 1,000; and the highest in Perth, viz., 27.5 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.0 per 1,000, or 0.1 above the rate for the previous week. Whooping-cough was the most fatal epidemic in Glasgow, and measles in Edinburgh. Acute diseases of the chest caused 117 deaths, or six less than the number recorded during the previous week. The mean temperature was 46.9°, being 2.0° above that of the week immediately preceding, and 0.7° above that of the corresponding week of last year.

HEALTH OF THE PRINCIPAL SCOTCH TOWNS.

In the eight chief Scotch towns, there were registered, during the month of April, the deaths of 2,267 persons—1,144 of these were males, and 1,123 females; after allowing for proportionate increase of population, the total number is 475 below the average for the same month during the preceding ten years. The respective death-rates of the towns were, per 1,000 of their population: Leith 15, Dundee 17, Edinburgh and Greenock 21, Aberdeen and Perth 22, Glasgow 23, and Paisley 27. Forty-two per cent. of the entire mortality was of children under five years of age, and the respective per centage was: Perth 33, Greenock 37, Aberdeen 38, Edinburgh 39, Dundee 44, Glasgow 45, Paisley and

Leith 46. It is worth noting that Leith, with the lowest general death-rate, and Paisley, with the highest, are equally placed as regards infantile mortality. Deaths due to zymotic diseases constituted 15.5 per cent. of the entire mortality; but this rate was much exceeded in Paisley and in Leith—in the former 8.7 dying from measles alone, and in the latter 9.9 from scarlet fever. As usual, whooping-cough was most fatal, having occasioned 4.4 per cent. of all the deaths. To fever was attributed 38 deaths, and of these 9 were registered as typhus, 28 as enteric, and one as simple continued fever. Measles contributed 68, diarrhoea 42, scarlet fever 31, croup 19, diphtheria 18, metria 19, and dysentery 3 deaths. Cardiac diseases caused 146 deaths. Apoplexy 44, paralysis 49, hydrocephalus 76, and premature birth debility 67 deaths. Phthisis pulmonalis caused 280 deaths, equal to 12.3 per cent. of the entire mortality; while inflammatory affections of the respiratory organs, other than those already mentioned, caused 482 deaths, or 21.3 per cent. Of sixty-seven deaths by violence, five were suicidal. Three females and two males were over ninety years of age at their death, the oldest, a widow, being ninety-six. The births of 3,578 children were registered during April—1,848 males, and 1,730 females. The principal feature in the meteorological conditions in the month, was the arrest in the monthly advance of the mean temperature. April this year was no warmer than March; and it exhibits the only mean temperature of any of the months this year, in which there is no increase as compared with the average in former years. The wind has been more frequently in the east than usual; but there has, notwithstanding, been a heavy rainfall. The mean barometric pressure was less by 0.135 inch, its monthly range greater by 0.162 inch; the mean temperature less by 0.8°, its mean daily range less by 1.0°; the mean humidity less by 2; the rain-depth in inches greater by 0.45 inch; and the wind-pressure greater by 0.70 lb. than the average of the same month during the preceding twenty-five years. The highest mean temperature, 45.8°, was at Paisley; and the lowest, 43.6°, at Dundee.

IRELAND.

ADDRESS were presented to Earl Spencer on his resumption of the office of Lord Lieutenant of Ireland by the President and Fellows of the King and Queen's College of Physicians, and by the University of Dublin, on Tuesday last. In his reply to the Royal College of Physicians, the Lord Lieutenant said:—"I have a grateful recollection of the important work which your college performed during my previous residence in Ireland. Within the last year it has been my duty, as President of the Council, to consider questions of great moment connected with the medical profession. I trust that the commission which was appointed on my advice, and on which Ireland was influentially represented, may be able to recommend measures for the solution of the many difficult questions connected with medical education and diplomas. I know how important this is to your college and to the country at large. Public attention is every day more and more directed to the public health and sanitary reform. I am satisfied that your distinguished body will continue in the future, as in the past zealously, energetically, and efficiently to further those beneficial objects than which none have a closer connection with the well being and happiness of the community."

THE MURDER OF LORD FREDERICK CAVENDISH AND MR. BURKE.

THE following is the text of a resolution adopted at the special meeting of the Fellows of the Royal College of Surgeons in Ireland, held on the 11th inst.:—"Resolved: That the President, Vice-President, Council, and Fellows of the Royal College of Surgeons do record their deep horror and indignation at the atrocious murders of the Chief Secretary for Ireland, Lord Frederick Cavendish, and the Under Secretary, Mr. Thomas H. Burke. That this College, while expressing unanimously its abhorrence of an act so inhuman, also declares its loyal devotion to the throne and government of Her Majesty the Queen,

against which this outrage was directed; and earnestly trusts that the efforts to restore peace and order to this country, and to vindicate the authority of the law against the perpetrators of this crime may prove successful. That the college expresses its warmest sympathy with the bereaved families of the gentlemen thus suddenly cut off in the performance of their duty, and records its conviction of the severe loss which the country has sustained by the foul crime of which they were the victims." At a special meeting of the Court of Directors of the Apothecaries' Hall in Ireland, held on the 11th inst., the following resolution was unanimously adopted: "That this meeting denounces in the strongest terms the awful murders of Lord Frederick Cavendish and Mr. Thomas H. Burke, on Saturday, the 6th inst., in the Phoenix Park, which outrage has brought disgrace upon this country and inflicted untold anguish and irreparable loss on their bereaved families. That this meeting begs most sincerely to tender to the afflicted relatives of Lord Cavendish and Mr. Burke their heartfelt sympathy under such a terrible trial and sorrow, earnestly trusting that the guilty perpetrators of these atrocious crimes may speedily be brought to justice." At a special meeting of the Council of the Pharmaceutical Society of Ireland, held on Saturday last, it was unanimously resolved: "That this Council desires to express its abhorrence of the atrocious and brutal murders of Lord Frederick Cavendish, Chief Secretary, and Mr. Thomas Henry Burke, Under Secretary for Ireland, which have formed the culminating point of a series of unspeakable outrages perpetrated in this country during the past two years. The Council earnestly trusts that God in His mercy may so strengthen the hand of authority in this country as to bring the perpetrators of this awful crime to speedy justice. The Council also desires to convey to the relatives of Lord Frederick Cavendish and of Mr. Thomas Burke its heartfelt sympathy in this their hour of bereavement and sorrow."

COMPLIMENT TO AN IRISH MEDICAL WORK.

WE are glad to learn that the sixth edition of the favourably known Clinical Lectures on Diseases peculiar to Women, by Dr. Lombe Atthill, Master of the Rotunda Lying-in Hospital, have been translated into French by Dr. P. Lavoie, and published by the house of H. Lauwereyns.

CORK NORTH INFIRMARY.

AT a meeting of the trustees last week, a letter was received from Dr. Corby, resigning his position as assistant-surgeon to the institution, in consequence of having been elected surgeon to the Mercy Hospital. Several of the trustees spoke in high terms of Dr. Corby's abilities, and of his many services to the infirmary. A vote of thanks was unanimously passed to Dr. Corby, and it was decided to advertise for his successor.

THE DOCTOR HIS OWN PHOTOGRAPHER.—Attention is called by the *Philadelphia Medical News* to a recent invention by means of which photographs may be made by the medical man. "Medical men very frequently want photographs in cases of injury, deformity, tumours, etc., but the trouble and expense have been serious bars to obtaining them; and many patients, too, cannot go to the photographer. Drawings are often even more expensive, and labour under the disadvantage of possible inexactness. Recently, however, the introduction of the 'dry plate' process has so simplified the method, avoided the former dangers, and reduced the expense, that any one of ordinary intelligence and means can now take all the photographs he wants at a moment's notice. At the Cincinnati meeting of the American Association for the Advancement of Science, last August, Mr. Walker, of Rochester, New York, showed a 'pocket camera', which, according to Professor Lattimore, supplies every want of the inexperienced amateur. Its weight is only two pounds. 'Dry-plate outfits' are now to be had at a cost of 10 dollars and upward, which are excellent. Provided with one of these instruments, the doctor would always be prepared to photograph any case he desires, at his office or in the sick room. Our hospitals, especially, should be provided with such an outfit, so that cases and specimens could be photographed at any time, even by a resident. Our microscopists would also find it exceedingly useful to make permanent many a transient preparation not suitable for preservation."

SELECT COMMITTEE ON THE CONTAGIOUS DISEASES ACTS.

ON Friday, the 21st, and Tuesday, the 25th, of April, Mr. Daniel Cooper, Secretary to the Rescue Society, was called and gave evidence against the Acts. Mr. Cooper was one of the witnesses called before the Royal Commission in 1871, and his evidence on the present occasion was substantially the same as that given by him previously.

The Society with which Mr. Cooper is connected has eleven homes in which young women and children are received. The home at Hampstead is combined with a hospital, and the patients are transferred to the home department from the care of the medical attendant, when they are well enough to take a share in the ordinary routine duties. Five of the homes are for the unfallen, and may be said to be preventive in character. There is altogether accommodation for about two hundred, though they did not always have that number, as they were sometimes deficient in funds, and the reception of inmates was limited accordingly.

Owing to the Society's disapproval of the Contagious Diseases Acts, they refused to receive women who had been on the register, but such women were often "smuggled" into their homes by indirect means. Another reason for the exclusion of such women was that they were very difficult to deal with, and exerted an evil influence on the other inmates of the home.

The witness handed in a return showing the number of women and girls received, and the applications rejected, during the whole period of the Rescue Society's existence. From this, it appeared that, during the past twenty years, the number of applicants had diminished by one-half. This diminution Mr. Cooper attributed to the decrease of prostitution generally, brought about, to a large extent, by the action of the various rescue societies, and those co-operating with them.

The witness explained that, in the return handed in by him, he included under the head of fallen women not only avowed prostitutes, but also such as might have gone astray only once. He admitted the returns had been prepared in the office, and had not been checked by anyone unconnected with the Society.

He saw no unfairness in comparing registered women, who were avowed prostitutes, with the unregistered class which included those who endeavoured to earn a livelihood respectably, and only practised prostitution occasionally. Questioned as to how he would know whether a woman had been registered or not, as the register was kept strictly private, he replied that reliance was placed on the woman's own statement. On her admission to the home, she was questioned in a careful but friendly way, and he believed the truth was generally elicited.

Considerable stress was laid by Mr. Cooper on the bad results of the Acts, in enabling women to continue longer in a life of prostitution in the subjected districts than they could do in the unsubjected. He asserted that, in the unsubjected districts, the average length of a woman's career on the streets was only twelve months. At the end of that period, almost invariably the life became so intolerable, that relief from it was sought by some means or other.

Mr. Cooper did not state by what means his knowledge of this fact was arrived at, and it must be presumed that it was only an inference. Some questions were put to Mr. Cooper as to the method of examination employed before patients were admitted to the Society's hospital. He explained that the women were in every case admitted to the home first, and there was no system of compulsory medical examination. Many of the women voluntarily admitted their disease; in other cases, it was detected by what he called "the discriminating observation of the matron". He was obliged to admit that many women might not know that they were diseased—the hard sore particularly being often quite painless. Moreover, a woman who did not choose to disclose her condition might, by eluding "the discriminating observation of the matron", remain for a considerable time without treatment, thereby aggravating her malady by neglect.

With regard to Lock hospitals, he thought that ample accommodation on the voluntary system might be provided and supported without difficulty by public subscription, in the same manner that the Rescue Society's hospital was maintained. It was true that they only had twenty-five beds, but they did not wish to have more at present. If they did, funds would, no doubt, be forthcoming from the Christian and benevolent public.

Direct charges were made by Mr. Cooper against the officials, medical and otherwise, connected with the Contagious Diseases Act, not to mention the insinuations conveyed by many of his answers. Women had told him that they had been detained in hospital after they were cured, in order to benefit the hospital in some way; and he had not a shadow of reason to doubt their statements. They were, of

course, based on the women's own opinions, but, when they had been cared for during some months, and brought under Christian influences, it was found that they told the truth. At his establishment, the women were not allowed to prescribe for themselves, nor did they conduct their own medical treatment.

Another and graver charge made was, that women were sent into hospital although they were not diseased at all. This, he explained, might be done with a benevolent intention, as e.g., to enable reformatory influences to be brought into play. He was informed that a woman was always sent to hospital at her first examination.

Another point was, that a woman's stay in the hospital was peculiarly advantageous to the institution, as the daily Government allowance for each woman was sufficient to leave a profit to the establishment. Of course, he did not mean to insinuate for a moment that the hospital authorities had any profit by the transaction.

Mr. Cooper discussed the principles and practice of the Contagious Diseases Acts, to which he is, of course, strongly opposed, at great length.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting—viz., June 22nd, and September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881.

FRANCIS FOWKE, General Secretary.

BRANCH MEETINGS TO BE HELD.

METTING OF THE SOUTH LONDON DISTRICT.—The annual dinner will take place at the St. James's Restaurant, Regent Street, on Friday, June 1st, at 8 p.m.: Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. The dinner will be followed by a musical performance. Members of the Branch intending to attend are requested to give notice to the Honorary Secretary, Mr. H. NELSON HARRIS, Honorary Secretary, The Grosvenor Hotel, London, E.C., May 1st, 1882.

SOUTH-WESTERN DISTRICT.—The annual meeting will be held at the Grosvenor Hotel, London, E.C., on Friday, May 1st, at 8 p.m.: Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. The dinner will be followed by a musical performance. Members of the Branch intending to attend are requested to give notice to the Honorary Secretary, Mr. H. NELSON HARRIS, Honorary Secretary, The Grosvenor Hotel, London, E.C., May 1st, 1882.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Institute, Birmingham, on Friday, May 1st, at 8 p.m.: Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. The dinner will be followed by a musical performance. Members of the Branch intending to attend are requested to give notice to the Honorary Secretary, Mr. H. NELSON HARRIS, Honorary Secretary, The Grosvenor Hotel, London, E.C., May 1st, 1882.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Institute, Birmingham, on Friday, May 1st, at 8 p.m.: Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. The dinner will be followed by a musical performance. Members of the Branch intending to attend are requested to give notice to the Honorary Secretary, Mr. H. NELSON HARRIS, Honorary Secretary, The Grosvenor Hotel, London, E.C., May 1st, 1882.

SOUTH-WESTERN DISTRICT.—The annual meeting will be held at the Grosvenor Hotel, London, E.C., on Friday, May 1st, at 8 p.m.: Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. The dinner will be followed by a musical performance. Members of the Branch intending to attend are requested to give notice to the Honorary Secretary, Mr. H. NELSON HARRIS, Honorary Secretary, The Grosvenor Hotel, London, E.C., May 1st, 1882.

SOUTH-WESTERN DISTRICT.—The annual meeting will be held at the Grosvenor Hotel, London, E.C., on Friday, May 1st, at 8 p.m.: Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. The dinner will be followed by a musical performance. Members of the Branch intending to attend are requested to give notice to the Honorary Secretary, Mr. H. NELSON HARRIS, Honorary Secretary, The Grosvenor Hotel, London, E.C., May 1st, 1882.

SOUTH-WESTERN DISTRICT.—The annual meeting will be held at the Grosvenor Hotel, London, E.C., on Friday, May 1st, at 8 p.m.: Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. The dinner will be followed by a musical performance. Members of the Branch intending to attend are requested to give notice to the Honorary Secretary, Mr. H. NELSON HARRIS, Honorary Secretary, The Grosvenor Hotel, London, E.C., May 1st, 1882.

BATH AND BRISTOL BRANCH.—The sixth ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday afternoon, May 24th, at 4.15 p.m.: David Davies, Esq., President. The afternoon will be devoted to a discussion on Bone-setting, which will be opened by F. Richardson Cross, M.B.—E. MARKHAM SKERRITT, R. S. FOWLER, Honorary Secretaries.—Clifton, May 1882.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 24th. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than the 14th instant.—E. P. HARDEV, Honorary Secretary, 17, Brunswick Terrace.—May 3rd, 1882.

SOUTH-EASTERN BRANCH: WEST SUSSEX DISTRICT.—The next meeting of this District will take place at the Infirmary, Worthing, on Wednesday, May 24th: Mr. W. J. Harris in the chair. Members intending to read papers, or bring forward subjects for discussion, are requested to send notice to G. B. COLLET, Honorary Secretary, 5, Steyne, Worthing.

SOUTH WALES AND MONMOUTHSHIRE BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Town Hall, Tredegar, on April 20th: Mr. EVAN JONES (President-elect), and afterwards Mr. PEARSON R. CRESSWELL (President), in the chair.

New Member.—Mr. Wyndham Randall of Bridgend was elected a member of the Association and Branch.

Papers.—The following were read.

1. Mr. G. A. Brown (Tredegar) described Nine Cases of Tracheotomy in Croup, in which four lives were saved. A discussion followed, by Messrs. Fiddian, Steel, Dyke, A. Davies, H. N. Davies, D. A. Davies, and Evan Jones.

2. Dr. Redwood (Rhymney) showed a male patient, aged 20, with enormous uniform enlargement, mostly solid, of the Abdomen.

3. Mr. S. H. Steel (Abergavenny) showed the following specimens: a. Villous Growth in the Bladder; b. Large number of Calculi, *in situ*, in the Ureter and opposite Kidney, with Conversion of the Kidney into a Cyst. There had been no acute symptoms of pain, so far as could be gathered from the patient, who was only seen ten days before death.

4. Mr. Hall (Swansea) showed a Phosphatic Calculus, weighing 2½ ounces, which had ulcerated through the bladder and vagina, in a patient aged 70, who had repeatedly refused to have the stone removed. She lived two months afterwards.

5. Dr. SHEEN read notes of two cases of Aneurysm of the Common Femoral Artery, which he had had in his infirmary practice within a few days of each other, and in which he tied the external iliac artery. Both cases recovered perfectly, and had done hard work since.

6. Mr. D. Arthur Davies (Swansea) showed an instrument by which he had reduced a completely Inverted Uterus, of two years' standing, and pronounced notes of the case for the next meeting.

7. Mr. Davies also mentioned, at the request of Dr. Griffiths, the value of Iodoform in certain eye-diseases.

Committee Investigation Committee.—Dr. Sheen mentioned that Dr. Matheson, the Honorary Secretary, had spent his Easter holidays in visiting Gloucester, Bristol, Taunton, and Carmin, in order that he might meet men who would be likely to be interested in the work. After describing the objects for which this committee had been formed, and the manner in which it was suggested the work should be carried out all over the country, Dr. Sheen moved, and it was resolved unanimously: "That the following gentlemen, with power to add to their number, form the Committee Investigation Committee of this Branch—viz., Messrs. Fiddian, W. Price, D. A. Davies, Fry, Webster, Ward, D. J. Williams, H. N. Davies, G. A. Brown, Tait and Jones, Leigh, Evans, Jones, G. A. Davies, W. H. Davies, and H. Muller." Dr. Sheen undertook to act as Honorary Secretary, *pro tem*.

Homeopathy.—A long communication was read from the Honorary Secretary of the South-Western Branch, on the question of expelling homeopaths from the Association; and Dr. Sheen explained the views held on this question by the Committee of Council. After discussion, the following resolutions were passed unanimously.

1. Moved by Mr. A. DAVIES, and seconded by Dr. SHEEN: "That the Branch desires to express its approval of the action recently taken by the Committee of Council, with reference to the case mentioned in the circular now issued to the Secretary of the South-Western Branch, of a member practicing as a homeopath. At the same time it recommends that no further steps should be submitted to the next general meeting of the Association, with a view to prevent the election of homeopaths in the future, and for the disqualification of a member in the event of his practicing as a homeopath subsequently to such election."

2. Moved by Mr. A. P. FIDDIAN, M.B., and seconded by Dr. SHEEN: "That, while advocating the policy of not disturbing the present members of the Association who practice homeopathy, this

Branch desires to express its entire disapproval of the sentiments expressed by the readers of addresses, on the subject of homœopathy, at the last annual meeting of the Association held at Ryde."

Resolution of Sympathy.—On the motion of Mr. G. A. BROWN, it was resolved unanimously: "That the members present express their deep sympathy with Mr. T. G. Anthony in his recent and severe bereavement."

Luncheon and Dinner.—Mr. G. A. Brown hospitably entertained the members to luncheon on their arrival: and, at 4 P.M., the members and several visitors partook of a most excellent dinner, provided by the host at the Castle Hotel.

SOUTH-WESTERN BRANCH: QUARTERLY MEETING.

THE quarterly meeting was held on April 17th, at Liskeard; present, Dr. HUDSON (Redruth) President, in the chair, and twelve members and a visitor.

Professor Ferrier.—A letter from Professor Ferrier was read, thanking the Branch for the resolution passed by the last meeting.

Homœopathic Practitioners and their Relations with the Association.—The Honorary Secretary reported that, in accordance with his instructions, he had attended a meeting of the Committee of Council on April 12th, and moved this resolution: "That, as it has been resolved by the annual meeting of 1852, and reaffirmed by the annual meetings of 1858 and 1861, that there are 'three classes of practitioners who ought not to be members of the Association, viz.: 1, real homœopathic practitioners; 2, those who practise homœopathy in combination with other systems of treatment; 3, those who, under various pretences, meet in consultation or hold professional intercourse with those who practise homœopathy,' it be an instruction to the President of the Committee of Council to request Dr. — to withdraw his name from the list of members of the Association;" that the resolution was not carried, the chief argument used by the majority being, that any action would, by making martyrs of them, bring the homœopaths into the notoriety they desired.

It was proposed by Dr. HUDSON (Redruth), seconded by Mr. C. B. RENDLE (Liskeard), and carried unanimously:

"That this meeting heartily approves of the resolutions relative to homœopaths passed at the Plymouth meeting of the Branch; that it regrets that the Committee of Council have not yet seen their way to expel an avowed homœopath, when requested to do so by the unanimous vote of one of the oldest Branches of the Association."

It was proposed by Dr. ALDRIDGE (Plympton), seconded by Mr. G. KERSWILL (Looe), and carried unanimously:

"That this meeting requests members of the South-Western Branch to help on any movement for obtaining such remodelling of the constitution of the Committee of Council of the Association as shall ensure that the Committee of Council will carry out unhesitatingly resolutions that have been adopted by the Association at its annual meetings."

New Members.—Messrs. J. H. Jenkins (Liskeard) and E. W. Walter (Redruth) were elected members of the Association and Branch. Dr. T. S. Reed (Pool, Camborne) and Mr. J. Blamey (Penryn), already members of the Association, were elected members of the Branch. Mr. C. Curd (Redruth) and Mr. F. J. Pearse (60, Warwick Street, S.W.) were elected members of the Association.

Collective Investigation Committee.—A letter from Dr. Mahomed was read. A Subcommittee was appointed to further the work of collective investigation.

Communications.—The following were made:

1. Dr. Hudson: *a.* Tumour of Orbit; *b.* Congenital Encephalocele; *c.* Traumatic Frontal Meningocele; *d.* Two Cases of Foreign Body in the Eye.
2. Mr. C. B. Rendle: Spina Bifida.
3. Dr. Bampton: Nerve-Stretching for Supra-orbital Neuralgia.
4. Dr. Sanctuary: Two Cases of Sponge-grafting.

MYOPIA IN FRANCE.—It is stated in the report of the committee, which was appointed some time ago by the French Government to inquire into the prevalence of short-sightedness amongst the youths at the great Government schools in France, that the cause of the infirmity is to be found in the fact that the school books are printed in type which is too finely cut, and further, that the custom of printing upon white paper is still more hurtful. They recommend, therefore, that the authorities should consider the advisability of substituting thicker characters in the books, and also printing in white letters upon tinted paper.

CORRESPONDENCE.

SUPERINTENDENTS OF IMBECILE ASYLUMS.

SIR,—I read with interest your notice of the Institution for Imbecile Children at Larbert, of March 4th, and the correspondence to which it has given rise. I should not trouble you with any remarks of mine on the subject, were it not that Dr. Wood, in his letter of April 17th, I consider, most unjustly implies that the late medical superintendent neglected the ordinary details of management, for which he assumes he was not by "nature qualified", "and on which the comfort, and even the health, of the inmates so much depend", in order that he might write the results of his medical experiences.

As an intimate friend, having on several occasions had opportunities of observing the working of the institution, and seeing the interest and care which the superintendent took in the medical treatment of the inmates, his anxiety for their comfort and well-being, and also the intimate knowledge he had of each individual, I can truly offer my testimony that Dr. Wood's remarks are founded on erroneous assumptions. A mind naturally formed for, and long trained to, minute scientific observation, and gifted with a remarkable power of deductive reasoning, enabled the late superintendent to produce literary results which might well seem to have necessitated seclusion and close application; but it is well known to many that they were produced under physical difficulties which render sedentary habits impossible. This power of observation is certainly not incompatible with ability to enter into details of practical management; and that the efforts made to promote the welfare of the establishment were not made in vain, was amply proved by the flourishing condition of the institution at the time of the late superintendent's resignation, and the acknowledgments received by him subsequently.—I am, etc.,

T. L. ERSKINE, M.D.Ed., Deputy Surgeon-General A.M.D.
Bournemouth, May 8th, 1882.

SIR,—Equally with Dr. Wood, I consider that the question we have been discussing "concerns the interests of a valuable class of institutions . . . in the management of which the strictest economy consistent with efficiency is essential"; and for this reason I cannot allow the statements he has made, in your issue of May 6th, to pass unnoticed.

Dr. Wood does not give the argument with reference to the treatment of epileptics correctly. His statement was, that the management of epileptics during convulsions could be quite well trusted to trained attendants; and to this I replied that I did not think that such an opinion would commend itself to the general body of the profession, and that I did not agree with him. I do not consider that the argument required me to say that the resident doctor should be summoned to every epileptic fit, and that he should remain with the patient until it is over. My point was, that the serious condition into which many epileptics fall, in consequence of their numerous fits, required the presence of a resident physician, and that one living at a distance could not give the requisite attention. I say that a doctor, who only visits the institution, cannot give either proper attention or supervision, for he may be miles off, visiting his private patients, when his presence is required at the asylum. Dr. Wood may, perhaps, not be aware that many epileptic imbeciles suffer from mania after or before the fits, being perfectly quiescent in the intervals; and for this reason, too, a resident physician is necessary. "The family physician in large practice" does not take charge of a large number of epileptics; and Dr. Wood's argument, therefore, falls to the ground.

Dr. Wood is of opinion that the complaints from which idiots suffer are "chiefly chronic, where the alterations are usually slow, and such emergencies comparatively unfrequent"; but I can assure him that such is not the case. It is because the changes are so sudden and unexpected, and the diseases so acute—conditions which Dr. Wood thinks only exist in an asylum for lunatics—that a resident physician is required. As I have had to take charge of lunatics in an asylum where a considerable number of acute cases were admitted, I am not speaking without the requisite experience, and I say that the changes are quite as much unexpected in idiots as in lunatics. The above is, however, only one side of the question. As I have before said, the groundwork of the training and treatment of imbeciles must be physiological. In answer to this, Dr. Wood adverts to the training of deaf-mutes; but the two cases are perfectly dissimilar. Deaf-mutes, properly so called, do not suffer either from a defective condition or disease of the brain, such as exists in imbeciles. All that is necessary is to train them to use the muscles required for speech. In imbeciles, on the other hand, there is a defective brain to be developed, and a general physical condition to be im-

proved. In those of very low type, the senses, including the muscular, have to be developed, the muscles generally have to be strengthened, and the brain improved. In fact, the essential basis of the successful treatment and training of imbeciles is physical, and, as such, belongs to the physician rather than to the schoolmaster or house-governor. The schoolmaster must, of course, carry out the orders of the physician, who must give time and attention to the cases individually, such as a visiting physician cannot do. Dr. Wood's method may be an economical one, but it will be at the cost of efficiency.

His conception of a superintendent not fitted by nature to attend to petty details of management, must be peculiarly his own. Certainly it does not refer to Dr. Ireland, who not only gave his own time, but that of his relatives, to the management of the Larbert institution, which, instead of deteriorating under his management, was raised to a high state of efficiency.—I am, etc.

FLETCHER BEACH, M.B., M.R.C.P.,
Medical Superintendent, Darenth Asylum.

ACONITINE.

SIR,—In a lecture on aconitine-poisoning delivered before the Balloon Society of Great Britain on the 5th inst., Dr. Springmühl is reported to have said that on the occasion of the Lamson trial neither of the scientific experts pointed to the great difference between English and foreign aconitine, nor was it mentioned by the prosecution or defence.

It is to be regretted that Dr. Springmühl has made these incorrect statements. You have already pointed out in an editorial note that in my evidence I did lay down the distinctive difference between the so-called German and English aconitine; and I repeat what has been already said in your columns, that at the trial I spoke of German and English aconitine as being quite different substances. In cross-examination as to the medical dose of aconitine, I said that certain doses laid down in the text-book were applicable to the German and not to the English article.

Dr. Springmühl, perhaps relying upon imperfect newspaper reports, has thought fit to revive an unfounded charge against myself and Dr. Dupré, which could never have been made by anyone well versed in the facts of the trial, or who had read the officially printed short-hand writer's report taken for the court, in which I am made to state in evidence (p. 579) that German aconitine is very different from English aconitine.—I am, etc.,

THOMAS STEVENSON.

London, May 16th, 1882.

ETHER AS AN ANÆSTHETIC.

SIR,—In the BRITISH MEDICAL JOURNAL of May 13, Dr. Saundby refers to the report of a case in which I removed the kidney, and the patient died with suppression of urine, as an illustration of one of the dangers of ether as an anæsthetic. No mention is made in that report of the anæsthetic employed; which happened to be chloroform. However valuable and interesting therefore the question raised by Dr. Saundby may be, my case can scarcely serve as an illustration of it.

The danger of administering ether for the purpose of tapping an empyema is, I believe, a very real one. I have myself, after opening the chest, seen very alarming symptoms, attributable to the ether, in a case where the respiration was already considerably impaired; in this instance prompt blood-letting appeared to save the patient's life.—I am, etc.,

RICKMAN J. GODLEE.

18, Wimpole Street, W., May 15th, 1882.

ANIMAL VACCINE. LEMUEL.—In a recent report on several vaccine farms in the United States, Dr. James Law observes that the taking of the virus early seems to be a very essential condition of securing it pure. He was assured that up to the seventh day the virus could be obtained with no superadded products, and will convey cow-pox uncomplicated. Later, when granular and pus cells appear, and above all when the ruptured vesicle becomes the seat of septic and other bacteria, the virus cannot be sent out with the same confidence. If, as Paley and others claim, the intensity of the virus is greatest from the third to the seventh day, and if at the same time its purity can be guaranteed in a way that cannot be accorded to it at a later stage of the eruption, the mere fact of a larger yield cannot justify the practice of collecting the virus at a more advanced stage. The lessened supply may enhance the cost of the virus, and the method may necessitate the National Board of Health cultivating its own virus, yet Dr. Law thinks it should not be a valid argument for the sanction of an article, the purity of which is not guaranteed by every possible precaution.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE NOTIFICATION OF INFECTIOUS DISEASES.

THE following is a summary of the replies to the circular from the Local Government Board, from the towns and boroughs where provision has been made for the notification of infectious disease, published as Parliamentary Papers by the Government.

Mr. C. F. Preston, the Town Clerk of Barrow-in-Furness, writes, in reply to the circular, under date April 1882, that his local authority are so far quite satisfied with the working of the provisions of the Barrow-in-Furness Corporation Act, 1881, relating to notice being given of persons suffering from certain infectious diseases. The provision has acted beneficially in regard to the health of the town; two cases of small-pox have been quickly isolated, and the disease did not spread. The local authority further believe that the spread of scarlatina and typhoid fever have been prevented by the operation of this Act. The number of cases reported from September 18th, 1881, to March 31st, 1882, was 480. The authority pay for each certificate the sum of 1s. 6d., making an aggregate of £36. The medical officer of this authority entirely concurs in the expression of opinion as to the good results following the working of the provisions in question.

Mr. W. E. L. Gaine, Town Clerk of Blackburn, testifies to the satisfaction of his authority with the working of the compulsory notification provisions; and states that the immediate notification of infectious disease was the means of preventing the spread of small-pox in the borough, when it broke out on April 10th of last year. In no single case did a second one arise in the dwelling of those where infectious disease had been previously reported, and the patient removed to the hospital provided; and no other case in the borough could be traced to these. Four hundred and twenty-two medical certificates of notification were received during the year ended March 25th, 1882, and 2s. 6d. paid on each one, amounting to £52 15s.

Mr. H. P. May, Town Clerk of Blackpool, replies, that it is the unanimous feeling of the Town Council that the powers obtained by the Blackpool Improvement Act, 1879, for the compulsory notification of infectious disease, are most valuable. The medical attendant sends in his certificate to the medical officer of health, and a fee of 2s. 6d. is paid to the medical attendant for his certificate. In the last twelve months, these fees amount to £13 2s. 6d.

Mr. R. G. Hinnell, Town Clerk of Bolton, reports that the information furnished by the certificates of disease under the Bolton Improvement Act, 1877, Section 87, has been a very valuable aid in checking the spread of infectious disease, as they have been thereby enabled in every case to adopt precautionary measures. The number of cases of infectious disease notified to the sanitary department for the year ending March 31st, 1882, was 668; and the amount paid for certificates for the nine months ending March, 31st, 1882, £74 15s. The medical officer of health reports for 1880, that the compulsory notification of infectious disease has, during the past fifteen months, given every satisfaction, and proved of immense value in limiting the spread of contagion. The cases reported amounted to 1,649.

Mr. T. N. Whitehead, Town Clerk of Burton-on-Trent, writes, in reply to the circular, that the provisions in force in that borough for the compulsory notification of infectious disease have been fully worked out for three years, and have proved satisfactory. The number of cases reported for the year ending March 25th, 1882, was 107; and the amount paid therefore, at 1s. each, was £10 7s.

Mr. Joseph Jones, Clerk to the Sanitary Authority of Derby, states that the working of the powers for the compulsory notification of infectious disease given in the Derby Improvement Act of 1879, has been satisfactory; 450 certificates have been received, and £51 15s. was paid in fees. The Medical Officer of Health, Mr. Hille, submits an elaborate report on the working of these provisions, in the course of which he says that his years' experience of the working of the compulsory notification of infectious disease clauses in the 1879 Act has given additional weight to his previous opinion, that they are of immense importance and value to the inhabitants of the borough.

Mr. Joseph Layley, the Town Clerk of Huddersfield, writes that the corporation of the borough are thoroughly satisfied with the working of the provisions contained in Mr. John Lubbock's circular, and believe that they have been of great value in the prevention of the spread of infectious disease, and in minimizing the suffering and deaths which have occurred. The number of cases reported for the fifty-two weeks ending December 31st, 1881, was 255.

Mr. W. S. Daglish, the Town Clerk of Jarrow, replies, on behalf of the Town Council, that they are satisfied with the working of the Jarrow Improvement Act relating to the compulsory notification of infectious disease, but suggest that, in any future public or private legislation on this subject, the words "infectious disease" should be more clearly defined. The number of notifications of the existence of infectious disease supplied by medical practitioners amounted to 331, at a cost of 1s. per case, or £15 11s.

Mr. Swanson, the Town Clerk of Lancaster, states that the corporation of that city are satisfied with the working of the provisions respecting which information is sought by the Local Government Board. Seventy-two cases of infectious disease were reported during the year ending March 25th, the aggregate amount of fees paid being £9.

Mr. Storey, Town Clerk of Leicester, writes that the sanitary committee of that town are thoroughly satisfied with the principle of notification, and are quite satisfied that, since they have obtained such power, they have stamped out at the very commencement what would otherwise have proved small-pox epidemics. The total number of certificates and the cost for the year ending March 25th, 1882, were: certificates, 1,898; total cost, £230 12s. 6d.; 53 certificates, for various causes, not having been paid for.

Mr. T. T. Marks, Town Clerk of Llandudno, replies that the commissioners are satisfied with the working of the provisions obtained by the Llandudno Improvement Act, 1879; but suggests some alterations in the detail of working them. Thirty-five cases were reported during the last year; and the fees paid were 2s. 6d. each, making a total of £4 7s. 6d.

Mr. John Leigh, the Medical Officer of Health, replies for Manchester, and records his perfect satisfaction with the working of the Act for the compulsory notification of infectious disease in that city. Since February 1st, 1882, to April 1st, 262 cases of infectious disease were reported to Mr. Leigh by medical practitioners of the city.

Mr. H. B. Miller, the Town Clerk of Norwich, informs Sir John Lambert that the local authority are quite satisfied with the provisions contained in the Norwich Improvement Act, 1879, with regard to the clauses respecting the compulsory notification of infectious diseases. During the year ending March 25th, 1882, there were 469 cases of infectious disease reported, at an expense of £58 12s. 6d.

Mr. S. G. Johnson, Town Clerk of Nottingham, notifies that, after some difficulties with the medical men of the town, provisions in the Nottingham Improvement Act, 1878, as to the notification by the medical attendant of cases of scarlet fever and small-pox, were put into force; since which time (February 22nd, 1882), the medical men have worked most amicably with the medical officer of health; 416 notices of infectious disease have been served on the medical officer of health, and 72 cases of infectious disease have been removed to the hospital erected specially for these cases.

Mr. H. Booth, Town Clerk of Oldham, states that his sanitary committee have up to the present time every reason to be perfectly satisfied with the working of the provisions in the Oldham Improvement Act, 1880, relative to the compulsory notification of infectious diseases; and believe that they have had a beneficial effect in arresting the spread of infectious diseases in the borough. The number of cases notified during the year ended March 25th, 1882, was 656; and for each certificate 2s. was paid, making a total of £82.

Mr. H. Hames, Town Clerk of Preston, replies to the circular that his authority are satisfied with the working of the provisions relating to the compulsory notification of infectious diseases in the borough, but suggest the omission from the list of infectious diseases of measles and whooping-cough. The number of cases of infectious disease reported during the year ended March 25th, 1882, was 1,517, the expense of which, at 2s. 6d. per certificate, was £189 12s. 6d.

Mr. Henry Day, Town Clerk of Reading, reports that his corporation are satisfied with the working of the provisions for the compulsory notification of infectious disease. From August 1881 to March 31st, 1882, 122 cases of infectious disease, including measles, have been notified by the medical practitioners in the town. The amount of fees payable from August last to March 25th has been £6 2s., the fee being 1s. per case, and was fixed at 1s. because measles is included in the category of infectious diseases, in consequence of the difficulty of diagnosis in some mild cases between that disease and scarlet fever. The Medical Officer of Health also records his opinion that, unless the duty of notifying infectious disease is imposed upon the medical attendant as well as upon householders, the notification would be delayed or evaded, and any regulations relating to this important matter would practically become inoperative.

Mr. Samuel Brown, Town Clerk of Rotherham, states that the regulations now in existence as to infectious disease have hitherto worked

satisfactorily. The number of cases reported for the year ending March 25th is 1,057, and the cost has been £132 2s. 6d.

Mr. M. F. Blakiston, Town Clerk of Stafford, replies that his authority is satisfied with the working of the compulsory Act. The number of cases reported for the year ending March 25th, 1882 was 15, and the fees paid 2s. 6d. in each case.

Mr. Buckley, Town Clerk of Stalybridge, states, in reply to the Local Government Board circular, that the sanitary committee of Stalybridge are quite satisfied with the working of the provisions contained in the Stalybridge Extension and Improvement Act, 1881, relating to the compulsory notification of infectious disease, and believe that many cases of infectious disease would remain undiscovered but for the compulsory powers referred to. The number of cases of infectious disease reported from August 11th, 1881 to March 31st, 1882 was 117, and the amount paid for the reports was £14 12s. 6d.

Mr. W. H. Brook, Town Clerk of Warrington, states that the working of the provisions relating to notification of infectious disease has been most satisfactory. The number of notices given in 1882 is 451, and the amount of fees paid £45 7s. 6d.

In Edinburgh, the duty of notifying to the local authority cases of infectious disease is laid by the Municipal Police Act upon the medical attendant of the patient; whereas in Greenock the duty rests with the householder. Dr. Littlejohn reports, in regard to Edinburgh, that, since the clause in the Police Act rendering it imperative on all practitioners in the burgh to report cases of epidemic disease became law, in November 1879, reports of about 11,400 cases have been sent in to him, and a sum of over £1,450 has been paid to medical practitioners in the city. He further states that the clause, so far as Edinburgh is concerned, has been a great success, and the medical men of the city now unanimously approve of it. Dr. Littlejohn's report, which contains some striking illustrations of the value of prompt notification of infectious disease, is well worth perusal by all interested in this question. Dr. Wallace gives the results of compulsory notification of infectious disease by the householder, which are by no means satisfactory, by reason of the neglect of many householders to report cases of infectious disease, and in many cases the failure to call in a medical man. Nevertheless, striking results in the direction of diminished death-rates from infectious diseases have been obtained, even with the present imperfect method of notification; and Dr. Wallace, who is strongly in favour of the duty of notification of the existence of infectious disease being laid upon the medical attendant, anticipates great benefit to the community should the Bill brought in by Mr. Hastings and others become law. This view is supported by many cogent arguments drawn from his experience of the working of the present regulations in Greenock, which the space at our disposal precludes us from reproducing, but which are all well worth consideration at the present juncture.

SCARLATINA IN DURHAM.

THE terrible mortality from scarlatina in the county of Durham has almost passed into a byword amongst sanitarians. Various speculations have been made as to the causes of this exceptional prevalence—many of them ingenious, but all of them at the best but partially accounting for what is admittedly a grave etiological problem. Some years ago, when Mr. Simon was comparatively unfettered in the inquiries that he organised, he gave a commission to Dr. Buchanan to make an exact and systematic study of the conditions which determine the spread and intensity of scarlatina; but, owing to departmental and other changes, Dr. Buchanan never got any further than the preparation of a number of maps showing graphically the incidence of the disease upon the several English counties during the two previous decades. Although it was then shown that Durham had by far the heaviest mortality from the disease—a fact which had already been pointed out by Mr. Haviland—it apparently has not yet been possible to grapple with the question in any comprehensive fashion. But that inquiry is urgently necessary, is evident from the fact that, for the last thirty years, Durham has, in each quinquennial period, shown a scarlatinal mortality-rate higher than that of any other county in the kingdom. Whilst the average rate for England and Wales is 0.87, that for Durham during the last thirty years is 1.4; and the rate is not diminishing. Almost all the registration districts share in this excess; at least, there are only three exceptions. Darlington has an average rate for the period named of 0.81 per 1,000; Teesdale an average rate of 0.73, and Wear-dale one of 0.85; in all the others, the mortality is sustained at an excessive ratio, varying from 1.33 at Houghton-le-Spring, to 1.62 at Bishop Auckland.

To some small extent, no doubt, this excess may be explained away by the larger proportion of children living in Durham, as compared with the average English county; and, to a further extent, it may be

accounted for by a variety of unwholesome conditions, notably of lodgment, that mining villages too often exhibit in fullest intensity: and significance may be granted to these two considerations as affording some reason why scarlatina is exceptionally fatal in Durham, beyond the rate of fatality customary to the disease in other communities. It is obvious, however, that these circumstances do not satisfactorily account for more than a small proportion of the mortality, and there is evidently some other agent at work, of which we as yet do not appreciate the importance.

Mr. Spear, in the course of a recent report to the Local Government Board on a serious epidemic of the disease in the Durham Registration District, has been at pains to collect particulars as to the circumstances of as many of the cases as possible. Thus, 451 attacks occurring in 176 different families, most of them during the year 1880, were carefully inquired into. As many as 422 of these cases were found to be in children between the ages of one and fifteen years; 4 occurring in children under one year, and 25 in persons above the age of fifteen. In the 176 infected families, there were 31 infants under one year of age, who were exposed as much as the older children to risks of infection; but, while it was exceptional for the latter, if unprotected, to escape, of these 31 infants, only 4 were known to be affected. The women of the Durham colliery villages, who certainly have abundant opportunity for forming an opinion, say that "suckling infants rarely take the fever." The evidence seems also to point to adults as really possessing a certain immunity, apart from that accorded by previous infection. Thus, amongst 42 persons above the age of eighteen, who were very positive of not having suffered previously from the disease, and who were living in infected rooms, there were only 7 distinct attacks; 11, however, suffered from slight sore-throat and during some period of their exposure, a fact again suggestive of relative immunity in their case, for rudimentary or abortive attacks in children are far less common.

In all but 46 of the 176 infected families, the attacks were multiple; and, in almost all cases, there was a distinct interval between the first and second attacks in a family, a circumstance itself going to show that the disease was spreading mainly by personal intercourse, and not by any common influence of food-supply or the like. The type of the epidemic, judged of by the rate of mortality alone, was not a severe one, for the proportion of fatal attacks was about 9 per cent. of the whole; but the moderateness of the mortality seems rather to have been due to the comparative absence of fatal sequelæ, for, in respect of the original infective process, the facts would rather suggest exceptional severity. Thus, the duration of the illness is recorded in 207 of the 295 fatal cases; in 57 of these, the fatal termination occurred on or before the third day; in 106, within a week; in 45, in from one to two weeks; in 26, in from two to three weeks; and in 30 cases, after a longer time. Again, in 75 of the 295 cases (these all rapidly fatal), the deaths are recorded as from malignant scarlatina, or from scarlatina with one or other of the cerebral symptoms that indicate at this early stage deep infection; in 49 cases, the disease is spoken of as "scarlatina anginosa", and in 8 cases as scarlatina with diphtheria. On the other hand, in only 18 of the 295 cases is dropsy mentioned as contributing to the fatal result. Mr. Spear doubts, however, in spite of certain other evidence, to the contrary, whether the type of an epidemic, as a whole, of scarlatina, can often be properly spoken of. In this case, he mentions "malignant" cases, and cases of extreme mildness, as being seen side by side; the one apparently giving rise to the other. One case, he says, is true, uttered to an exceptional extent; and it is very probable that the violence of the disease in such cases will be due to local sanitary conditions. In a district, however, where such conditions are, as a rule, generally unwholesome, it is too hazardous to draw comparisons for the purpose of judging differently of the point. Mr. Spear mentions also that, in the course of the inquiry, it happened to arise that the prevalence of scarlatina might be in some way related to the pre-existing prevalence in the family of measles; and it seemed as if those who had recently passed through the attack of the latter disease, and a higher immunity, were more resistant to the contagion of scarlatina. The observation is not altogether new, for a somewhat similar fact has been noted by Dr. Lister in the case of their epidemic of diphtheria. It is certainly not our intention in the present report to attempt to account for any conclusions being drawn from the observations.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

A report on the year ending 31st December last, Mr. Hollingshead, Medical Officer for Aston, states that the number of deaths during the year 1881 was 31, as compared with 41 in the previous year. The total number of deaths in the district was 12,188, of which

10,780 were inhabited, and 1,306 were void. There had been a large increase in the number of children, of which the very high annual birth-rate up to 1879, nearly 44 per thousand, was the chief explanation. The report gives particulars as to the mode of obtaining information upon infectious diseases, and the means adopted to prevent their spread, including isolation and house-to-house inspection and attention to the water-supply. Fully three-fourths of the houses are supplied with the fairly good water of the Birmingham Corporation. The number of births registered during 1881 was 2,039—viz., 1,050 males and 989 females, as compared with 2,064 births during 1880. There had been a constant though varying increase in the number of births during each year for eight years until 1880; but during 1880 and 1881, there has been a decrease. In 1876 the birth-rate was nearly 44 per 1000, but in 1880 it had fallen to 39.28, and this year it has fallen still lower—viz., 37.5. The decrease in the births is general in the neighbourhood, and corresponds with a decrease in the birth-rate of the country, which has fallen from 17.6 per 1000 in 1873, to 14.9 in 1880 and 1881. There have been 882 deaths registered in the district during the year 1881—viz., males 446 and 436 females, being 32 less than in 1880, giving a death-rate for the year of 16.2, as compared with 17.3 during 1880. The diminution of the death-rate is chiefly in consequence of the absence of any serious epidemic or excessive mortality from any outbreak of disease. There were 148 deaths registered from the seven principal zymotic diseases, as compared with 163 during the previous year, and amounting to 16.8 per cent. of the total of deaths. The zymotic death-rate was 2.7 per 1000 living, being 1.5 below the average of nine preceding years. There have been no deaths from small-pox in Aston Manor for seven years. Scarlet fever caused 33 deaths, and 191 cases were reported, in 1881, against ten deaths out of 62 cases in 1880. Measles caused 8 deaths, typhoid fever 6, diphtheria 23, whooping-cough 43, and diarrhoea 45.

ASTON AND CANNON-ROAD.—Dr. McEwen, in his first annual report, makes it abundantly clear that he intends to do his utmost to raise the sanitary authority to a sense of duty. He condemns the water-supply as dangerously open to contamination, and animadverts on the practice of keeping animals (especially pigs) in dirty and overcrowded parts of the town. He desires to see better by-laws for common lodging-houses, and strongly urges the provision of a small hospital for the isolation of cases of infectious disease. He regards the unduly large mortality from phthisis (12 per cent. of the total deaths) as connected somewhat nearly with the unsanitary state of many of the dwellings, especially of the poorer classes in the town. As he well observes, "in those parts or alleys where the houses are huddled together, and where there is more or less overcrowding, and where darkness, damp, and dirt prevail, there are conditions highly favourable to the development of pulmonary consumption. That there are too many such houses, no one will deny; and that such houses draw to them a class of tenants who do not sanitation and encourage filth and disease, is a fact on which cannot be considered without at the same time being reminded that the property of such 'properties' belong to parties who must be aware of the extent of mischief which they allow to exist." Dr. McEwen has been troubled upon what is perhaps the greatest impediment of sanitary progress in small towns—the neglect and often positive refusal of small-property holders to spend the money necessary to put the tenements they own into reasonably habitable condition. There were no special features in the mortality of the year, which was equal to a death-rate of 21.8 per 1,000.

ASTON AND CANNON-ROAD.—Mr. Hollingshead has again to report a death-rate for the year of 17.2 per 1,000, which is a slight decrease upon that for 1879. The zymotic death-rate shows a marked decline, the total number of deaths registered from these causes being 21, against 30 for the previous year. These rates are, however, exclusive of the deaths from phthisis, which in 1880 were 31. The total births were 300, and the total deaths 205, which, based upon a population of 15,143, gives rates of 38.13 and 17.2 per 1,000 respectively. Of the total deaths, 107 were under five years of age, and of these, sixty had not completed their first year of existence. What a startling fact to be an actual large percentage of the mortality, Mr. Hollingshead holds responsible for the town to be responsible, rather than any defect in sanitation. He says, "It is a very common practice among the poor part of the community to give their children a kind of bread with sugar made from a kind of yeast, and which is kept stewing on the fire most of the day. Sometimes a little sugar is added to it, but generally it is not. The bread used is frequently new, and consequently, when made from a little better than dough." On this ground, the health officer pleads for the establishment of a factory, where infants could be supplied with bread in the absence of their mothers. Small-pox, which had for some time been entirely absent from the district, re-

came prevalent during the latter part of the year, and altogether nine cases occurred, three of which terminated fatally. The health-officer regrets the absence of any system requiring the compulsory notification of cases of infectious disease, and of any isolation accommodation better than that afforded by the Birmingham Hospital, which is a long distance from many of the villages in the district. Many improvements have been effected by the recent system of drainage, which, however, requires ventilation and additional flushing. The water-supply, too, needs extension, since in many cases an analysis of the well-waters has shown them to be unfit for domestic use. The general sanitary work of the district has been well attended to; but an alteration in the system of scavenging seems desirable.

WEST SUSSEX COMBINED DISTRICT.—Dr. Kelly again presents a series of interesting reports upon the various districts forming this extensive combination. Not the least interesting or valuable part is the summary which he has appended to the present report, in which are statements of the births and deaths for the preceding six years, their respective rates and causes, and a general history of the meteorology and temperature of 1880. Dr. Kelly has omitted, however, any statement showing the sanitary state of his combination; nor is any mention made of improvement in water-supply and drainage. This may arise from the fact that there may be little to chronicle in this respect; but a statement as to sanitary progress would considerably enhance the value of the concluding portion of the report. Amongst an estimated population of 16,146 souls, there were 2,614 births and 1,287 deaths during the year 1880, giving rates of 30.3 and 14.9 per 1,000 respectively. A considerable increase is shown in the zymotic deaths, the rate per 1,000 being 1.9, against 0.9 in 1879, 1.6 in 1878, and 1.1 in 1877. This high zymotic death-rate arose chiefly from the prevalence of whooping-cough, diarrhoea, and measles; no less than 127 of the total number of 171 deaths from zymotic causes being due to these three diseases. Whooping-cough was largely prevalent in the Wakeham Rural District, where 24 deaths were registered from that disease. Eleven more happened in the Steyning Rural District, and 6 at Worthing. Diarrhoea was also very fatal at Steyning, where 20 deaths from it occurred. Measles was most prevalent at Steyning and Horsham. Scarlatina caused 9 deaths, diphtheria 12, enteric fever 15, and typhus 1. No deaths from small-pox were reported during the year; but 130 deaths were registered from phthisis, 204 from chest-diseases, and 90 from heart-disease. The infantile mortality was at the rate of 101 deaths for every 1,000 births, against 107 for the preceding two years. Dr. Kelly has little to report in the way of sanitary improvement; but signs are not wanting that progress may be expected. Petworth is in the peculiar position of having a thorough system of drains lying useless for the want of water, which has not yet been provided. At Worthing, there has been a marked improvement in the ventilation of house-drains; and West Zarring (in the East Preston District) is about to be provided with water. The outbreak of enteric fever at Worthing, due to infected milk, has already been dealt with in these columns.

CERTIFICATION OF IMBECILE PAUPERS.

Sir,—Will you kindly inform me if it is usual for medical officers of workhouses to charge 2s. 6d. each quarter for certifying to imbecile paupers resident in the house? I find many of my medical brethren do so without comment by guardians or auditor.—Faithfully yours, NEMO.

It is generally held that, as by the terms of the appointment the workhouse medical officer engages to make tri-weekly, or it may be daily, visits, that the writing of all certificates, whether they relate to apprentices or quarterly returns of harmless or imbecile lunatics, come within the terms of his contract. The only exceptions as regards fees to workhouse medical officers are those which relate to the removal of acute lunatics; and in order to obtain these, he must have been required to visit and certify under the order of the justices or a stipendiary magistrate. Midwifery is also excepted from the contract—a fee, which is laid down in the general order, being accorded in each case. It is true that, in some instances, the 2s. 6d. fee has been paid, but that has arisen from special arrangement having been made at the time of the appointment, or by an oversight on the part of the clerk and auditor. Our correspondent should look at the wording of the contract he has signed, as that will determine the terms on which he holds office, and will govern the fees to which he should be entitled.

A NEW VESICANT.—Dr. José Armengue of Barcelona has lately brought to the notice of the profession a new vesicant, which in many respects would appear to be far superior to cantharides. The new material is derived from the *Enas afer*, a coleopterous insect, which at certain seasons of the year appears in enormous quantities in many parts of Spain. From experiments which Professor Armengue has instituted on his own person, and on that of several medical students, he is led to claim for the *Enas afer* as a vesicant the following advantages over cantharides: it is cheaper; it acts without appreciable pain; it is equally powerful; and it does not, so far as his experiments have yet shown, affect the genito-urinary system. If its non-inflammatory action can be established by further experiment, it is probable that the *Enas afer* will be a valuable addition to the materia medica.

MILITARY AND NAVAL MEDICAL SERVICES.

AMALGAMATION OF THE INDIAN AND ARMY MEDICAL DEPARTMENTS.

WE extract the following from a recent number of the *Indian Herald*, published at Allahabad.

"The Secretary of State for India has, it is stated, agreed to the recommendations of the Government of India for the amalgamation of the Indian and Army Medical Departments. It is now intended to create a new medical corps for India, to be composed of all Indian medical officers who joined the service after 1860, and all army medical officers at present serving in India who volunteer to join the new corps and are under fifteen or twenty years' service. Older officers of the Indian services who joined the Indian service before 1860, are to be on the new list, for the purpose of regulating promotion, but not to be amalgamated with the Army Medical Department, because they have each a covenant, which gives them the right to serve only in India; whereas younger officers have only the Queen's commission, and no special agreement restricting service to India. After the amalgamation, all medical officers on the new list will ordinarily be employed in India, but will be liable for service in any part of the British Empire."

We have reason for believing that the amalgamation of the Indian and Army Medical Department is by no means the accomplished fact which it might be inferred to be from the foregoing paragraph. There still exists many difficulties to be overcome before the arrangements for uniting the two services—a union which, we have no doubt, will be arrived at in course of time—can be sufficiently advanced for public announcement.

Sir,—In answer to "A.M.D.", in the JOURNAL for March 2nd, you say that "the whole subject of medical service in India, and especially the mutual relations of the Indian and British medical services, are under anxious consideration". Perhaps it may assist those who are considering the matter, in rendering the junior branch of our department justice, if they know some of our prominent grievances. A surgeon, when gazetted in the Army Medical Department, ranks as captain, and in England gets good pay and draws captain's allowances for lodgings, etc., amounting in all to nearly £300 a year. Before he is allowed to enjoy this any length of time, he is sent abroad, the majority being sent to India. He arrives at Bombay, and is sent to his station. A warrant is given for the journey, and if he travel up country with troops, as a rule, his baggage is taken up free; but if he travel alone, only four and a half maunds (a little over three hundredweight) are allowed on the warrant for himself, and half a maund for each servant. This, of course, falls far short of the weight of his necessary "kit" brought out from England, and the surplus has to be paid out of his pocket. When he joins his station, he may consider himself fortunate if he be left there three or four months. Each time he moves he has to break up his establishment, sell furniture, etc., at a loss, and pay for any extra luggage beyond the four and a half maunds he may carry about. Or he may be sent into camp some distance from the station, and has to pay for the carriage of all he takes out, no allowance being given for these moves. In England, a surgeon is always able to get his travelling allowance, ten shillings a day, and carriage of goods. I quite allow this is all supposed to be covered by his consolidated pay in India; but what is that pay? 317 rupees 8 annas a month—not by any means equivalent to £300 a year in England. I have been now nearly a year in the country. From the first station at which I joined, I was sent to do a surgeon-major's work for three weeks. There I was in medical charge of a draft from an English regiment, and a whole native regiment, besides staff duties. For this work nothing extra was allowed, I was informed. Thence I was sent back to my original station; and after a few days was sent to a new station, where I remained a fortnight; thence to another station, and after remaining there three months, I was sent to a musketry camp, where I am at present. I suppose I may consider myself fortunate, as I have had only six journeys to make; each move, however, has cost me money, and as these moves are by no means optional, why should I be obliged to pay for them? Now-a-days, gharries, bullock-carts, and coolies are more expensive than formerly, and yet our pay is not increased, but is the same as in former days when we ranked as lieutenants.

Again, our work is much increased; the Native Army Hospital Corps require instruction, and lectures have in consequence to be given; and we are informed that we must do any extra work we are ordered to do. Horse-allowance has also been taken away since the station hospital system has been introduced. Why should not Government give us the same pay that captains receive, and also give us allowance for travelling? Our work is increased, and our duties more onerous; surely the labourer is as worthy of his hire now as he was formerly.—I am, sir, your obedient servant,
Bengal, March 28th, 1882.

SURGEON A.M.D.

Sir,—At the concluding portion of the leader in your issue of February 25th, the writer seems to be labouring under a delusion, if he thinks that, "whenever a separate medical organisation for the civil medical duties of the various provinces of India becomes an accomplished fact, all real difficulties in the way of the Indian Army Medical Department coalescing with the British Army Medical Department will have disappeared...."

Pray understand that men who have entered the time-honoured Indian Medical Service did not do so for the purpose of being "coalesced" with the other service. They entered it with the expectation of remaining in a service where they would hold permanent civil and military appointments, with the privilege of transfer from the one to the other, and *vice versa*. Those who would have preferred the other service had their option of entering it, and could easily have done so with the marks with which they entered the Indian service. There are the majority of Indian

medical officers who would dislike any such move. Others, who may seem to like it, do so under the erroneous idea that they are going to be gainers, but will begin to complain when the real position is disclosed. What the service wants, in the interests alike of its present and future members, and the sepoys and pauper (the people of India), is, to be left alone. "Hands off" should be the watchword to all would-be reformers. No such radical reform is called for. The service, since the new warrant of better pensions, shows a tendency to regain its popularity with medical students, some of the best of whom it still attracts. It is absurd to believe that, from the proposed mixture, you would expect to find the fittest men for the duties of civil surgeons, superintendents of lunatic asylums, gaols, etc., professors, or even officers of native regiments. It is absurd to think that any unification, and the abolishing of the regimental system, would work to the advantage of the public service in the native army. I have not met a single combatant officer of the Indian army who did not tell me that he would like to see the good old regimental system reintroduced, for regiments to have their own doctors; for the men to know their doctor, and the latter his patients. It is nonsense to think that the sepoy will not take advantage of the "unification" in feigning disease to escape duty whenever he so feels inclined, knowing full well that the doctor who came to his hospital yesterday may be off to-morrow, would know nothing about his previous habits, and probably care less; and so he will be master of the position, and he can then smile at his commanding and other regimental officers, and all that would bid fair to discipline. A man must know the native character to treat natives, be they sepoys or others. He must also know individuals, to be an efficient regimental surgeon.

What are the grounds, amalgamate the Indian Staff Corps officers with those of British regiments? That would bear a semblance of economy, real or imaginary. These promises of economy end in myth. The British army, including the Indian, is being muddled and muddled with to such an extent, as is most disheartening to everybody. Schemes after schemes turn up, and what real good has ever been the legitimate outcome? Why not also amalgamate the Naval Medical Service also, for there are Royal Naval medical officers in the different harbours?

Now there is no "friction" whatever between medical officers of the British service and those of the Indian service. Some of the deputy surgeons-general are of one service, and some of the other. An Indian medical officer in military employ holds his regimental or other military appointment; he is, like combatant officers, under the control of the commanding officer; and, in medical matters, under the divisional deputy surgeon-general and of the surgeon-general of Her Majesty's Forces, who belongs to the Army Medical Department. Those in civil employ are under the control of the civil authorities, and, in medical matters, under the civil surgeon-general. If an officer want to get a civil appointment, *i.e.*, get transferred from the military to the civil department, he can apply for it, and the civil surgeon-general advises the Government as he thinks fit; and, if he be appointed to the civil appointment, if there be a permanent vacancy he gets it permanently, and only acting if the vacancy be temporary, in which latter case he would have to return to his regiment when the medical officer for whom he was acting in the civil appointment returns to it. No one complains of this. Then why have such medical changes, which are not called for?—I am, &c.

A VOICE FROM THE JUNGLES OF INDIA.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS, Friday, May 12th.

Patent Medicines.—Mr. WARTON called attention to the subject of patent medicines, and said that, by an Act of the 52nd of George III. it was provided that inventors of patent medicines should no longer be obliged to take out patents, which they had up to that time been obliged to do, but that they should be required to pay stamp duties. A great deal of quackery was promoted by the Government stamp now levied on these medicines, the price of which was often advertised as 1s. 1d. with the Government stamp. An apparent sanction was thus given by the Government to these medicines; and Mr. Warton suggested that, if the Chancellor of the Exchequer still thought fit to levy those duties, there ought at least to be some words placed on the stamps indicating that they were levied for fiscal purposes only, and were no guarantee for the goodness of the medicines. Another point which he urged was that at present, although restrictions were placed by the Pharmacy Act of 1868 on the sale of poisons properly so called, and of some others, unless he were a medical man, could get certain poisons without very great difficulty, yet it was open to any vendor of patent medicines to sell those medicines, although they might contain any quantity of poison. The sixteenth section of the Pharmacy Act seemed to reserve the rights of persons making or dealing in patent medicines. The restriction, however, he said, that it would be unlawful to sell any poison, wholesale or retail, unless the bottle or packet containing it was distinctly labelled "poison"; but he doubted whether those words overrode the special exemption in the sixteenth clause as to patent medicines.—*Dr. FARR* said that the Pharmacy Act was one of great utility, and that it was with pleasure in the interests of patients. There were numerous cases when the restriction which it was necessary to place on the sale of poisons was not sufficient, and the restriction was not sufficient. There were patent medicines that contained various poisons, and some more than one, with the Government stamp, and that although the poisons were not sold in bulk, but in the form of pills, capsules, or other preparations, it was still a case of poison, and that a large quantity of poison had been used in the use of which had caused a large number of deaths. An example of this had been given in the case of a patient who had been sold by a medical man, and who had not the same sense of responsibility. The amendment was

of the law was illustrated by the fact that the pharmaceutical solutions of chloral could not be sold except by registered chemists, while a patent medicine containing a solution of double the strength was freely sold by grocers and others.—*Mr. HIBBERT* said that Mr. Warton had done good service in pressing the point whether the Government should allow medicines over which they had no control, and the ingredients of which they could in no way guarantee, to be sold labelled with the Government stamp, producing the erroneous impression that some guarantee was thereby given. He was further doubtful whether it was right to allow mixtures of this kind, containing poisons, to be sold as medicines, without being labelled in the same way as poisons were required to be labelled, so as to indicate at least the extent to which they were poisonous. He could not make any promise as to what the Government would do, and could only express a hope that the matter would be fully considered by them, and that some better system would be adopted than that which was now in force.

Army Hospital Corps.—In Committee of Supply upon the Army Estimates, Sir R. LOYD-LINDSAY expressed the opinion that the short service system did not work well when applied to the Hospital Corps; also he thought there would be great advantage in an increase of the number of female nurses both at home and abroad.—*Mr. CHILDERS* mentioned that the first question was receiving attention from the Director-General; and he regretted the employment of female nurses, which gave rise to very serious difficulties and scandals, especially in time of war.—*Mr. A. O'CONNOR* and Colonel COLTHURST commented upon the high rate of mortality in some of the military prisons.

Tuesday, May 16th.

Kilkenny Union Infirmary.—The ATTORNEY-GENERAL FOR IRELAND, in answer to a question from Mr. McCOAN, said a sum of £89 1s. 10d. per annum was paid by the Government to the Kilkenny County Infirmary, among others, under 14 and 15 Vict., cap. 68, so long as the medical officers holding office at the time of the passing of that Act continued in office. No representations relative to sectarian appointments of officers, or to the management of this institution, had been made to the Government.

Patent Mixtures of Coffee and Vegetable Matter.—*Mr. REDMOND* asked the Chancellor of the Exchequer whether Section 6 of the Customs and Inland Revenue Bill, 1882, was intended to annul letters patent under and pursuant to which mixtures of coffee and vegetable matter were prepared and sold as such mixtures.—*Mr. GLADSTONE* said he was not aware, nor was the Revenue Department aware, of any patent rights such as were referred to in this question.

The Suspects in Cork Prison.—In reply to questions by Mr. HEALY with reference to the health of the suspects now confined in Cork Gaol, the ATTORNEY-GENERAL said that all these prisoners had two hours' daily exercise, exclusive of the time occupied in going to and returning from the exercise-yard. The prisoners had not complained of insufficient exercise, and the medical officer had not found their health suffer. The heating apparatus was discontinued in April in each year, subject to the advice of the medical officer. The closets were connected with pipe-laid sewers, and were constantly flushed and cleansed inside with gas-tar.

Vaccination Act.—The second reading of the Vaccination Acts (Compulsory Clauses Repeal) Bill is set down for June 21st.—The second reading of the Vivisection Abolition Bill is appointed for June 28th.—*Mr. Arthur Balfour* has given notice that, on the second reading of the Vivisection Abolition Bill, he will move that, while due provision should be made for preventing the infliction of unnecessary pain on animals, it is inexpedient so to limit scientific investigation as to hinder the series which must result in a great diminution of human suffering.—The second reading of the Compulsory Vaccination Acts Repeal Bill is set down for July 10th, and Mr. Warton has given notice of his intention to move that it be read a second time upon that day six months.

Carriage Tax.—Petitions for the exemption of medical practitioners from the carriage-tax have been presented from Garroch, Exeterham, and Harley.

University of Edinburgh.—The Secretary of the University of Edinburgh writes to inform that at the recent convocation for the Degree of M.D. at the University, Mr. Herbert Carter, L.R.C.P. London and Edinburgh, M.B. S. England, L.S.A., London, came out first with "honorable mention" in the first doctorate; first with "distinction" in the second doctorate; and finally, first with "grande distinction" in the third doctorate, which earned with it the Degree of the University.

OBITUARY.

SIR JOHN ROSE CORMACK, M.D., F.R.C.P., F.R.S.E.,
PHYSICIAN TO THE HERTFORD BRITISH HOSPITAL, PARIS.

WE much regret to have this week to record the death of a well-known and highly esteemed member of the medical profession, Sir John Rose Cormack. He had for some time suffered from chronic disease of the prostate and bladder, and died on Saturday, the 13th instant, at his residence, Rue St. Honoré, Paris.

John Rose Cormack was born on March 1st, 1815, at Stow, in Midlothian, of which place his father, the Reverend John Cormack, D.D., was minister. After receiving a sound general education, he pursued his medical studies in the University of Edinburgh, where he graduated as M.D. in 1837. On his graduation, a gold medal was awarded to him for his inaugural thesis on the Presence of Air in the Organs of Circulation. This essay, which was founded on carefully conducted experiments on animals, as well as on literary research, established Dr. Cormack's reputation as an authority on the subject, which was one in which he continued for many years to take much interest. Previously to this, in 1836, he had gained the Harveian prize for an essay on Creasote, the result also of much study and experimental research. In 1837, he was the senior president of the Edinburgh Royal Medical Society, and occupied the chair at the centenary festival of that society.

After his graduation, Dr. Cormack visited Paris, where he attended the lectures of Andral and Velpeau, and afterwards spent some time in travelling in Italy and Spain. Having returned, he settled in Edinburgh, and commenced physician's practice. In 1841, he was admitted a Fellow of the Royal College of Physicians of that city; and, not long afterwards, was appointed a physician to the Royal Infirmary. During the epidemic of relapsing fever in Edinburgh in 1843, he was physician to the Fever Hospital, and there made a series of careful clinical and pathological observations, which he published in the form of a treatise on the *Natural History, Pathology, and Treatment of the Epidemic Fever, at present prevailing in Edinburgh and other towns*. He also for some time lectured on Forensic Medicine in the Extra-academical School of Edinburgh.

In 1847 he left Edinburgh, and for several years followed general practice at Putney. Afterwards, he resided in London until 1866, in which year he left England, and went to Orleans. In 1869, the death of Sir Joseph Ollivier having caused a vacancy in the ranks of the British medical men in Paris, Dr. Cormack entered on practice in that city. In order to acquire full legal right to practice in France, he graduated as Doctor of Medicine of the University of France in 1870, selecting as the text of his thesis a subject cognate to that of his Edinburgh essay: namely, *De l'Entrance de l'Air par les Orifices Béants des Veines Utérines considéré comme Cause de Danger et de Mort subite peu de temps après la Délivrance*. He had previously, in 1850, written on the same subject in the *London Journal of Medicine*.

On the approach of the German army to Paris in 1870, Dr. Cormack dismissed several of his family to England, and, with his wife, one son—the late Dr. J. R. Baillie Cormack—and one daughter, remained throughout the siege, during which he rendered eminent service, not only to the wounded both on the field and in the ambulances, but also as one of the committee formed for the purpose of affording relief to the distressed British residents—an object in which much valuable aid was rendered by the liberal generosity of Sir Richard Wallace. During the terrible scenes of the Commune, he remained at his post, affording professional aid to the wounded of both sides, some of whom he received in his house in the rue d'Aguesseau, while others were placed in a house in the vicinity occupied as a hospital. After the restoration of peace, his services to the French and to his countrymen were recognised by the Governments of both countries. In 1871, the French Government made him a chevalier of the Legion of Honour; and in 1872, Her Majesty the Queen conferred knighthood on him. In the letter informing him of his enrolment as a member of the Legion of Honour, M. Jules Favre, the Minister of Foreign Affairs, wrote to him: "For the devotion with which you have cared for the French wounded and dying, whom you have sought on the field of battle, and so faithfully attended in the British Ambulance, France is grateful to you." When the Hertford British Hospital was established in Paris through the munificence of Sir Richard Wallace, Sir John Rose Cormack was appointed one of the physicians, and held office up to the time of his death. From 1871 to the present time, he had a considerable amount of practice, and was held in high regard both by his patients and by his English and French professional colleagues. In 1872, he was elected a Fellow of the Royal College of Physicians of London.

Sir John Rose Cormack possessed much literary ability, and was the

author of several valuable contributions to medical periodicals. Among them may be mentioned "Notes on the Pathology and Treatment of Cholera" (*Association Medical Journal*, November 1853): "Puerperal Convulsions, their frequent dependence on Toxæmia" (*London Journal of Medicine*, June 1849): "The Value of the Dark Abdominal Line as a sign of Recent Delivery" (*Edinburgh Monthly Journal of Medical Science*, February 1844), etc. In 1876, he published these with his Edinburgh thesis, several papers on Air in the Veins, Diphtheria, etc., in two volumes of *Clinical Studies, illustrated by Cases observed in Hospital and Private Practice*. Four of the volumes of the New Sydenham Society's translation of Trousseau's *Lectures on Clinical Medicine* (the first being by the late Dr. V. Bazire) were written by him. He had a great liking and possessed much aptitude for editorial work. In 1841, he established the *Edinburgh Monthly Journal of Medical Science*, and conducted it up to the time of his leaving Edinburgh. That periodical, long afterwards known and referred to as "Cormack's Journal", became in a few years amalgamated with—or rather, we believe, absorbed—the old Quarterly Medical Journal published in the northern metropolis, and has now for many years held firm ground as the *Edinburgh Medical Journal*. While residing at Putney, he established another monthly periodical, the *London Journal of Medicine*; among the contributors to which were Drs. Golding Bird, Garrod, Marshall Hall, Bence Jones, Parkes, Peacock, Quain, Sibson, C. J. B. Williams, Mr. (afterwards Sir William) Fergusson, and Messrs. Bowman, White Cooper, Prescott Hewett, H. Lee, Curling, and many other well-known men. This was discontinued towards the end of 1852, when, after the decision to remove the publication of the journal of the Provincial Medical and Surgical Association to London, he was appointed editor of that journal. He continued to conduct the *Association Medical Journal* with much ability until 1855, when, it having been decided at the annual meeting to separate the office of secretary—to which he had been appointed in the previous year—from that of editor, he announced his desire to retire from his editorial duties as well—a decision which was received with much regret. He took a deep interest in the prosperity of the British Medical Association, and was a steady advocate of all measures which he believed to be calculated to secure its welfare and increase its efficiency.

Sir John Cormack was always a firm supporter of the honour and dignity of his profession. In practice, he was a careful clinical observer; judicious and moderate in the use of medicines; assiduously attentive to cases which he judged to be severe and to require his careful supervision; and always acting in such a way as to gain the confidence and esteem of his patients and their friends.

Sir John Rose Cormack married, in 1841, Eliza Anne, second daughter of Mr. William Hine, of Hampshire, Trelawney, in Jamaica, and had eleven children—four sons and seven daughters. His widow, one son, and four daughters, survive him. His second son, Dr. Baillie Cormack, a young man of much promise, assisted his father during the sieges of Paris, and died in 1876. His only surviving son is a student of medicine in Paris.

We will conclude this notice by extracting a few sentences from an article in *Galignani's Messenger* of Monday last; remarking merely, that a long and intimate knowledge of him enables us to endorse all that is there said of the excellence of his character.

"In the death of Sir John, the English colony in Paris has lost one of its most distinguished representatives, one most widely known and respected. . . . For more than thirteen years he has lived in our midst, meeting the duties of his great profession with rare skill and fidelity, and commanding the respect of all by his sterling integrity and consistency of character. He was a true and earnest man, a noble servant in every call of duty. We, who knew him well and loved him in the closest friendship, will miss him through life. What we particularly noted in his character, apart from his abilities as a physician and a writer, was his high spiritual attainments, his simple and devoted Christian faith, his intense love for his Master, his profound sympathy for his fellow-men, and his unswerving fidelity to duty. Universally respected, he leaves many to mourn him. As husband, father, physician, friend, he was all that could be—more than most men are. He has passed from us and entered upon his great reward. Blessed be God for the record of such a faithful life, and for ever blessed be the honoured memory of this good and earnest man."

JOHN BROWN, LL.D., M.D., F.R.S.Ed.

DR. JOHN BROWN, who died of pneumonia on the 11th instant, in his seventy-second year, was born at Biggar on September 22nd, 1810. His father, grandfather, and great-grandfather, were all well known ministers of the Scotch Kirk. He received his general education partly at home, and partly at the High School and University of Edinburgh. He commenced the study of medicine as a pupil of Professor Syme,

S. Campion, Sydenham D. Chandlee, Roderick Cusack, William T. Cuthbert, Frederick W. Elsner, Francis C. Evans, John A. O'Finegan, Vicars H. Fisher, George H. J. Fisher, Richard W. Gilmore, John B. Greene, John Gurnea, Robert J. Gubbins, David Hamilton, John M. Harrington, Alexander F. Harcourt, Percie C. Hayes, Robert J. Heatly, Robert Hickson, Allen M. Jones, William G. Kennedy, James J. Kerr, John R. Mallins, John McCabe, Michael M. Hugh, Thomas M. Inerney, Fitz James Molony, William F. Morgan, Frederick H. Moore, Robert G. Nesbitt, John R. Nolan, William Nolan, Claudius O'Donel, Peter O'Donnell, James J. Phelan, William H. K. Pollock, George C. Porter, William J. Robinson, Joseph F. Russell, Robert Simpson, William F. Smart, Noble L. U. Somers, William H. S. Walker, Samuel R. Walls, George T. Wilkinson, Michael T. Yarr.

UNIVERSITY OF DUBLIN: TRINITY TERM, 1882.—At the First Summer Commencements, held on Wednesday, May 3rd, in the Examination Hall of Trinity College, the Senate of the University conferred the following amongst other degrees.

Doctor in Medicine.—Charles Patrick Baxter.

MEDICAL VACANCIES.

The following vacancies are announced:—

ADDENBROOKE'S HOSPITAL, Cambridge.—House-Physician. Salary, £65 per annum. Applications by June 6th.

BRISTOL FORESTERS' DISPENSARY.—Qualified Medical Practitioner. Salary, £120 per annum. Applications to E. L. Burgess, 34, Horfield Road, Kingsdown, Bristol, by the 20th instant.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary. Salary, £80 per annum. Applications to Mr. George Fell, Solicitor, Aylesbury.

CHELSEA HOSPITAL FOR WOMEN.—Assistant-Physician. Applications by June 1st.

CHELSEA HOSPITAL FOR WOMEN.—Two Physicians. Applications by June 1st.

CORK UNION.—Apothecary or Pharmacist for North District Branch Dispensary, at a salary of £90 per annum, with residence. Election on the 23rd instant.

HACKNEY UNION.—Resident Medical Officer. Salary, £200 per annum. Applications by the May 29th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by June 3rd.

KINGTON UNION, Kington, Herefordshire.—Medical Officer. Salary, £30 per annum. Applications by May 22nd.

LANCASTER INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £120 per annum. Applications by May 29th.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum. Applications by June 3rd.

NATIONAL HOSPITAL FOR THE DEFORMED, 234, Great Portland Street.—Surgeon. Applications by May 29th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Four Examiners in Medicine and Two Examiners in Midwifery. Applications by the 25th instant.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Junior Resident Medical Officer. Applications by the 24th instant.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by June 10th.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by May 25th.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL, St. George's Circus, S.E.—Clinical Assistant. Salary, £25 per annum. Applications by the 27th instant.

SLIGO DISTRICT LUNATIC ASYLUM.—Resident Medical Superintendent. Candidates must be doubly qualified, and not over forty years of age. Applications to be forwarded to the Under Secretary, Dublin Castle, on or before the 22nd instant.

ST. PANCRAS AND NORTHERN DISPENSARY.—Physician-Accoucheur. Applications to the Committee at the Dispensary by June 1st.

TORBAY HOSPITAL AND PROVIDENT DISPENSARY, Torquay.—Junior House-Surgeon and Dispenser. Salary, £90 per annum. Applications by May 22nd.

TOWCESTER UNION.—Medical Officer for the Blisworth District. Salary, £50 per annum. Applications by the 19th instant.

WARNEFORD, LEAMINGTON, AND SOUTH WARWICKSHIRE HOSPITAL.—Honorary Physician. Applications by May 22nd.

MEDICAL APPOINTMENTS.

ARCHER, A. M., M.B., appointed Visiting Surgeon to the Chester General Infirmary and W. H. King, M.D., resigned.

BAILEY, W. E., L.R.C.P., appointed Resident Assistant Medical Officer to the Township of Manchester, *vice* J. H. Pettinger, L.R.C.P., resigned.

BRADSHAW, Oswald G., L.R.C.P., M.R.C.S., appointed Clinical Assistant at the Royal South London Ophthalmic Hospital.

BRENTON, C. E., M.B., appointed second Assistant Medical Officer to the Metropolitan Asylum at Leavesden, near Watford, Herts, *vice* H. B. Runnalls, M.R.C.S., resigned.

CAMPBELL, C. C., M.B., appointed Medical Officer to the Royal Portsmouth, Portsea, and Gosport Hospitals.

CLARK, T. R. H., M.R.C.S.E., appointed Assistant Medical Officer to the Cambridge County Lunatic Asylum, *vice* R. J. Boyd, L.R.C.P., resigned.

COTTON, Charles, M.R.C.P., M.R.C.S.Eng., appointed Surgeon to the Admiralty at Ramsgate, *vice* J. B. Thomson, M.R.C.S., resigned.

DONNELLY, Thomas, M.B., appointed Assistant-Surgeon to St. Joseph's Hospital for Sick Children, Upper Temple Street, Dublin.

MIVART, F. St. George, L.R.C.P.Ed., M.R.C.S., appointed Surgeon to the City Dispensary.

NASH, W. G., M.R.C.S.Eng., L.S.A., appointed Medical Officer of Health to the Davenport Union, *vice* A. Haviland, M.R.C.S.Eng., resigned.

STEWART, C. W., M.B., appointed House-Surgeon to the Leith Hospital, *vice* G. M. Johnston, M.B., resigned.

UNDERHILL, F. E., M.D., appointed Member for the Honorary Medical Staff to the Guest Hospital, Dudley, *vice* A. Jones, M.R.C.S., deceased.

WOOLLETT, Sidney W., M.R.C.S., L.S.A., appointed Junior Assistant Medical Officer to the Banstead Asylum.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

EMERSON.—May 12th, at 4, Park Side, Cambridge, the wife of P. H. Emerson, Esq., M.R.C.S., Clare College, of a son.

WILKINS.—On the 9th instant, at Castlehold, Newport, I. W., the wife of Robert Bird Wilkins, of a son.

DEATHS.

CORMACK.—On May 13th, Sir John Rose Cormack, M.D., Physician to the British Hertford Hospital, M.D. of Paris and Edinburgh, at his residence, 364, Rue St. Honoré, Paris.

NORTH.—On the 11th inst., at Horsemonden, Kent, after a few days' illness, of pneumonia, John Cunningham North, M.B., C.M.Édin., eldest son of John North, Esq., of Brecon, aged 34 years.

ROWLAND.—May 16th, at Gloucester House, Malvern Wells, Worcestershire, Hugh Mortimer Rowland, M.D., in his 48th year. Australian papers please copy.

THE PHARMACEUTICAL SOCIETY.—The eleventh annual dinner of the Pharmaceutical Society of Great Britain was held, under the presidency of Mr. Greenish, on Tuesday night at the Freemasons' Tavern, when among those present were Dr. Buchanan (the Master of the Society of Apothecaries), Professor Abel (President of the Institute of Chemistry), Dr. Michael Foster, Sir Philip Cunliffe-Owen, Dr. Gilbert (President of the Chemical Society), Mr. E. Saunders (President of the Metropolitan Counties Branch of the British Medical Association), Mr. Sutherland Edwards, Mr. Danvers, and Mr. Brembridge, the secretary. The chairman in proposing "The Medical Profession," dwelt upon the importance of an intimate relation subsisting between pharmacy and medicine. Mr. E. Saunders, replying, remarked that whatever advance might be made in pathology, the healing art could not keep pace with that advance unless the pharmacist made corresponding progress. Dr. Buchanan gave the toast of "The Pharmaceutical Society of Great Britain." The president, Mr. Greenish, in reply, said the progress of the society depended upon the education of the individual pharmacist. In August last, the pharmacists from every part of Europe had come to this country. For a long time they had been making attempts to form an international pharmacopoeia; and he believed that, through the influence of the Pharmaceutical Society of Great Britain, the object would now soon be accomplished.

INSANITY FROM DRUGS.—Members of the medical profession, especially those having had dealings with the insane, are earnestly requested to answer the following questions, fully, yet concisely. The subject is one of so much importance, medico-legally, and otherwise, and so very little is to be found upon it in works on insanity, that it merits the attention asked for it. 1. Have you ever seen any cases of insanity, temporary or permanent, or any deviation from the normal mental or moral state that could be traced directly to the use of a single large dose, or the continued use of opium, or any of its preparations or alkaloids? 2. Of what type was such insanity? Give symptoms. 3. State patient's age, sex, civil condition, and occupation. 4. What was its duration and result? 5. State colour of patient's hair, eyes, and complexion. 6. Was there any hereditary tendency to insanity, or any history of alcoholism, grave nervous disease, or any drug habit in the patient's ancestors? 7. What amount of the drug was used, and for how long a time? 8. What line of treatment was pursued? 9. Please answer the same questions regarding the use of chloral hydrate. 10. Please answer the same questions regarding the use of bromide of potassium, or any other drugs. In all cases requested, communications will be considered strictly confidential. Reprints of the article, embodying the results of statistics, will be sent to each correspondent. Communications are to be sent to Dr. H. H. Kane, De Quincey Home, Fort Washington, New York City.

WATER SUPPLY AND DEATH-RATE.—The *Weiner Medic. Blätter*, No. 14, contains an abstract of a paper, read by Professor Drasche, on the influence of the high pressure service of water on the health of the population of Vienna, in which he takes as an index thereto, the rate

of mortality from typhus [typhoid?] The new supply was commenced late in the year 1873, and extended to over 2,000 houses in the following year, to 6,000 in 1876, and to 9,430 at the end of 1881, when 23 per cent. of the houses remained still supplied from private wells or other services. Prior to 1855 the deaths from typhus [typhoid?] were 2 or 3 per 1,000. At that time some improvement appeared, due probably to the demolition of the walls of the city, the widening of the streets, and other sanitary measures; but it was more marked when the new water service came into operation. Thrice only between 1795 and 1874 had it fallen below 1 per 1,000, but since that time it has never risen above 1, and latterly has stood at 2 per 1,000. Between 1853 and 1863 no fewer than 48,689 cases of "typhus" were admitted into the three principal hospitals; from 1863 to 1873, 32,000, and in the last decenniad only 10,000, of which 3623 cases and 803 deaths occurred in the short period prior to the introduction of the new water supply. Until 1878 or 1879 the houses which drew their water from private wells or other sources showed a mortality from twice to ten times as great as those provided by the company's water, but of late years this difference has disappeared, probably because those having private wells are now mostly well arranged suburban villas. A like reduction in the number of cases of gastric and intestinal catarrhs received at the various hospitals has been observed in the case of all parts of the city to which the new supply has extended. But an even more conclusive proof of the benefits derived therefrom was furnished by the fact that when during the droughts of 1876-7 some of these districts were for a time provided with water from the old Ferdinand canal they immediately showed the highest mortality of all. During the epidemic of "typhus" of 1877, these areas had a death-rate of 28.7 per cent. of the whole, while those receiving only the pure water had but 4.8. In the entire garrison there were 109 cases, of which 86 came from the barracks, supplied at the time from the Ferdinand canal, and in two barracks containing almost precisely equal numbers of men, similar in age, clothing, and other circumstances, but supplied the one from the canal and the other from the new waterworks, the cases were respectively 80 and 2.

HEALTH OF FOREIGN CITIES.—The recent health and sanitary condition of various foreign and colonial cities may be inferred from the following facts and figures, derived from a table in the Registrar-General's last weekly return. According to the most recent official returns, the annual death-rate was equal to 34.0 in Madras and 26.5 in Bombay; cholera caused 17 and small-pox 9 deaths in Madras, while 48 fatal cases of measles were recorded in Bombay. During the first week of May, the death-rate in Alexandria was equal to 33.5, and 10 of the 136 deaths were fatal cases of typhoid fever. In twenty-three European cities, the death-rate averaged 29.7, and exceeded by no less than 8.5 per 1000 the average rate prevailing last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 58.0, and showed but a slight further decline from the still higher rates in previous weeks; the 745 deaths included 40 from typhus and typhoid fevers, 25 from scarlet fever, and 28 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Carlsburg—the death-rate averaged 20.0; measles caused 7 more deaths in Copenhagen. The death-rate in Paris was equal to 20.5, and the 1140 deaths included 68 from diphtheria and croup, 36 from typhoid fever, and 20 from small-pox. The lowest death-rate was equal to 24.3, and 4 deaths resulted from small-pox; the death-rate in Geneva, however, did not exceed 23.3. In the three principal Dutch cities, the death-rate averaged 27.2, the highest rate being 28.1 in Amsterdam, where 8 fatal cases of measles and 6 of whooping-cough were recorded. The Registrar-General's table includes returns from some German and Austrian cities, in which the death-rate averaged 20.3, and ranged from 23.6 and 24.8 in Berlin and Hamburg, to 20.4 and 22.2 in Vienna and Innsbruck. Small-pox caused 44 more deaths in Vienna and 17 in Innsbruck; diphtheria continued somewhat fatally prevalent in Berlin and Dresden. The death-rate averaged 32.0 in the four Italian cities, and ranged from 28.4 in Rome, to 33.0 in Naples. The returns from Naples and Rome relate, however, to weeks ending in December and January. Scarlet fever caused 11 deaths in Naples, and both typhoid fever and diphtheria showed fatal prevalence in Turin. The annual death-rate in three of the largest American cities averaged 24.9, and ranged from 22.0 in Philadelphia to 25.5 in Brooklyn; the death-rate from New York does not appear to have been much affected by the fever and diphtheria which had fatal prevalence in Brooklyn, and which have caused 10 deaths in Philadelphia.

At the Annual General Meeting, Mr. W. H. Jackson, M.D., of the Metropolitan General Dispensary, Mr. E. W. F. Jones, of the Westminster General Dispensary, and Mr. J. H. B. Jones, of the Westminster General Dispensary, have been elected to the Westminster General Dispensary and the Westminster General Dispensary.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY..... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 12.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F., 0.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.40; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. T. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Mr. J. H. Jackson, M.D., on the removal of the uterus in cases of cancer of the cervix, and the removal of the uterus in cases of cancer of the body of the uterus. Dr. Felix Semon, on the case of a woman with a large fibroid tumor of the uterus, and the removal of the uterus. Mr. J. H. Jackson, M.D., on the case of a woman with a large fibroid tumor of the uterus, and the removal of the uterus. Mr. J. H. Jackson, M.D., on the case of a woman with a large fibroid tumor of the uterus, and the removal of the uterus.

THURSDAY. Royal Society of London, 8 P.M. Mr. G. V. S. Semon, on the case of a woman with a large fibroid tumor of the uterus, and the removal of the uterus. Mr. G. V. S. Semon, on the case of a woman with a large fibroid tumor of the uterus, and the removal of the uterus.

FRIDAY. Royal Society of London, 8 P.M. Report of Committee upon the removal of the uterus in cases of cancer of the cervix, and the removal of the uterus in cases of cancer of the body of the uterus. Dr. Felix Semon, on the case of a woman with a large fibroid tumor of the uterus, and the removal of the uterus. Mr. J. H. Jackson, M.D., on the case of a woman with a large fibroid tumor of the uterus, and the removal of the uterus.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

PRACTICE WITH SINGLE QUALIFICATION.

SIR,—Will you kindly inform me whether a practitioner with only one qualification, that of the College of Surgeons, can be permitted to practise both medicine and surgery, and charge for the same as a general practitioner? and, if not, through what channel can a remedy for such irregularity be had recourse to.—Yours truly, VETO.

. It was shown by a paper handed in to the Select Committee of the House of Commons by the Registrar of the General Medical Council, that a very considerable proportion of the medical practitioners of the United Kingdom (nearly one-fifth, in fact) are practising with a single qualification; and as the diploma of the College of Surgeons is the one most sought after, many of these will be in the position described by our correspondent, *i.e.*, practising both medicine and surgery, and, of course, charging for both, though only authorised by their diploma to practise surgery. There is nothing in the Medical Act of 1858 to prevent this; but the thirty-first section enacts that a registered practitioner shall only be entitled to recover his charges in a court of law, "according to his qualification or qualifications". The surgeon who possesses no medical qualification is, therefore, not entitled to recover for medical cases, nor the physician, who is without a surgical diploma, for surgical cases. With regard to the supply of medicines, the Apothecaries' Act of 1815 would, before the passing of the Medical Act of 1858, have been applicable to the case; but the last named Act provides that the registered practitioner may recover both his professional charges, and also the cost of all medicines and medical or surgical appliances; and it is quite certain that the Apothecaries' Society would refuse their sanction to the prosecution of a registered surgeon on account of any supposed infringement of their Act. In this, we think they would be right; the true remedy for the irregularity complained of by our correspondent being rather to be sought in the amendment of the Medical Act, and the adoption of the one portal system of examination, than in the promotion of litigation between members of the same profession.

PRURITUS VULVAE.

SIR,—In answer to "H. H. O.", I am not inclined to think with him that the distressing symptom he alludes to is in his case due to a diabetic condition of the urine. "H. H. O." describes his patient as being strong and robust in appearance. Now, I have noticed that the symptom of pruritus—or, in other words, irritation and inflammation about the orifice of the urethra—does not, as a rule, show itself until quite the last stage; in fact, when the patient is dying from inanition. I should fancy there was some local cause, and should recommend the application of liquor sodæ chlorinatæ diluted to half its strength.—Yours very truly, Fareham, May 13th, 1882. E. T. CROUCH, M.R.C.S.

SIR,—A correspondent, "H. H. O." asks for a remedy for pruritus vulvae. In the case of a patient of mine, a single application of a saturated solution of boric acid effectually released her from this affection, from which she suffered in an intense and most distressing degree for weeks previously, and which various applications, including lead and strong nitrate of silver solutions, failed to relieve.—I am, sir, faithfully yours, THOMAS DRAPE, M.B. Enniscorthy, Ireland, May 15th, 1882.

MR. JAMES STARTIN suggests that, provided there be no mechanical cause, small tumour, uterine or otherwise, "H. H. O." should try a drachm of cajeput oil to the ounce of vaseline, and apply it after bathing with warm water every night. It may cause a little smarting at first; but, in Mr. Startin's experience, it has proved valuable in many instances.

MEDICAL QUALIFICATIONS.

SIR,—Now that so much has been said for and against the Edinburgh colleges as qualifying bodies, is it not time that something was said and some attention drawn to the lamentable fact that the English practitioner is compelled to seek for medical degrees outside his own country? The best of our general practitioners, and some of our most distinguished physicians, in the laudable desire to possess medical degrees, are compelled to seek them from foreign universities, or to cross the Tweed, unless, indeed, they choose to wait for the degree at Durham, and accept, at the age of forty, fifty guineas' worth of professional distinction. At forty, it matters little to a man what his qualifications are. He has, at that age, made his mark or missed it; and any degree, no matter how high, is of secondary importance to him.

Had Durham been sufficiently liberal as to offer its M.B. to men of ten years' standing, and the M.D. afterwards in the usual course, it might have done much to deserve the thanks of the profession. It is surely too hard that, year after year, our best men are compelled to seek at the hands of foreigners what they are denied at home. Looking through the *Directory*, I was astonished to see what a number of men, men of high standing in public and professional estimation, would have been driven to seek the degrees abroad. Cannot the voice of the profession rouse the universities to a sense of the injustice of their restrictions? Will they not see, until too late, that honour and profit are passing away from them? Should the present exodus continue, the Government will be compelled to take the matter up; then who can tell how far the reform may go? Agitation may bring this question within the range of practical politics.—Yours, etc., L.R.C.P.

FAREWELL, MAY 6TH, 1882.

To Sir William M. Muir, M.D., K.C.B., Director-General Army Medical Department, 1874-1882.

What burning words can fitly tell how beat our hearts to-day
For his loved name who made us free, who struck our bonds away!
Who found us weak and powerless, and ever nigh to fall,
Split up in many a petty group, and held in irksome thrall;
Who leaves us strong and stalwart, and full of life and hope,
Prepared alike in peace or war with pain and death to cope.
The foremost he in the long list of men so true and tried
Of England's soldier-doctors—the names that are our pride;
He stands the first, the best of all; his name shall live secure—
The name that was our rallying cry, the honoured name of MUIR.

Can we forget the bitter fight, the struggle, and the pain
He bore, to free our own loved corps from dull tradition's chain?
He fought the fight most gallantly; he won, and we are free—
Free to develop perfect work and ordered liberty.
He built for us a fortress, with ramparts broad and great—
A castle where we ever knew a strong man held the gate;
A fortress where we dwell secure if duty's calls are met;
And his loved name who built the fort we never must forget.
To-day he yields to other hands the keys he kept so sure;
May CRAWFORD hold the gate as well as it was held by MUIR;
And may the garrison within stand loyal, firm, and true,
United in the Godlike work it is their lot to do.

But we must now a sad farewell to our loved leader say,
To the bold captain whom so long we followed in the fray.
Farewell! May truly honoured rest still crown thy years to run.
The fight is fought, the conquest sure, the victory is won.
Cease from thy heavy tasks to-day; its cares, its toils, resign;
But the great memories of the work are all, are wholly, thine.
Thy name upon our annals shall in clear distinction stand—
A man complete at every point, heroic, matchless, grand;
The greatest soldier-doctor; the strongest clear head and true;
The boldest, bravest, staunchest heart our annals ever knew;
We lose thee. But through all the years undying shall endure,
Undimmed by time for evermore, the well-loved name of MUIR.

May 1882.

I. V. R. C.

FLEAS.—In answer to "Tormented's" query in the JOURNAL of May 13th, Dr. Poole writes to say that he will find lavender water, or lavender used in the shape of pomade or wash, a great preventive to the approach of fleas.

A. B. K. refers "Tormented" to page 214 of Mr. Pye Chavasse's *Advice to a Mother on the Management of her Children*, where he will find efficient directions both for the prevention of, and means of relieving the effects of flea-bites.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following were the questions submitted to the 167 candidates at the written portion of the anatomical and physiological examination which was commenced on the 5th instant, when they were required to answer four, and no more, of the six questions. *Anatomy*. 1. Describe the surfaces of Bone which enter into the formation of the floor of the Orbit. 2. The Uterus; describe its position and its ligaments; also the divisions of the organ, its cavity, and the openings into it. 3. Describe the second portion of the Subclavian Artery, and the Dissection by which you would expose it. 4. Describe the Synovial Membrane of the Knee-joint, and mention the various synovial bursæ which are found in the neighbourhood of this articulation. 5. State the position which the Heart and the arch of the Aorta bear in reference to the walls of the thorax and the roots of the lungs. 6. Name in order the parts which would be divided in removing the Hand at the Wrist-joint by a transverse incision from before backwards.—*Physiology*. 1. Describe the Structure and Functions of the Submaxillary and Parotid Salivary Glands. 2. How does Striated Muscle in a state of rigor mortis differ from similar muscle when living and in a state of rest? What conditions affect the period of onset and the duration of rigor mortis? 3. The production of Heat in the Body has been compared to the process of combustion. State in what particulars the comparison is valid. By what circumstances is the production of Heat in the Body modified? 4. What are the extrinsic and intrinsic muscles of the Eyeball? What are these functions? and what nerves supply them? 5. Describe the Coagulation of the Blood, and state the mode in which the fibrin factors can be obtained. 6. Describe the structure of the Testis.

G. S.—A medical man cannot legally refuse to give a certificate of death on the ground that his account will not be paid.

BLAIR'S GOUT PILLS.

SIR,—I shall feel obliged if any of your correspondents can give me some idea what is the chief or active ingredient of Blair's gout pill; or could you refer me to any book where I could find its composition approximately given, as I am aware it is a patent medicine?—I am, etc., M. B. M. A.

INQUIRER asks whether a Fellow of a Royal College of Physicians is correct in adding the prefix "Dr." to his name. The following is a copy of a resolution passed at a general meeting of the Royal College of Physicians of London, held April 10th, 1876. "No Fellow, Member, Extra-Licentiate, or Licentiate of the College, is authorised or entitled by virtue of any Diploma or Licence granted by the College to assume the title of Doctor, or to append to his name the title of Doctor of Medicine, or the initial letters M.D., or any other letters indicating that he is a Graduate in Medicine of an University, unless he has obtained a Degree in Medicine from an University recognised by the College, and legally entitled to confer such degree."

THE MEDICAL DEFENCE ASSOCIATIONS.

L.R.C.P., who asks for particulars relating to these Associations, will find the names of the office-bearers, and a full statement of the objects both of the Medical Defence and Medical Alliance Associations, in Churchill's *Medical Directory*. Briefly stated, the object of both societies is to repress the practice of medicine by unqualified persons, and to procure an amendment of the Medical Act of 1858, especially as regards its penal clause. Both societies have done good work, the Medical Defence having, *inter alia*, established branches at Nottingham, Norwich, Newcastle, Shrewsbury, Sunderland, etc.; while the Medical Alliance has instituted more than thirty prosecutions, and introduced, we believe, several Bills for the amendment of the Medical Act into Parliament.

REPORTS TO THE SCIENTIFIC GRANTS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

ON THE INFLUENCE OF THE GALVANIC CURRENT ON THE MOTOR NERVES OF MAN.

By A. WALLER, M.D., AND A. DE WATTEVILLE, M.A., B.Sc.

THE results of our experiments, together with the sources of the fallacies to which they were liable, and the methods adopted by us for the elimination of errors and the confirmation of facts elicited, have been embodied in a memoir, which is to appear shortly in the *Philosophical Transactions* of the Royal Society. In the present report we shall, therefore, confine ourselves to giving an amplified version of the Abstract read before the Royal Society, and published in the *Proceedings* for February 1882.

The attempts hitherto made to demonstrate on the living nerve of man the laws of electrotonus, established by Pflüger for the excised frog's nerve, have been desultory, and the results they yielded contradictory or negative for the most part. Of these results, such as were considered as concordant with the data of physiology, were either explained as depending on physical fallacies in the mode of experimentation, or could not be confirmed by subsequent investigation.

The results of Fick were purely negative. Those of Eulenburg and Erb, concerning the descending extrapolar electrotonus, were in each case uniform, but diametrically opposite to one another. Those of Samt and Cyon, on the same point, were very irregular. Brückner and Runge obtained, with the method used by Pflüger for testing the "total excitability" of the nerve, results fragmentary but uniform, and in consonance with some of the facts as observed by us: in their interpretation, however, they join issue.

Erb is the only observer who perceived the truth and importance of Helmholtz's axiom, "that, owing to the rapid current diffusion among the tissues, the polar state of the nerve will be, at a short distance from the electrode placed over it, of the opposite electrical sign to that of the electrode"; and his second series of experiments gave results concordant with the theory. Remak, on the other hand, observed the influence of changes of resistance in the tissues upon such investigations, and was the first to use the galvanic test for the effects consecutive to the polarisation of a nerve.

The fundamental condition to be fulfilled in testing the alterations of nervous excitability is the exact coincidence of the points of excitation with one of the zones of polar alteration. These zones correspond to the points of application of the anode and cathode of the polarising current. These points are, in the excised nerve, identical with the points of application of the actual electrodes; whereas in the normal living nerve, lying deeply embedded among various tissues, these points cannot be determined so accurately. They exist wherever the current enters and leaves the nerve; hence their distribution is regulated in each case by the relative position of the electrodes on the surface, and the diameter and conductivity of tissues surrounding the nerve.

When, as in our experiments, one electrode only is applied over the nerve (the other resting on some distant part of the body), the part of the nerve nearest to the electrode is permeated by a current of a certain density; whilst in neighbouring parts, owing to the rapid diffusion due to the better conductivity of surrounding tissues, the electrical density is much less considerable. To these nerve-regions, we give the names of polar and peripolar respectively.

Since, by the definition of the words anode and cathode, with reference to the nerve, we must understand, not the actual electrodes, but the points of entrance and exit of the current into and from the nerve itself, it is obvious that the polar and peripolar zones will be of opposite electrical sign; the polar zone being always of the same sign as the electrode placed on the skin over it. And, since the law of diffusion is the same for all currents, in order to secure coincidence of their respective polar and peripolar zones, it is necessary that the polarising and testing current should be applied to the same spot on the surface. Hence we have, in our experiments, joined both currents in the same circuit, and applied them by means of the same electrode.

From the same premises, together with the considerations (1), that

the stimulation on making the current starts from the cathode, on breaking it from the anode, (2) that an induction shock acts as a cathodic make only, we have interpreted our results on the principle, that any alteration of irritability manifested on making and breaking the testing current, arose from changes effected by the polarising current in the one bone in which fell the stimulus.

Generally speaking, the alterations observed are always better marked in the polar region—a fact easily explained by the greater electrical density obtaining in this nerve.

It has been objected to the method of uniting the polarising and testing currents in the same circuit, that the effects are accounted for by "a summation of the electro-motive forces." This objection, in the case when the two currents flow in the same direction, contradicts the known laws of electricity; and is, moreover, invalidated by the demonstration of electrotonic changes by means of mechanical stimulation. It is more specious in the case where the two currents (faradic and galvanic) flow in the opposite direction. The following experiments sufficiently refute it. (a) When a tetanising induction current (200 interruptions in the second) has its effect suspended by the closure of a galvanic current opposed to it, it is found that, on suddenly short circuiting the latter, the contraction produced by the release of the former has a latent time considerably longer than that observed with a simple closure of the current. Now here, by the known laws of current-diffusion, the faradic stimulus falls upon a series of anelectrotonised points; and we know that the anodic opening contraction has a long latency, owing to the persistence of anelectrotonus after the opening of the circuit. Hence, it is clear that the release of the tetanising faradic current is physiological, not physical. (b.) A subminimal faradic stimulus is made effective by making a galvanic current in the opposite direction; on gradually increasing the latter, a certain point will be reached, where contractions appear. These continue increasing with stronger polarisation.

The most important sources of fallacies in experiments on the human body such as those we are describing, are electrolytic changes, and the consequent development of electro-motive force in the electrodes and tissues; changes of resistance in the circuit; alterations of nervous excitability due to the effect of the testing currents. The first two give rise to accidental variations in the strength of the currents employed. These alterations may be controlled by constant reference to the galvanometric readings, or eliminated by the introduction of large additional electro-motive forces and resistances in the circuit. Both these means were constantly resorted to by us in all our experiments.

In order to eliminate the disturbing effects of the testing currents, we took a series of observations which enabled us to establish certain propositions. The excitability of the nerve is regularly diminished or increased during a series of electrical stimuli according to their strength and their rhythm (*i.e.*, their number in the unit of time, and the relative duration of the periods during which the current is made and broken respectively). Further, we found that, in every series of anodal opening contractions, a point is soon reached at which the contractions diminish, and finally disappear.

Our results were obtained (1) by the method of minimal stimuli; (2) chiefly by that of varying effects with uniform stimuli. The muscular contractions which served to estimate the degree of nervous excitability were uniformly registered on a revolving cylinder. Three kinds of stimuli were used: (1) make and break induction currents; (2) makes and breaks of the galvanic current; (3) mechanical stimuli. Each of the several polar combinations possible yielded a number of data which will be found individually described and interpreted in our full memoir, as well as illustrated by myographic tracings. We give here our final conclusions only.

(a) When the stimulus falls on an anodic bone, whether polar or peripolar, there is diminution of excitability. When it falls on a cathodic bone (polar or peripolar), there is increase of excitability. This statement holds for weak and moderate current-strengths; and, within these limits, the alterations of excitability bear a certain proportion to the strength of the polarising and testing current. Beyond this, we observed phenomena which apparently point to an invasion of the anelectrotonic by the catelectrotonic influence—the opposite of that which obtains in Pflüger's intrapolar region of the frog's nerve. The effect of a uniform stimulus first suffers diminution, then increase (relative or absolute) by anodal polarisation of the zone on which it falls.

(b) The state of diminished excitability in the anodic zone gives way on breaking the current to a state of increased irritability of considerable duration.

The state of increased excitability in the cathodic zone gives way on breaking the current to a condition of diminished excitability of appreciable duration, and which gradually passes into a state of in-

ON SOME POINTS IN THE DIFFERENTIAL DIAGNOSIS OF INTRACRANIAL DISEASE, GENERAL PARALYSIS OF THE INSANE, AND TABES DORSALIS.

By THOMAS STRETCH DOWSE, M.D.,

Formerly Physician Superintendent of the Central London Sick Asylum.

[Concluded from page 732 of last number.]

If we may be allowed to judge from pathological evidence alone, we should, I think, come to the conclusion that in some cases a sclerosis of the posterior root-zones of the spinal cord may exist, to a certain extent, without locomotor ataxy; and a chronic degeneration of the grey matter of the cortex of the antero-parietal lobes may exist without the mental derangements which are common to general paralysis. Westphal does not believe that there is any direct relation between the morbid process in the cord and the morbid process in the brain, which frequently co-exists in the general paralysis of the insane; he believes that they are the expression of an excessive proclivity to disease of the nervous system; and Hammond, in his valuable work on *Diseases of the Nervous System*, corroborates this view of Westphal, and states that locomotor ataxy is by no means uncommon in patients affected with other forms of insanity; and although I am inclined to question this doctrine of Westphal, yet, so far as I am aware, we have no direct pathological proof to upset it.

We find that, in locomotor ataxy, the mental functions—intelligence, memory, etc.—are for a long time, if not permanently, unaffected during the whole course of this troublesome and trying disease; and this leads us to infer that sclerosis of the posterior columns of the cord is for the most part secondary to the brain-changes in the general paralysis of the insane. I cannot agree with those observers who maintain that there is no relation of causality between these two conditions; for there are many and striking clinical features which are common to the two affections, and which it may be wise to consider as manifestations of a more or less diffuse process of disease extending over a great part of the central nervous system.

There is a growing desire on the part of neurologists (and justly so) by the aid of advanced pathological and clinical research, to localise changes to distinct areas of grey and white matter in the brain and spinal cord in accordance with certain well known and recognised rules; and we can now tell with a fair amount of accuracy the seat of the lesion which has given rise to a definite train of signs and symptoms; yet I must admit that we are still most woefully in the dark concerning the nature and value of many and important initiatory symptoms which may exist for years before any serious lesion has implanted itself on the brain and nervous centres; and we cannot find any better example to justify the truth of my assertion, than that which is found in tabes dorsalis and general paralysis of the insane. I may say with truth that to no living man are we more indebted than to Dr. Hughlings Jackson, for the valuable work which he has done in the field of ophthalmology. In the paper on Optic Neuritis in Intracranial Disease, which he read before the Ophthalmological Society, March 10th, 1881, he makes the following remarks; and although they do not exactly bear out in practice the precise value of my observations, still they are of important and relative worth. He states: "A man whom I thought to be hypochondriacal until I looked into his eyes, who gave only a vague history of twitching of one lip, had double optic neuritis with good vision. He seemed, superficially regarded, to have nothing the matter with him. He became suddenly apoplectic, with hemiplegia, and died. A woman who had double optic neuritis with good vision, and some other vague nervous symptoms, got well, except that the neuritis remained, vision being still good. She then had attacks of giddiness, in some of which she would fall. She, however, looked perfectly well, and yet died in a few minutes one night." I should most strongly advise all those who are interested in the study of intracranial disease to read the paper of Dr. Jackson to which I have just referred, for the reason that sufficient attention is not usually given to many of the initiatory subjective symptoms of locomotor ataxy and of general paralysis of the insane. I am led to believe that much of the evidence in reference to the occurrence of these two conditions in their relationship to each other, in regard to their origin and association, is untrustworthy and of little value.

Dr. Mickle says: "Broadly speaking, in general paralysis, the rule is that cerebral symptoms precede the spinal symptoms;" and I am bound to receive the dictum of so careful and distinguished an observer with due deference, but we must not forget that a man may suffer from tabes dorsalis, and yet be free from ataxy in locomotion,

and when a man once becomes a general paralytic it would not advance clinical research if we paid any attention to his statements in regard to what may or may not have been the initiatory symptoms before the grandiose mania became developed; and, as I before stated, a man may be an insane general paralytic although the grandiose mania has proved abortive. I believe it is the unqualified experience of most observers "that headache more or less persistent and attended with elevation of temperature, optic neuritis, or atrophy, is indicative of gross organic change within the cranium; that pupils which do not contract to light but contract during accommodation (with or without atrophy of the discs), when associated with an absence of knee-reflex, and with the existence of dysæsthesia and analgesia of the lower limbs, are indicative of sclerosis of the posterior columns of the cord; that either of these states just mentioned, or the two combined, when associated with marked labial and lingual tremor and the *délire des grandeurs*, are indicative of the general paralysis of the insane. If a man dies from some intercurrent affection during what is called the stage of grandiose mania, and we examine the nervous centres, we shall most probably fail to find any extensive gross change, and we are thus led to believe that, during this stage, there is an instability and retardation in the normal sensory and motor reflex processes, due to an impairment of nutrition, which ultimately leads to organic dissolution and general paralysis with the pathology of which we are now quite familiar; and I feel quite sure that there are also stages in tabes dorsalis where no pathological change could be detected in the posterior columns of the cord. If a man lose his reason, and declare that he is the Emperor of Morocco and brother to the Sultan, he passes at once into the hands of the psychologist, who tests his mental condition, and classifies him accordingly; but little knowledge is gained of the antecedent features of the patient's case from a psychophysical point of view, and all hearsay evidence is valueless in reference to the formation of scientific clinical deductions, although I must admit that, for all practical purposes and for treatment, no such knowledge is imperatively demanded.

I will now [draw attention to some of the disturbances of reflex action common to general paralysis of the insane and tabes dorsalis. Possibly the most important initiatory sign in all the reflex processes of the body is that which is connected with the pupil of the eye. This condition, known as spinal myosis, has long been fully recognised, and is unquestionably due, as pointed out by Erb, to some morbid inactivity in the reflex processes which normally exist between the optic nerve, the medulla oblongata, and the cilio-spinal centre; and here would demonstrate a point which I consider to be of some importance in relative diagnosis. In tabes dorsalis, we invariably find pupillary immobility more or less marked, and such is often the case in the general paralysis of the insane; but in the former we find the reflex action of the skin retained, whilst in the latter we find that it is partially lost; and the same condition may be said to exist in reference to common sensation, although the reverse is sometimes found in regard to the tendon-reflex.

The abolition of the reflex action of tendons in tabes dorsalis is, with very few exceptions, an accepted doctrine; but it is very questionable whether the absence of tendon-reflex is found in the general paralysis of the insane without some change in the posterior columns of the cord. Erb states that the tendon-reflexes stand in no demonstrable relation to cutaneous or muscular sensibility, nor to the reflex action of the skin. He says that he has seen the reflex action of tendons fail when the cutaneous and muscular sensibility were entirely intact, and that they were greatly diminished when the reflex action of the skin was normal, raised, or lowered. I need scarcely say that these are facts borne out by our every-day experience. Disturbances of vision are common both to the tabetic and to the general paralytic; and I have verified the assertion of Gräfe that patients who are suffering from diplopia in tabes show slight tendency to the blending of images in binocular vision; but the reverse, in my opinion, often occurs in the vision of the general paralytic. With regard to degenerations of the optic nerve, I am sorry that my experience in this respect is extremely limited in the general paralytic; but Hammond states that ophthalmoscopic examination will very generally detect degeneration of the papilla at a very early stage of this disease, together with retinal and choroidal anæmia. We know that atrophy of the optic nerve is common in the initial stage of tabes, and may exist, according to Charcot, for many years as an initial sign of ataxic symptoms. In the third case which I reported, the grey degeneration of the optic nerve, which was associated with severe headache, increase of temperature, and emotionability, was rapidly succeeded by sclerosed atrophy; and, although there was scarcely a trace of vision, yet the pupils contracted slightly to light and during accommodation. I am, however, greatly inclined to believe, from some cases which I have under my observa-

tion, that those cases of ataxy which are preceded by sclerosal changes in the optic nerve are frequently cases of abortive general paralysis, and which are decidedly cerebro-spinal, rather than purely spinal; and, furthermore, when the acute symptoms set in, they become more or less rapidly fatal. When the sensory division of the fifth nerve is involved in association with amaurosis due to sclerosal atrophy of the optic nerve and other signs of tabes dorsalis, we must be guarded in making a diagnosis and in giving a prognosis. Now, in making a diagnosis, we have to study very carefully the head-pains, which are very diagnostic in the general paralysis of the insane, as they differ from those of tabes dorsalis, which are equally diagnostic. In the former case, the headache is primarily of medullary origin, is more diffuse, and invariably associated with marked elevation of temperature; but it may appear and disappear suddenly; and it differs altogether from the chronic form of headache which supervenes and becomes more localised and persistent as organic changes ensue in the later progress of the disease. In tabes, when the fifth nerve is involved, the pains are rapidly migratory, and resemble more the pains of neuralgia; and, what is most important to remember, they are not accompanied by an increase of temperature of the head. The fifth nerve is more frequently implicated in the general paralytic than in the tabetic; hence we find disturbances of sensation in those parts supplied by the sensory division of this nerve more frequent in the former than in the latter. I have seen patients with commencing general paralysis who have stated that their teeth felt like so much India-rubber; and I have also found that, throughout the whole distribution of this nerve, there has been a decided retardation in the conduction of sensations as well as of the sense of pain.

It is generally considered that the seventh is, of all the cranial nerves, the first nerve to be objectively involved in general paralysis, and especially those branches which serve for the mimetic movements of the mouth and lips; and this is unquestionably true as far as the objective signs are concerned; but more recent observation has led me to conclude that the deficiency in normal sensation of those parts supplied by the fifth nerve precedes the exaggerated and inco-ordinate movements of the lip in articulation, which are strikingly characteristic of general paralysis, and which distinguish this condition of disease from tabes dorsalis; and the same may be said of an associated lingual tremor and muscular inco-ordination. The special senses of taste and hearing are more defective in the general paralytic than in the tabetic. The varying morbid reflex actions and trophic disturbances which produce the different crises in tabes are for the most part of spinal origin, and are common to other degenerative changes in the spinal cord, and cannot be said to be due entirely to sclerosis of the posterior columns; at all events, they are not found to exist in the primary stages of the general paralytic. In tabes dorsalis, ataxy, and not paralysis, is the essential and characteristic disturbance. This disturbance is usually first manifest in the lower extremities.

In the general paralysis of the insane, the first sign of ataxy is usually seen in some derangement of those complicated and combined movements of the tongue and lips in articulation; but we find more than mere disturbance in the co-ordination of these movements, for there is, in addition, actual muscular paresis; and the power for the engenderment of individual and simple movements is greatly lessened, and no sustained muscular effort can be supported.

THE PHYSICS OF NERVE-STRETCHING.

BY J. SEMINGTON, M.B., F.R.C.S.E.,

Lecturer on Anatomy, School of Medicine, Edinburgh.

On the 15th May 1878, I read a paper on the above subject before the Medical and Chirurgical Society of Edinburgh. At that time, the operation of nerve-stretching was chiefly resorted to for severe and intractable cases of asthma. Having seen the greater sciatic nerve stretched by several of the Edinburgh surgeons, and the limb with part of the trunk lifted from the table by the nerve, I thought it would be useful to ascertain the amount of force that could be applied to the nerve without any liability of rupturing it.

On consulting the various treatises of anatomy and physiology, little or no information could be obtained. Thus Hermann, in his *Human Physiology*, translated by Gamgee, discusses the subject with no remark, but "the more mechanical properties of nerves have, as a rule, no interest, physiologically speaking;" but, in view of the importance we have mentioned above, they would appear to have some interest surgically. In *Valentin's Physiology*, translated by Dr. W. Lushington (page 24), there is a table, showing the relative strength of the various parts of the body. These are stated as follows, in the grammes, for square centimetre of surface: arm, 200; anterior, 111; ventral, 241; nerves, 100; tendons, 544; bone, 200. It will be noticed that tendons are

given as about six times as strong as nerves. In the *Annales de Clinique et de Physique*, for 1847, is a valuable "Memoire sur l'elasticité et la cohesion des principaux tissus du corps humain," by Wertheim. At the end of his paper, he gives, in a tabular form, the result of his experiments upon various tissues. In the list of nerves, there are four great sciatics. The following was the method he employed, and the result obtained. As long a portion of the great sciatic nerve, presenting a tolerably uniform size, as could be obtained, was removed from the body, measured and weighed. One end of it was then fixed, and a weight attached to the other; the increase in the length of the nerve was observed; and, the weight being removed, its length was taken immediately, and again after a short interval. This process was repeated, the weight being gradually increased each time, until the nerve was broken. This was accomplished in a man, aged 35, by 47 lbs., and in one aged 74 by 51 lbs.; in two females, aged respectively 21 and 60, by 59 lbs. and 39 lbs. From experiments on various nerves, he came to the conclusion that, in proportion to their size, the branches of a nerve were stronger than the main trunk. These experiments of Wertheim did not appear to give the surgeon a reliable guide to the amount of force he might safely apply in the ordinary operation of nerve-stretching; and that mainly for two reasons.

1. His experiments being made chiefly with a view to ascertain the elasticity of the nerves, these were subjected to a considerable amount of stretching for some time before a force sufficient to rupture them was applied; and, as is well known, time is an important factor in testing the cohesion of a substance.

2. The nerves being first removed from the body, his experiments afford no information as to the strength of the upper and lower attachments of the nerve.

In order to obviate these objections, I made a series of experiments, in which the force was applied, as nearly as possible, in a manner similar to that in the operation of nerve-stretching. The subject being placed on its face, the nerve was exposed at the point where it is usually stretched—viz., at the lower border of the gluteus maximus. One end of a strong S-shaped hook was passed beneath it, special care being taken to include the whole of the nerve. The body was then turned on its back, and the buttocks supported on one table and the knees upon another. To the lower curve of the hook, weights were then rapidly attached until the nerve gave way. By this means, the force was applied at right angles to the thigh, as in the operation when the limb is lifted by the nerve; and, by the rapid addition of the weights until the nerve ruptured, the force acted only, as in the operation, for a short time.

EXPERIMENTS.

Experiment 1.—Male, aged 37, well-developed, but lower limbs oedematous; heart and lungs healthy; liver markedly cirrhotic; a clot in left iliac vein. During life, the left limb had become dropsical before the right one. Right sciatic: 100 lbs. failed to break, even after it had been on for fifteen minutes; had no heavier weights at this time. Left sciatic: 100 lbs.; the nerve came away, with its connections to the spinal cord, in less than one minute.

Experiment 2.—Female, aged 50, of average size and muscular development; aortic disease; lower extremities slightly oedematous. Right sciatic: 100 lbs.; came away from spinal cord in less than a minute. Left sciatic: 100 lbs.; came away as on right side, but almost immediately.

Experiment 3.—Male, aged 22, well developed. Right sciatic: 126 lbs.; failed to break. Left sciatic: 126 lbs.; failed to break. I had no more weights, but turned the body, and lifted the lower extremities and as much of the trunk as I could by the nerve, and I failed to break the nerve.

Experiment 4.—Female, aged 17, small for her age and ill-developed. Died of phthisis, waxy disease, etc. Right sciatic: 68 lbs.; gave way in less than a minute from spinal cord. Left sciatic: 84 lbs.; same result as above.

Experiment 5.—Male, aged 36, well developed; aortic disease; slight dropsy of lower limbs. Right sciatic: 138 lbs.; nerve broke across immediately at the point of attachment of the hook. Left sciatic: 154 lbs.; same result.

Experiment 6.—Female, aged 60. Died from fracture of skull. Right sciatic: 140 lbs.; broke as in Experiment 5. Left sciatic: 126 lbs.; the same result.

Experiment 7.—Female, aged 30, well developed. Died of cardiac disease. Right sciatic: 145 lbs.; immediately broke from the spinal cord. Left sciatic: 160 lbs.; same result as on right side.

Experiment 8.—Male, aged 40, very muscular; height, six feet. Died from injury of head. Right sciatic: 170 lbs.; broke immediately at the point where the hook was applied. Left sciatic: 170 lbs.; same result.

Experiment 9.—Female, aged 35, very well developed. Right sciatic : 160 lbs.; detached from the spinal cord in less than a minute. The left sciatic could not be tested at the time.

In all these cases, the experiments were performed from one to three days after death. In applying the weights, an amount rather less than it was considered probable would be needed to rupture the nerve was first attached to the hook; and then, with the help of assistants, small weights were rapidly added until the nerve gave way. Excluding Experiment 4, all the subjects were adults; and in these, the average weight required to rupture the nerve was $140\frac{3}{4}$ lbs. In Experiment 1, the nerve gave way with an exceptionally small force—viz., 100 lbs.; but, in the other two male subjects (Experiments 5 and 8), the average weight required was $164\frac{1}{2}$ lbs. On an average, a loop of the great sciatic would, I think, bear for a short time nearly the entire weight of the body.

Even more interesting than the amount required to rupture the nerve, was the position at which it gave way. Out of the fourteen cases in the table, six broke at or near the point where the hook was applied. In the other eight cases, the nerve itself did not break; but its connections with the spinal cord and its membranes were detached. All the specimens thus obtained presented essentially the same appearance, and consisted of the nerve-roots of the last lumbar and first and second sacral nerves. These were torn at the point where they joined the spinal cord. Tracing these nerve-roots downwards to the dura mater, a small portion of this membrane was found connected with each pair of spinal nerve-roots, a short time before the latter joined. The dura mater, in fact, was torn near the point where it is prolonged from the main sheath on to each nerve. Then, the anterior primary divisions of the last lumbar, and two upper sacral nerves, could be traced down to the point where they become continuous with the great sciatic. The branch from the fourth lumbar, to join with the fifth to form the lumbosacral cord, was always present. The posterior primary divisions, and other small branches, were broken near their origin.

REMARKS.—The experiments detailed above were not published at the time the paper was read, as I intended, before doing so, to conduct a more extensive and carefully planned series of experiments. Circumstances have hitherto prevented me from working much further at the subject. As, however, the operation of nerve-stretching is now becoming a comparatively common one, both for central and for peripheral nervous affections; and as I believe the results I obtained may prove, not merely useful to the surgeon, by affording him some guide to the amount of force he may safely apply, but also because I think they have a value in connection with the question of nerve-stretching in central lesions, I venture to lay them before the profession.

My experiments clearly show, that the great sciatic nerve is able to withstand a considerable strain; but they also indicate the necessity for caution; more especially in the downward traction of the nerve. I have several times attempted to break this nerve in the dead subject, but have invariably failed, although the nerve was greatly stretched, and I sometimes heard suspicious cracking noises. The suggestion of Dr. John Cavasf, in the JOURNAL (December 17th, 1881), that surgeons should come to some more definite idea of the amount of force employed, should certainly be acted upon. There are several points in connection with the operation of nerve-stretching, which have not apparently been sufficiently considered. If a nerve, such as the great sciatic, having an almost direct origin from the spinal cord, be pulled downwards, an anatomical examination will show at once that almost the entire strain is borne by the dura mater. If the vertebral canal be opened from behind, so as to expose the spinal dura mater, and at the same time the great sciatic be stretched, a slight downward movement of the lower part of the dura mater is at once visible. By careful measurement, however, I find that it is not displaced more than an eighth of an inch. The dura mater possesses very little extensibility; and, further, the nerve-roots piercing it nearly opposite the intervertebral foramina, the stretching of the great sciatic rather tends to displace the dura mater laterally. Even a cursory examination will at once show that this cannot occur to any appreciable extent. If the dura mater be opened in the lumbar region, and the roots examined, it will be evident that the slight displacement produced by the stretching of the dura mater can have no appreciable effect in increasing their tension, and thus enabling them to act directly upon the spinal cord. The dura mater thus serves as a very efficient protector of the delicate spinal nerve-roots; but, should it be torn, an extremely small force would suffice to detach them from the spinal cord. It therefore appears evident that stretching a nerve, such as the great sciatic, produces no direct mechanical action upon the spinal cord. Stretching a nerve less directly connected with the spinal cord, such as the median, is still less likely to affect directly the spinal cord; and, of course, there is no danger, in case of rupture, of its being detached from the cord. In the few experiments I have

made upon this nerve, it always broke at the point where the force was applied.

The manner in which a beneficial effect is produced by the operation of nerve-stretching is very obscure. In some cases of sciatica, it may be due to the breaking up of adhesions, etc., pressing injuriously upon the nerve. In cases of central lesions, it probably acts upon the same general plan as other counter-irritants.

There is abundant clinical evidence to show, as one would expect, that the operation of nerve-stretching produces a powerful local action—not unfrequently being followed by temporary paralysis. Then, again, it produces a marked effect upon distant nerve-centres, such as the respiratory and cardiac, as is shown in Langenbuch's cases. As a counter-irritant, it stimulates, not merely the nerve, but also its connecting trunk and branches.

In the operation, many surgeons attach special importance to the downward traction of the nerve—apparently believing that, by this means, they produce some direct mechanical action upon the spinal cord. This appears to me, as I have before stated, to be an erroneous idea: the nerve-fibres, as far up as the dura mater, being put upon the stretch, but not the spinal nerve-roots beyond.

Dr. John Cavasf, in the BRITISH MEDICAL JOURNAL (December 17th, 1881, page 974), objects to the "nerve-stretcher" of M. Gillette, partly on the ground "that the extension must affect the peripheral and central portions of the nerve itself." If my view be correct, this is rather an advantage than otherwise, as a longer tract of nerve-fibres is thus stimulated. Furthermore, by stretching a loop of the nerve, the force is divided between the peripheral and central ends—so that there is less liability to rupture. Traction upon the peripheral end of the nerve can be employed with more safety than upon the central end, the former being the stronger; and the nervous stimulation would probably be as great, if not greater.

CASES BEARING ON CEREBRAL LOCALISATION.

By JAMES SHAW, M.D.,

Medical Superintendent of Haydock Lodge Asylum.

CASE 1. Idiocy with Congenital Aphasia, Dextral Hemiplegia, and Contracture and Atrophy of Right Limbs. Destructive Lesion and Atrophy of Left Cerebral Hemisphere.—H. C., admitted April 21st, 1879, aged 10, was described, in the statement appended to the "order for admission", as an epileptic whose insanity was congenital. The "medical certificate" stated that he was quite incoherent and unintelligible; dirty and destructive in his habits; idiotic in appearance and manner; easily excited, when he tore his skin with his nails.

On April 24th, he was observed to be a deformed lad. He squinted slightly inwardly with the right eye. The right side was chiefly affected, both arm and leg being as stiff as if the joints were ankylosed. He had an idiotic expression of countenance, and did not seem to have any intellect; and was very wet and dirty in his habits. He had had several fits since admission. His appetite was good, and he was fairly nourished. July 22nd. He had a prolonged attack of syncope after an epileptic seizure a few days ago. The fits increased in frequency and severity. The condition on February 22nd, 1880, was as follows. His chest was deformed, narrow, and projecting; his head very large, twenty-three inches in circumference, and of the hydrocephalic conformation. He knew those about him, took notice of them, and evinced a considerable amount of jealousy, joy, grief, anger, etc. On February 23rd, 1881, his right arm was paralysed and contracted; the elbow bent and stiff; the hand bent back on the arm; the wrist stiff; the fingers were flexed on the palm of the hand. The right leg was paralysed and contracted, and strongly flexed at the knee-joint. The ankle was stiff, and the sole of the foot turned in. The right arm was atrophied; the right leg also, but not so much. He moved the left arm, hand, and fingers freely. He moved the left leg, and could stand when supported on the right side. He displayed some pleasure by his facial expression when spoken to, and screamed when annoyed, but had never been known to utter any articulate sound. On March 1st, he was paler and thinner and did not take food well. On March 10th and 11th, he had a series of severe and prolonged epileptic seizures, in which the convulsions were bilateral, and the eyes turned upwards and to the left. He died March 12th, 1881.

Necropsy.—An abnormally large quantity of serous fluid was found in the cranial cavity. The right lateral ventricle was greatly dilated. A gelatinous-looking mass was found attached to the left cerebral hemisphere laterally and inferiorly; this proved to be an enormous cyst containing serous fluid. The convolutions of the region over which the cyst was situated were completely destroyed, and the portion of the centrum ovale underneath was represented by a thin lamina, in

some places translucent. The missing convolutions were: the posterior half of the second frontal, the greater part of the third frontal (the orbital portions of the convolutions being intact), the inferior halves of the two ascending convolutions, the supramarginal and angular gyri, the whole of the first and second temporal, the convolutions of the island of Reil, and most of the external surface of the occipital lobe. The left central ganglia were atrophied. There was secondary degeneration of the left cerebral peduncle, and of the left half of the pons Varolii and medulla oblongata. The middle portion of the peduncle was very much flattened in comparison with the same part of the right peduncle. The pons Varolii was asymmetrical, and very much smaller on the left side. The left pyramid, viewed superficially from before, was hardly a third of the right in breadth. The medulla oblongata was asymmetrical, on section through the middle of the olivary bodies. The prominence formed normally by the pyramid being absent on the left side; the restiform body was apparently slightly more massive on the left than on the right side. The right cerebral hemisphere was very large proportionately to the dilated lateral ventricle, but apparently normal as to membranes, convolutions, and cortex. The weight of the different portions of the encephalon, free from membranes, is as follows:

Left hemisphere of cerebrum	2,830 grains.
Right "	"	"	8,074 "
Left half of cerebellum	996 "
Right "	"	"	750 "
Pons and medulla	248 "

Total weight of brain ... 12,898 "

REMARKS.—In this case, the lesions were too extensive to throw any light on the localisation of the centres for individual members, or on the exact limits of the motor area; yet it is perhaps worth recording, as tending at least to support the theory of the cross action of the cerebral hemispheres through the pons and medulla, and of the localisation of motor centres for the limbs of each side in the opposite half of the brain, especially as Dr. Brown-Séquard insists on the rejection of these generally received views. The third left frontal, or Broca's convolution, was almost completely destroyed, and the faculty of speech was absent. The aphasia was not the *aphasie d'habitude* of M. Jaccoud, as the patient, for some months before his death, displayed a considerable amount of intelligence, with powers of perception, attention, and memory superior to those of many idiots capable of articulating.

The only abnormality observed in the muscular movements of the neck, face, eyes, mouth, or tongue, was the slight internal strabismus of the right eye; there may have been slight differences in the two sides which passed unnoticed. It is also possible that the muscles of one side in this region being influenced more by those of the opposite side than a left limb by a right, or a right by a left, the motor centres in the right hemisphere more readily acquire the functions of those destroyed in the left half of the brain. He could see, hear, feel, and taste fairly well, but the comparative acuteness of the special senses on the two sides was not investigated, nor was the cutaneous sensibility tested.

With regard to the cerebellum, the right and left hemispheres were to each other almost exactly as three to four (750 grains and 996 grains). Were the functions of the cerebellum purely motor, and limited to the muscles of the same side of the body, the difference should be much greater, as there was an entire absence of movement in the right arm and right leg, and therefore no co-ordination required in these members. For the same reason, this case does not seem to support the view of Dr. Charlton Bastian, that it is a "supreme organ for the reinforcement and regulative distribution of outgoing currents." On the other hand, the patient could maintain himself in the sitting posture in a chair, except when he was seized with an epileptic fit. The case, therefore, seems to support Dr. Ferrier's theory, that the cerebellum is an organ of coordination.

CASE II. *Paralysis with internal Hemiplegia and Contralateral Lesion of Right Anterior Convolution at Third Frontal Convolution, and of Part of Superior Frontal Convolution.* A. O., a housewife, aged 60, was admitted on September 4th, 1879, in very feeble physical health, afflicted with heart-disease, and suffering from dementia. No previous history could be obtained; and the statement appended to the order for admission afforded no information as to duration, cause, &c.

The medical certificate stated her to be deaf, blind, irrational, and stupid, constantly muttering generally applicable remarks, and during day and night that her body was dead, that she was dying, &c. On September 10th, 1879 (six days after admission), the pupils were equal, the globe fixed. A systolic cardiac murmur was heard loudest at the apex and to the left. She suffered from constipation. There was

hemiplegia of the left side, affecting the face and both members; the latter being at the same time contracted. The power of attention was very feeble. She was incapable of answering or conversing, and muttered incoherently. She was restless and noisy at night. She was confined to bed. On September 24th, she was weaker, and had an uncontrollable tendency to contract bed-sores. On October 1st, though feeble, she was at times very noisy, shouting out the names of her friends; and she was worse on alternate nights. On November 5th, she was weaker and thinner. Although she had a water-bed and the most careful nursing, she could not be kept free from bed-sores. She died on November 11th, 1879.

NEUROPSY.—The brain was well developed, with the convolutions apparently normal as to size and configuration. The only lesions in the right hemisphere were: 1. A patch of softening, brown in colour, with loss of substance caused by a clot now absorbed at the junction of the ascending frontal with the ascending parietal, about three-quarters of an inch long from before backwards, about a quarter of an inch broad in the perpendicular direction, and an eighth of an inch deep, with the adjoining portion of the ascending parietal tinged yellow; 2. A superficial brown patch, a quarter of an inch long antero-posteriorly, and an eighth broad, on the superior ramus of the first or superior frontal convolution (the third frontal of Meynert), near its origin; 3. Two small brown spots, little longer than the head of a pin, on the inferior ramus of the same convolution, near its origin; 4. A small brown spot, not larger than those above mentioned (3), near the commencement of the middle third of the inferior ramus. The diseased portions of cortex were in the region supplied by the median branch of the anterior cerebral artery. In the left hemisphere was a small lacuna, free from abnormal colour, and measuring about one-twelfth by one-sixteenth of an inch, near the commencement of the middle third of the inferior ramus of the superior frontal convolution. This may have been caused in removing the membranes. There was no other visible abnormality in either hemisphere.

REMARKS.—Here, the lesion was purely cortical, and situated for the most part between the præ-frontal and pediculo-parietal sections of M. Pares, in the superior part of the region included between them. The existence or non-existence of secondary degeneration was not ascertained; but the permanent contracture which M. Charcot ascribes to it was present. Speaking of secondary degenerations, or descending sclerosis, he says (*Léçons sur les Localisations dans les Maladies du Cerveau et de la Moelle Epinière*): "Il faut, à mon avis, leur rapporter, pour la majeure partie, la contracture permanente, dite tardive."

He further says that lesions of slight extent in the region of the giant pyramidal cells, viz., the paracentral lobule and the upper part of the ascending convolutions, give rise to well marked secondary degenerations. Had there been brachio-crural monoplegia with contracture, and without facial paralysis, the case would have been typical according to the generally received notions about cerebral localisation, whether from the point of view of the histologist, the clinician, or the experimentalist on the higher mammalia. But the facial paralysis is unaccounted for by any visible cerebral lesion, unless, indeed, it is sometimes a symptom of lesion of the superior portions of the median convolutions, and not of their inferior extremities. It may, however, have been the result of the patient's general physical weakness, which was very marked.

The great tendency to contract bed-sores is characteristic of lesion of the right hemisphere. It is noteworthy that the very serious affection of the intellectual faculties, the power of attention being very feeble, was coincident with lesions limited to the ascending and first frontal convolutions, and extending in the latter beyond the motor area anteriorly, thus assisting to bear out the opinion of Dr. Ferrier and Dr. Crichton Browne, that the functions of the anterior and middle parts of the frontal lobes are purely psychic, and that in these lobes are localised the centres of inhibition, the physiological substrata of the faculty of attention.

HISTORY OF A CASE OF MYXEDEMA.*

BY W. GOWANS, L.R.C.P.S.I.D.,

Physician to the Ingham Infirmary, South Shields.

THE patient I am about to introduce to your notice is a woman sixty years old. She is the mother of eight children, and has had two abortions. There is no history of syphilis. Her father and mother lived to the ages of eighty-four and seventy years respectively. She always enjoyed excellent health and spirits until ten years ago, when she received a violent shock, caused by her second daughter being seized with puerperal convulsions while in labour; and from that she dated

* Read before the Northumberland and Durham Pathological Society.

the commencement of her ill-health. Two years later, she ceased to menstruate: and for some months previous to this cessation she had considerable losses at her monthly periods.

In May 1873, she first consulted me for the disease from which she is now suffering. Her general appearance caused me to suspect renal mischief; but repeated chemical and microscopical examinations of her urine invariably demonstrated it to be free from albumen, casts of the uriniferous tubes, or renal debris. The excretion occasionally was extremely scanty, measuring at times only thirty-three ounces in seventy-two hours; it was of specific gravity 1029, and contained considerable quantities of urates. As a general rule, however, it was in all respects normal. Further, there was an absence of those nervous and dyspeptic phenomena which are characteristic of Bright's disease. The absence of these symptoms, and the presence of others which I am about to detail, caused me to think I had something other than Bright's disease to deal with. Her condition gradually got worse; and in the latter part of the year 1877 she suffered severe family bereavement, which had an evil effect upon her. The following was her state at that time.

Objective Symptoms.—The hair had almost entirely disappeared from her head and axillæ. Her face was swollen, broad, and expressionless. This swelling was most marked above the eyebrows, and around the eyes, where it formed a translucent bag hanging under each eye. There was a bright patch on the cheeks, in marked contrast to the pallor of the rest of the face. There was a discharge of clear fluid from the nose. The lips were swollen; the speech slow, difficult, and interrupted, by frequent efforts of deglutition. The saliva trickled down the angles of the mouth while she spoke. The cutaneous surface was absolutely dry, and the hands and chest rough, like sand-paper. Around the middle part of the body were numerous brown warty spots, some of them as large as a sixpence. The posterior triangles of the neck had a swollen appearance, most marked over the supraclavicular triangles, and apparently of the same character as the facial swelling. The thyroid body could not be felt. The hands were swollen, harsh, and lined, and did not pit on pressure. The feet were not much affected. The heart-sounds were soft, slow, and regular. The apex-beat was in its normal position; there was no hardness, twisting, nor evidence of fibrosis or other structural change in the arteries. The pulse was 55 to 60 beats in a minute; the temperature 94.5° to 95.2° Fahr. The lungs were healthy, the breathing normal, and digestion good. The gait was awkward and staggering; and the patient could not walk without the aid of someone's arm, which enabled her to walk fairly well. She answered questions intelligently, but in a slow ponderous manner; and seldom took part in a conversation, unless directly addressed. Her teeth were good, considering her age; but she complained that one of her molars was loose, and she requested me to extract it. This I did, and I feared she would die from the hæmorrhage that followed. Styptics were tried in vain; but ultimately I succeeded by means of a wedge of cork fitted into the cavity, and the opposing tooth kept fastened down on it. An ophthalmoscopic examination of her eyes revealed nothing abnormal.

Subjective Symptoms.—The patient stated that she had a constant trouble at the top of her head, and, if she turned her eyes upwards, she fell down. She had a fear of falling when she walked. Her memory had become bad. Her hands felt stiff; and she could not "fathom" her fingers, which rendered her unable to pick up coins, etc. This caused her to feel quite useless both in her business of grocer and in performing her household duties. Her hearing was normal; but her sight was defective, unless she wore strong convex glasses. She had a good appetite, and slept too soundly, and was liable to fall asleep at any time. She had frequently to shake the old cells of the epidermis from her underclothing. She occasionally was extremely irritable, and at other times felt much depressed. She constantly suffered from a feeling of cold, and her disease invariably became aggravated in winter.

Treatment.—Previously to June 1879, the patient had taken perchloride of iron with quinine, Fowler's solution of arsenic, Parrish's syrup, nux vomica with gentian, and bromide of potassium, but without any benefit. At that date, I prescribed perchloride of iron, strychnia, and dilute phosphoric acid, from which she obtained relief. This treatment, together with warm clothing to head and body, was continued for some months, with marked benefit. Her present condition you have now an opportunity of seeing. All the symptoms I have described are still well marked. The hair, however has partially regrown. She can use her hands comparatively well, and can walk without assistance, but still staggers. Her temperature is now 95.2° ; and her urine is quite normal.

A few weeks since, some cases of a similar character were shown by Dr. Ord before the Clinical Society of London. To these he gave the

name of "myxœdema", which I have ventured to apply also to this case. He believes that there is a great increase in the interfibrillar mucin-yielding cement of the skin, which, padding the touch-corpuscles and nerve-ends, interferes with the ready reception of peripheral impressions. The brain, thus receiving sensory stimuli slowly and imperfectly, falls into a state of increasing torpor.

EFFECT OF THE RHEUMATIC DIATHESIS UPON THE INITIAL LESION OF SYPHILIS.

By C. B. LOCKWOOD, F.R.C.S., ETC.

MOST observers are agreed that the course of syphilis may be greatly modified by the diathesis of the patient. Reference to the writings of authorities on syphilis, and to their discussion at the International Medical Congress, shows that their observations are extended chiefly to the later stages. I am not aware that anyone has recorded observations showing that the rheumatic diathesis can modify the initial lesion. Primary syphilitic sores come under notice, which at first present ordinary characters. They afterwards become "inflamed and phagedænic" (Hill and Cooper, *Manual of Venereal Diseases*, London, 1881, p. 466) and may cause considerable destruction of tissue. Many attempts have been made to explain this occurrence (*Ibid.*, p. 468); debility, patients' habits, position of the sore, and peculiarities of the virus have all been adduced. In the cases mentioned below, all of these can be eliminated except the last. If the infecting virus in such cases as these be peculiar, it must expend its peculiarities upon the sore, for the other manifestations are not unusual. Moreover, these sores do not cause similar ones when inoculated. It therefore remains to explain what Messrs. Hill and Cooper state, and what personal observation has frequently confirmed, why "patients are met with who, but for the rapidly necrosing chancre itself, present every sign of good health" (*Ibid.*, p. 469). The following cases may suggest a cause. They are not numerous, but seem to be more than coincidences.

A patient, aged 26, came under my care in September 1879. He had what appeared to be an excoriation near the frænum. Ordinary applications had no effect upon it. By the end of September, the sore was larger and considerably indurated; not inflamed or particularly ulcerated. The inguinal glands were indurated. About the beginning of October, the character of the sore changed. It became inflamed, very painful, and excavated. There was a profuse, thin, and slightly sanguineous discharge. Small sloughs occasionally separated, and the ulceration extended until about a quarter of the glans penis was destroyed. The appearance of the disease at this time was quite characteristic. The sore was acutely inflamed and phagedænic. In November, there was acute inflammation of the dorsal lymphatics of the penis, with roseola over the chest and belly. The treatment adopted locally, during the whole course of the disease, was the use of warm baths and the application of iodoform. Constitutionally, two and a half grains of blue pill were administered night and morning. The effect of mercury was to cause the sore to spread, and increase the pain. Iodide of potassium with tartrate of iron was given in increasing doses. Opium was administered to relieve the pain. Improvement was rapid and continuous, and the sore healed. Afterwards, the patient had a slight tubercular syphilide and ulcerated throat. These were relieved by increased doses of iodide of potassium (30 grains) three times a day, and calomel vapour baths (15 grains) every other night. About February 1880, he discontinued the iodide of potassium, and took half a grain of green iodide of mercury each night for a few months. He is at present free from symptoms.

There did not appear to be anything to account for the course of this patient's disease. He had not taken mercury before the inflammation began. He appeared strong and healthy. His circumstances were comfortable, and his life regular. The following case seemed to throw some light upon it. About December 1880, W. H., aged 25, a book-binder, came under observation in St. Bartholomew's Hospital. He had an inflamed and phagedænic chancre, which resembled in all its characters that of the first patient. He also had lymphatic engorgement and roseola. His throat was ulcerated. Mercury increased the ulceration, which had destroyed about a quarter of the glans penis. Iodoform was therefore applied to the sore, and iodide of potassium and tartrate of iron were administered internally. By the end of January 1881, the sore was healed, the patient left the hospital, and has not been seen since. There was nothing about this patient which would account for the inflammation and phagedæna. He, like the other, appeared strong and healthy. However, I remember that the first patient was very rheumatic. He had suffered from rheumatic fever twice, and from one or

two slighter attacks. He had had endocarditis and iritis. Upon inquiry, it was found that W. H. had been laid up in the London Hospital seven years before, suffering from rheumatic fever. He said his heart had been affected, but no murmur could be detected. There was no family history of rheumatism. Two other cases, in which hard sores became inflamed and phagedænic, have come under notice. In one, there was a clear history of previous rheumatism. The other had never had rheumatism; but his father had had rheumatic fever, and his mother suffered from chronic rheumatism. This case is progressing favourably, iodine being applied to the sore, and $\frac{1}{2}$ grain of bichloride of mercury given three times a day. It may be mentioned that he had inflammation of the dorsal lymphatics of the penis. This occurring in two cases denotes the intensity of the inflammation. Mr. Hutchinson, in the *Medical Times and Gazette* (quoted by Hill and Cooper, page 469), has attempted to account for the origin of phagedæna. "He considers the patient's temperament. Certain persons have special proclivities to acute inflammation; and such a patient, if attacked by a chancre, would be more likely to have a phagedænic form of chancre." Bearing this in mind, and remembering how prone rheumatic patients are to inflammations, it might be anticipated that in them chancres would become inflamed. Four cases form insufficient materials from which to draw sound conclusions. But these are suggestive, and serve to bear out theoretical considerations.

As regards the treatment of these cases, in two mercury certainly did harm. The third was not under observation a sufficient time to form any conclusion. The last is improving under very small doses of a mild preparation. He had never had rheumatism himself, and his predisposition was probably least. Experience teaches not only that phagedæna is seldom benefited by mercury, but also that iodide of potassium is good for rheumatism. It can, therefore, be understood why these cases were so amenable to treatment by the latter. Therefore, in cases of syphilis, in which the initial lesion is inflamed and phagedænic, and in which there is a history of rheumatism, it is probable that iodides will be of service at an earlier stage than usual. Mercury should be administered with the greatest caution, if at all.

SURGICAL MEMORANDA.

A NEW METHOD OF PERFORMING INCISION OF THE CHEST.

As the treatment of empyema is now receiving prominent attention, I beg to submit to the notice of the profession a safe and easy method of incising the chest.

At the point selected for the operation, I introduce my No. 2 anti-septic trocar (see *BRITISH MEDICAL JOURNAL*, February 25th, 1882), which serves the purpose of an exploring instrument, and then, from the sheath of a probe-pointed knife. Under Listerian precautions, the outer tube is removed, and the inner tube withdrawn; then I replace the knife is introduced, which accurately fits the trocar, and projects a cutting edge of one inch and a quarter in length. The trocar is then converted within the chest into a probe-pointed trocar, and with it the required incision can be safely and rapidly made. This method renders the performance of the operation very easy; on the other hand, an incision from without inwards is often delayed by the dense layer of lymph lining the costal chest.

THOMAS WALKER, Esq., M.D. (Lond.), F.R.C.S.

Surgeon to the Royal Portsmouth Hospital.

ATTACHMENT OF PENIS AND SCROTUM.

In the *Journal of May 18th*, referred to, is the report of a case of this kind to its unfrequency. I met with a case some time ago. The penis was firmly adherent to the scrotum below the umbilical part of the raphe of the scrotum of the same was as described by Mr. Malgouyres. The patient refused to have the operation, on the supposition that there was no connection between the penis and the scrotum. In Larnach's report (1877) the case of a boy is mentioned.

JAMES DUNN, Esq., M.D. (Lond.), F.R.C.S.

Dr. Malgouyres's case is a rare one, and the only one I have seen. I have seen a case of this kind, which I have seen before, and it was a rare case. I have seen a case of this kind, which I have seen before, and it was a rare case. I have seen a case of this kind, which I have seen before, and it was a rare case.

round on its own axis, so that the slit-like orifice of the glands looks right across, and the urine is passed straight to the left. The preputial orifice is unusually large, and the amount of loose bulging foreskin on the upper and right aspects much in excess of the normal. The child's health is not such as to warrant interference at present.

D. MITCHELL, M.B., C.M., Renton, N.B.

THE PLASTER-OF-PARIS JACKET FOR SPINAL DISEASE.

THE series of interesting papers published in the *JOURNAL* of May 13th, induces me briefly to state that I have found no reason to modify my opinion as to the advantages of applying the plaster-of-Paris jacket for spinal disease, in the recumbent posture, by the method which I suggested some years since, which was demonstrated at the Association meetings at Bath and Cambridge, and which I fully described in the *JOURNAL* of March 1st, 1879.

Many surgeons who have adopted my method complain of the weakness behind the jackets thus applied. To obviate this Dr. B. Lee, of Philadelphia, has suggested that, after one layer of bandage has been applied, the patient should be turned to the prone position for the application of the second, the third being applied in the dorsal position. This modification of the steps described in the paper referred to I have adopted, and recommend to others.

THOMAS JAMES WALKER, Surgeon to the Peterboro' Infirmary.

THE code of directions which Mr. Golding-Bird gives in the *JOURNAL* of the 13th instant as a guide in the treatment of spinal disease appears to me to require some slight modification.

With regard to disease of a chronic or subacute character affecting the spine between the third cervical and the sixth dorsal vertebra, it is stated that "the deformity being mostly from the weight of the head support must be given to it"—it refers, I conclude, to the head, not to the deformity. Now certainly deformity in such cases, as in all other cases of Pott's disease, is directly dependent upon destruction of bone, and the only means by which deformity can be prevented is by arresting the existing disease. It is universally acknowledged that treatment in such cases must be to place the affected vertebra in a condition of complete rest. The term rest includes not only absence of movement, but also relief from pressure. Mr. Golding-Bird rules that treatment should consist in supporting the head, which does it is to be "attached to by a chin and occiput rest, acting crutch-like from a suitable leather corset below; (2) by a chin and occiput band, acting as a suspender from a steel spring rest placed over the head, and rising from a plaster-of-Paris corset (this is Sayre's jury-mast)." Mr. Golding-Bird prefers the latter appliance "because it permits rotation," a quality which should rather condemn its employment, for, if the vertebra be not prevented from rotating, they are not placed in a condition of rest. A further distinction is drawn between the two appliances in reference to their mechanical action. The first is described as a "dead push up;" the second as giving "constant elastic extension." Practically, they act in the same way, since in each case the fulcrum is the same the extending force must necessarily be the same.

I place of the spine as high as the third dorsal vertebra, it is ruled, may be treated by means of the plaster jacket alone; "the downward weight of the head is not obviated, but the spine is kept solid by the tension of the upper ribs." Even supposing that the support may be fixed by the jacket, which is very doubtful, it must be remembered that they are not immediately connected to the vertebra, weight being from pressure on the corset here as in the case of a case of any other portion of the column.

I regret to find that Mr. Golding-Bird so completely condemns the corset, powered by the principle of the jury-mast, because I am strongly of opinion that the corset is the best method of supporting the spine, and that the jury-mast is a dangerous and unreliable appliance, and that it can be removed without injury, and is not at the cost of money. I am only sorry that Mr. Golding-Bird's opinion is so completely opposed to that of Mr. Golding-Bird.

THOMAS JAMES WALKER, Esq., M.D. (Lond.), F.R.C.S.

TOXICOLOGICAL MEMORANDA.

POISONING BY ELLAGIC ACID AND ACONITE.

On April 1st, I was called to a patient who was suffering from a severe case of poisoning by aconite. I found that the patient had been given a large quantity of aconite, and had been suffering from a severe case of poisoning. I found that the patient had been given a large quantity of aconite, and had been suffering from a severe case of poisoning.

first saw him, he was lying on the sofa in great agony; he was quite sensible, but unable to speak. He pointed to his stomach and bowels, and also to his tongue. His face was very much flushed; he was foaming at the mouth and nose; his pupils were contracted. The pulse was very fast and irregular, and the respiration hurried. His hands were clenched, and the legs almost paralysed. The skin was cold and clammy. There was great muscular twitching. He had vomited before my arrival, but was quite unable to swallow. He died in about half an hour, in convulsions. He was sensible to the last. Judging from the size of the glass used and the remaining contents of the bottle, I should say about two tablespoonfuls of the lotion had been taken; this would correspond to the dose of his mixture. The relatives objected to a *post mortem* examination. The lotion was sent out from the Infirmary in a blue bottle, and was labelled "Poison".

W. S. SIMPSON, M.R.C.S., L.R.C.P., Worthing.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

TWO FATAL CASES OF TYPHOID FEVER IN CHILDREN: NECROPSIES.

(Under the care of Dr. GEE.)

[Reported by Dr. ANGEL MONEY, Registrar.]

CASE I. Perforative Peritonitis.—John B., aged 9½ years, was admitted on December 19th, 1881. He had suffered from diarrhoea for about three weeks; for a fortnight he had complained of pain in the "bowels", headache, and thirst; he had lost appetite, and had had a bad cough; for a week he had been delirious. His condition on admission was unfavourable; the abdomen was slightly tympanitic, and was tender, especially in the right iliac fossa and in the splenic region, the pupils were dilated, but reacted to light, the pulse was 120, soft, and dicrotous. He breathed thirty-four times in the minute, and a few coarse *râles* were to be heard in the chest; the temperature in the evening was 103.6°, on the following morning it was 101.6°, the tympanites had increased, and he had passed only one stool. On December 21st two rose-spots were noticed; but the eruption was not well marked. On December 23rd the temperature had fallen to 99.4° in the morning, and on the four days during which he had been in hospital the evening temperature had fallen a degree each day; at the same time the pulse had grown feebler and more rapid. From December 25th to December 27th the temperature steadily mounted, without evening remissions, and was 104° on the evening of the latter day. On December 30th it was 104.6° in the morning, the pulse was 144, the abdomen and the lower part of the chest were tender, the tongue was dry, and he had been vomiting, the vomit containing some bile pigment; percussion over both pulmonary bases was impaired, and the urine contained albumen. The temperature remained high, the vomiting and other symptoms continued, and he died at 6 P.M. on the following day.

At the *post mortem* examination, which was made eighteen hours after death, the peritoneum contained much purulent fluid mixed with milk; the parietal layer of the peritoneum was covered by a thin layer of lymph, and presented many minute extravasations, chiefly on the lower part of the left side. The small intestines were matted together by soft yellow lymph, which lined also the pelvic cavity and coated all the contained organs; this lymph also extended upwards to the spleen, stomach, and under surface of the left side of the diaphragm; in this manner an irregular cavity, coated by recent lymph, and containing a purulent fluid was formed. A very complete layer of lymph also lined the pleural surface of the left diaphragm. The lower fifteen inches of the ileum contained many ulcers, one of these, situated just seven inches from the ileo-cæcal valve, had given way; the perforation was a narrow slit at right angles to the longest diameter of the ulcer; the gut at the seat of the perforation was quite free and overhung the pelvic cavity from the right side. The ascending colon also showed numerous ulcers; both in the large and small intestine, many of the ulcers were apparently healing.

CASE II. Severe Symptoms; Hyperpyrexia and Death at beginning of Third Week.—Thomas G., aged 7 years, was admitted on January 20th, 1882. He had been ill for about a week, suffering during that time from

pain in the head and belly, and from diarrhoea; for two days he had been slightly delirious. His mother stated that there were "plenty of cases in the neighbourhood", and that one man who lived at the top of the same house was affected with the disease. The patient's brother was admitted, shortly afterwards, also suffering from enteric fever. On admission, the tongue was foul and coated, the abdomen was tender, and the spleen enlarged; the pulse was 120 and dicrotous, a few coarse *râles* were heard in the chest, and he had some cough; there was no distinct eruption. The temperature was 103.2°, and rose to 104.6° on the following evening. On January 26th it was noted that his condition had been very serious, the temperature, taken every four hours, showed a continued pyrexia (for the most part above 103°); there was much diarrhoea, the stools were very watery, and were passed unconsciously; the tongue, the teeth, and the lips were coated with black material, the abdomen was swollen, and was generally tender; the spleen was large, but there was no rash. On the following day the temperature fell in the morning to 100.8° (lower than on any previous morning); later in the day it rapidly rose and reached 105.6° in the evening; the excessive diarrhoea disappeared somewhat suddenly (the bowels acted only twice during the day), the belly was apparently tender all over, and there was much tympanites; the pulse was 164, and the patient was unconscious, with subsultus tendinum, and picking of the bedclothes. The temperature remained high; and, finally, just before death, which occurred at 2 a.m. on January 28th, reached 109°.

A *post mortem* examination was made fourteen hours after death. Blood was extravasated into the upper half of the recti muscles, especially on the left side, and also into the subperitoneal tissue; the hæmorrhage had been so considerable that the skin at the upper and left part of the abdomen was discoloured. The spleen was very large and of a deep purple colour; it weighed 9¼ oz. The ileum, for about two inches above the ileo-cæcal valve, was most extensively diseased, the ulcers in this situation were in a sloughy condition, the sloughs having brownish, yellowish, and blackish tints; the ileum for the next two feet contained numerous ulcers with yellow sloughy bases. Above this, there was only slight swelling and congestion of the lymphatic structures. In the large intestine many of the solitary glands were swollen and red, and a few had a sloughy surface. There was no perforation, and no peritonitis. On the surface of the lungs beneath the pulmonary pleura were scattered some extravasations of a bright black colour, glistening and raised above the surface; they varied in size from a pin's head to a quarter of an inch square; there was no pneumonia and no pleurisy. The heart was not evidently diseased. In the larynx there was slight superficial ulceration about the vocal cords; the bronchial glands were much congested and swollen.

REMARKS BY DR. MONEY.—Statistics show that death from typhoid fever occurs much less frequently in children than in adults. The cases recorded here are of further interest in the contrast they afford between two modes of death from enteric fever. Perforation and sequent fatal peritonitis is in children a very unfrequent termination; in the case in which this accident happened, it was noted that the seat of rupture was quite free and overhung the pelvic cavity, and so allowed a very free escape of the intestinal contents, with a correspondingly large area of inflammatory action. In CASE II, death was most probably due to the intense general affection, and occurred at that period of the disease to which such a mode of dissolution is usually assigned, viz., about the beginning of the third week. This case also bears witness to the fact which, looking only to statistics, might be doubted, that children are capable of having severe typhoid fever; and, *a priori*, there is no reason either in the total, or detail structure, or function of the human or animal growing organism, which denies such a possibility.

QUEEN'S HOSPITAL, BIRMINGHAM.

A CASE OF CHLOROFORM-POISONING: UPWARDS OF THREE OUNCES SWALLOWED: COMA LASTING SEVEN HOURS: RECOVERY.

(Reported by JAMES OLIVER, M.B. Edin., late House-Physician.)

Now that some controversy has been going on amongst the members of our profession regarding anesthetics, the record of this case of chloroform-poisoning may prove of some interest.

The patient, a Frenchman, of rather slender build, was brought to the hospital one evening, about eleven o'clock. His condition then was as follows. Respiration had ceased; the pulse, numbering twenty per minute, was hardly to be felt at the wrist; the surface of the body was quite cold, and of a dusky pallor; the lips were livid, and the pupils widely dilated. The odour of chloroform was distinct. The patient had been seen at his own home by two medical men, and an hour and a half elapsed after swallowing the poison before he was removed to the hospital. Artificial respiration was immediately begun,

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 23RD, 1882.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

Two Cases of Laryngeal Growths, in which the Neoplasms were successfully removed by Endolaryngeal Operations with the Aid of the Galvano-caustic Method. By FELIX SEMON, M.D. Berlin, M.R.C.P. Lond.—The first of these two cases was one of multiple, sessile, in part subglottic, recurrent papillomata, occurring in a young lady, aged 20, after a common cold, and giving rise to complete aphonia and slight dyspnoea on exertion. The supraglottic portion of the growths having been removed with forceps, and the tendency towards recurrence, which at first was most markedly manifesting itself, having been gradually exhausted after repeated removals, the subglottic papillomata, which it was found could not be removed by any endolaryngeal method, were destroyed with the aid of a suitably bent galvano-cautery, which was introduced between the vocal cords during the act of deep inspiration. The patient completely recovered her voice, and has been free from recurrence of the growth for more than four months. The second case was one of a very large and hard broad-based fibroma, originating from the anterior commissure of the vocal cords and the anterior third of the right vocal cord, occurring in a man, aged 33, and causing complete aphonia and dangerous dyspnoea, filling up, as it did, almost the whole of the glottic cavity. The growth was to be traced for the last ten years. It was removed by the aid of a galvano-caustic loop passed round it, and was found to be one of the largest benign laryngeal growths on record. The patient completely regained his voice, and is now quite well. Rosbach's method of producing local anaesthesia of the larynx, by directing two ether sprays simultaneously against the points of entrance of the superior laryngeal nerve into the thyro-hyoid membrane, was resorted to, but not found, in this case, to afford any material advantage over the simpler expedient of directing the patient to suck lumps of ice some time before the operation. Dr. Semon stated that he had brought these cases before the Society because they practically proved that certain qualities of laryngeal growths, such as multiplicity, subglottic position, tendency towards frequent and quick recurrence, and, again, excessively large size, broad base, and great hardness, which were generally looked upon as so many contraindications against the performance of any endolaryngeal operation, were in reality no serious obstacles to endolaryngeal interference, even if several of them occurred together. He discussed at some length the comparative advantages and disadvantages of extra- and intralaryngeal operations in cases of benign laryngeal growths, showing that thyrotomy gave no guarantee against recurrence of papillomata, and that this operation in itself, as conclusively shown by Paul Bruns, was very dangerous to the vocal function. He admitted that the galvano-caustic method ought not to be used in the larynx as long as the same ends could be achieved by simpler methods; but maintained that, in such cases as the two brought forward, it was of the highest value, because it could not be replaced by any other method. On the whole, he thought that no hard-and-fast rules could be laid down which should govern our decision to the choice of the method in every given case of laryngeal growths. Exclusive adherence to either side was to be deprecated, and he thought that the struggle between the partisans of the extralaryngeal and endolaryngeal methods might be settled, with advantage to everyone concerned, by the general adoption of the rule, that no extralaryngeal operation for the removal of benign growths should be performed, unless an experienced laryngoscopist had unsuccessfully attempted endolaryngeal removal. Instruments, drawings, and the second patient referred to above were shown to the Society.—Dr. GEORGE JOHNSON, who had the opportunity of seeing the first of these cases in the early stage, thought the case, from the great number and wide distribution of the growth, the most difficult to deal with he had ever met with. When he saw her after treatment, the voice was quite normal, and the only evidence of disease was a slight irregularity on one cord. On the whole, the risk of endolaryngeal operations appeared to be less than that attaching to extralaryngeal.—Dr. DE HAVILLAND HALL remarked on the great difficulty of dealing with these growths, owing to their sessile attachment and great number. With regard to the second case, he had himself felt confident that tracheotomy would be necessary, owing to the great dyspnoea present. But the removal of a small piece of the growth at the first operation was followed by great relief, and now the patient appeared to breathe and speak quite naturally. He congratulated Dr. Semon on the success of these operations, and hoped that they would encourage surgeons to endeavour to remove

these growths *per vias naturales*, and not by making any artificial opening.—Dr. DOUGLAS POWELL asked whether the galvano-cautery had any action in causing the absorption and disappearance of these growths, after they had been removed in part.—Dr. SEMON, in reply, said that it gave him great pleasure to record a fact which had been brought to his notice by Mr. Berkeley Hill. It was generally supposed that Middeldorpf of Breslau had been the first to introduce the galvano-cautery into surgery, whereas he had been able to satisfy himself that the credit of its introduction was really due to Mr. Marshall, the President of the Society. He had not seen any absorption of the growths after cauterisation; on the contrary, he found that they never disappeared until they had been thoroughly removed. It was an important question whether the frequent use of instruments, and of the cautery in these cases of multiple benign papillomata, tended to produce malignant disease. He did not believe that this was the case with true papillomata. He showed to the Society a man, who, fourteen years earlier, had been operated on for papillomata of the larynx. Lately, the growths had begun rapidly to recur; in such a case he would suspect a malignant tendency, and would act with great caution. He referred to another case which came under his care five days earlier, with great dyspnoea; he had removed a good deal of the growth, and the dyspnoea was now very slight. His object in bringing forward the cases was to show that the endolaryngeal method was available in a class of severe cases, to which it had been supposed to be inapplicable.

On Thyrotomy, for the removal of Foreign Bodies Impacted in the Interior of the Thyroid Cartilage. By T. HOLMES, F.R.C.S.—This paper related the history of a case in which a large and rough piece of rabbit-bone was impacted in the neighbourhood of the left vocal cord for seven days before its removal. On the failure of attempts to extract it with the laryngeal forceps from the mouth, laryngo-tracheotomy was performed on the fifth day; and, as the bone was still immovable, the thyroid cartilage was divided on the seventh day, when the piece of bone was at once extracted. The patient had suffered rather severely from inflammation of the mucous membrane of the larynx and trachea before the operation, and this did not subside after the operation, but spread gradually down to the lungs, until finally a gangrenous abscess formed in one lung, and the patient died nine weeks after the operation. *Post mortem* examination showed evidences of intemperate habits, which was indeed also known from the patient's history. The voice had almost entirely returned before the patient's death, and the wound had contracted to a very minute fistula. The parts concerned in the operation were exhibited, and showed hardly any unnatural appearances. There was slight ulceration of the left vocal cord, caused by the foreign body, and a very minute perforation still existed in the thyroid cartilage, above the glottis; but the wound, which extended from the upper border of the pomum Adami to the second or third ring of the trachea, was represented only by a faint line of union, and the vocal cords showed no sign whatever of having been interfered with. The general subject of the indications for thyrotomy, the method of performing it, and its results, in cases of impacted foreign bodies, was discussed, and the following conclusions were arrived at. 1. Very large substances may be impacted, either in the ventricle or between the alae of the thyroid cartilage, without causing any symptoms of immediate urgency. 2. When such substances are rough or pointed, they sometimes give rise to a spreading inflammation of the mucous membrane, and in such cases should be removed as soon as possible. 3. If they can be seen and touched, they can usually be removed from the mouth, either whole or piecemeal. 4. When this is found impossible without tracheotomy, an opening should be made through the crico-thyroid membrane and upper rings of the trachea. 5. After this operation, it is quite possible that the spasmodic condition of the parts about the glottis may subside, and a renewed attempt at extraction be successful. 6. If this be impossible, the foreign body may perhaps be either extracted or displaced from the tracheal wound, so that a preliminary tracheotomy is always advisable. 7. On the failure of such attempts, the thyroid cartilage is to be laid open in the middle line—partially, from below upwards, if the body is small, and can be felt lying near the wound—entirely, and from above downwards, if the body is large, firmly impacted, and lying out of reach from the tracheotomy wound. 8. The operation of thyrotomy involves little danger to life, and not much to the integrity of the voice; at least, the risk of damage to the vocal cords is much greater from the protracted irritation of the foreign body than from the operation.—Mr. DURHAM opened up the larynx in two cases in which foreign bodies had become impacted; in both cases, the operation was successful, and the patients recovered. In the first case, which was published in the *Guy's Hospital Reports*, the foreign body was a cherry-stone; on opening the larynx, it was clearly seen that there could have been no reasonable chance of removing the stone by endolaryngeal methods, owing to the fact that it was involved between the false and

the true cords, and firmly retained, owing to the swelling of the tissues. The second case was that of a young man, who got a portion of bone into his larynx: sudden dyspnoea followed, which, however, quickly subsided. The bone could not be seen with the laryngoscope, as it was concealed by enormous oedema. Thyrotomy was performed, and the bone was found tightly wedged. He thought that the rule referred to by Dr. Semon applied to foreign bodies, as well as to new growths. In certain cases, thyrotomy was the best operation that could be performed. He had been represented as advocating the splitting of the thyroid, in opposition to all endolaryngeal operations; this was entirely opposed to what he meant to maintain; it was only when endolaryngeal methods failed, that the external operation should be attempted; but, where required, there ought to be no hesitation in undertaking it. The deaths after the operation had been due to the disease, and not to the operation. He objected to the word thyrotomy, as applied to all operations in which the laryngeal cartilages have been cut up; in some cases the cartilage, in others that cartilage and some of the rings of the trachea, had been divided in addition to, or independently of, the thyroid. He would propose the term laryngo-chondrotomy. Mr. Durham showed a pair of endolaryngeal forceps, which he had found exceedingly convenient.—Mr. CROFT had performed this operation once on a patient who had been in hospital three weeks beforehand, and the result was successful, so that he did not think that the view put forward by Mr. Holmes, that the death in his case was due to the interval between the impact of the body and the operation, could be maintained. In the case in which he had operated, the foreign body was a walnut-shell. He wished to ask Mr. Holmes, what connection he traced between the abscess in the lung and the laryngeal trouble; if much hæmorrhage had occurred at the time of the operation, some blood might have entered the lungs, and, by its decomposition, led to the abscess.—Mr. HOWARD MARSHTE erred to a case in which, after tracheotomy, he had been unable to remove the laryngeal tube: he therefore performed thyrotomy, and the operation was not difficult, and did not at all determine the condition of the patient, who was a child of three years.—Dr. SEMON said that in some cases he thought results were attributed to operation, which were properly traceable to the disease set up by the foreign body; for instance, in Mr. Croft's case the left half of the larynx was quite ankylosed, and the right arytenoid was dislocated, so that the patient was obliged to wear a tube; this was evidently due to the inflammation set up by the foreign body, and not to the operation. Mr. HOLMES said that the foreign body in his case was of a really enormous size; far larger than appeared on laryngeal examination. In such a case it was quite impossible to remove the body through the mouth owing to this fact. He thought that death was due to a diffuse inflammation which started in the trachea before the operation was performed, and the abscess, which formed eight or nine weeks later, was not in any way due to blood lost at the operation; very little could have entered the trachea, owing to the excellent way in which the wound was closed. He agreed with Dr. Semon that much had been attributed to the operation which was really due to the disease or to the foreign body. He brought this case forward to show, especially, how much of unity might remain after thyrotomy; the vocal cords were in their normal relation to each other, and the wound was hardly perceptible on the external aspect of the larynx.

Microscopic examination.—Mr. WATSON CRISP showed a large number of microscopical specimens illustrating the micro-organisms present in various diseases of the larynx, and also a large number of microscopical specimens of the larynx of a patient. Among the specimens there were three of the following:—1. *ruvide* (a). Two specimens showing the larynx of a patient by Dr. J. H. Fyndall, in 1879, who died of laryngeal cancer under a high power (1,000), and showed, under a lower magnification, invaded the pharynx. The other specimen was under a low power (1,000), and the clearness with which the organisms might be perceived showed that a preparation of this kind was much more important than a high magnifying power. These specimens were stained by a new method, the details of which Mr. Watson Crisp had not time to explain, but were of great regular beauty and distinctness. 2. Two specimens stained by Dr. Watson Crisp; the first was a specimen of mucus from the larynx of a patient, from the lung and pharynx, and the second was a specimen of mucus from the lung and pharynx, stained by a new method, the details of which Mr. Watson Crisp had not time to explain, but were of great regular beauty and distinctness. 3. Two specimens stained by Dr. Watson Crisp; the first was a specimen of mucus from the larynx of a patient, from the lung and pharynx, and the second was a specimen of mucus from the lung and pharynx, stained by a new method, the details of which Mr. Watson Crisp had not time to explain, but were of great regular beauty and distinctness.

from a leprosy nodule from the skin showing numerous bacilli, in many cases filling up and destroying the nuclei. 1v. (a). Specimens and photographs showing the organisms found in the pyæmia, and in the septicæmia, of rabbits. (b). A specimen of the organisms found in a form of septicæmia common to mice, rabbits, and birds (under a very high power, the bacteria which were stained blue, were oval, transparent in the middle, and had a blue spot at each end). (c). A specimen and photographs showing the progressive formation of an abscess in the rabbit; this specimen as seen under the low powers showed a line of dense reddish (stained) masses between the healthy and diseased tissue; under a high power these masses were seen to be composed of minute micrococci. v. Specimens and photographs demonstrating the *Bacillus anthracis* in man and in the rabbit; a section of a lymphatic gland from a rabbit which had been inoculated with anthrax showed very plainly the bacilli in enormous numbers in the lymph sinuses. vi. Photographs and specimens showing the organisms in small-pox, erysipelas, osteomyelitis, ulcerative endocarditis, etc.—Mr. V. A. H. HORSLEY also showed a number of microscopical specimens of (1). Bacterium Termo; (2) Organisms in Puerperal Septicæmia; (3) Bacilli in the Peritoneal Fluid of a Guinea Pig: the peritonitis was induced by the injection of nitric acid, and the intestines were in a state of acute enteritis; (4) Micrococci from an abscess, where the pus was yellow and sweet, and contained much iodoform; (5) Micrococci from a case of umbilical pyæmia; (6) Omentum from a case of splenic fever; some of the capillaries were choked with the bacilli; (7) Slices of potato, with various centres of mould and bacterial growth, to illustrate the method of growing and separating micro-organisms introduced by Cohn and employed by Koch.—Dr. DOWSON: Micrococci from a peculiar form of septicæmia known as Devaine's.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 3RD, 1882.

J. MATTHEWS DUNCAN, M.D., F.R.C.P., President, in the Chair.

During the evening of 1st June 1882.—Dr. BANTOCK showed two specimens of uterine fluids removed by abdominal section, one of them weighing six pounds. In both cases, the pedicle was secured by ligature. Both patients were doing well. He had now had seven cases, with four deaths.—Dr. SAVAGE asked whether Dr. Bantock's method of securing the pedicle was more easily effected when the tumour reached high up within the abdomen. Dr. BANTOCK said that the size of the tumour made very little difference. In reply to Dr. Routh, he said he had not used a drainage-tube in these cases, because there was nothing to drain.

Myxomatous Tumour.—Dr. JOHN WILLIAMS showed a dermoid cyst of the ovary, with myxomatous disease of the peritoneum. In reply to Dr. Routh and Dr. Heywood Smith, he said that there had been no symptoms indicating rupture of the cyst, and that the peritoneal disease began during life by the result of tapping.

*Dr. MAITLAND COFFIN showed an *Amnion* of the *Amnion*.*

The paper by Dr. W. A. POROFF of Pensa, on the above subject, was read. He described two cases. The first was that of a pregnant woman, 21, who died from prussic acid poisoning. In her ovary a fully ripe corpus luteum was found, although she was neither pregnant nor menstruating. The difference between the corpus luteum of pregnancy and that of menstruation, was usually ascribed to the increased amount of nourishment received by the follicle in the pregnant state. In this case, he thought that menstruation was probably the cause of the increased nutrition and development of the follicle. The second case was that of a woman, aged 41, who died from gangrene of the ovary and uterus. The ovary contained a true corpus luteum, and he thought it resembled the ovary of a pregnant woman. In this case, he thought the increased development of blood in the ovary, in consequence of the placenta, was the explanation of the size of the corpus luteum.—The President said that it was important to keep the view constant that a corpus luteum having all the characteristics of that met with in pregnancy occurred in women who were neither pregnant nor menstruating. He had seen such a corpus luteum in an aged woman who was believed to be salacious, and he had dissected cases of pregnancy with complete absence of corpus luteum.

The paper by Dr. J. W. DUNCAN, of Dundee, was read by Dr. JOHN WILLIAMS. The subject was, "On the following is a summary:—1. The corpus luteum should be looked for under the least complicated conditions in single women. 2. In single women, it is rarely associated with any abnormal primary state, it appears with the menstrual function only in a few, but rare, cases, it occurs spontaneously a few years after puberty. 3. Marriage, if sterile, aggravates the

disorder in many cases; it is only very seldom that it relieves the pain. 5. Child-bearing cures a large number of cases; and it is not improbable that, were all puerperal complications excluded, it would cure every case. 6. The proportion of sterile to fertile women, subjects of primary dysmenorrhœa, is one to twelve. 7. Menstruation begins in women who become sufferers from primary dysmenorrhœa at about the estimated average age for the appearance of that function in London. 8. Menstruation is regular in about two-thirds of the cases, and irregular in about one-third. 9. The menstrual fluid is profuse in about two-fifths of the cases, scanty in about one-half, and contains clots or shreds in about three-fourths. 10. The changes which take place in the fluid in the course of dysmenorrhœa are various, and cannot at present be classified. 11. The uterus is imperfectly developed. It may be too short, or too small in volume, or it may be defective in both respects. The cervix may be conical, and the os small and round; but stricture of the canal in any part of its course is infinitely rare. 12. The changes in the uterus due to dysmenorrhœa are, slight hypertrophy, erosion and eversion of the mucous membrane of the cervix, and catarrh. The cavity increases but little in length; for, after years of suffering, it measures rarely more than two inches and a half in length. In the early stages, the tissues of the uterus are in some cases soft; in more advanced, hard. 13. The hypertrophy of the uterus is probably the result of periodically increased muscular action. 14. Ovaritis and perimetritis are possible consequences of dysmenorrhœa. 15. The menstrual pain is the result of spasm of the uterus, excited by the separation and expulsion of shreds of decidua and clots, in an organ whose sensitiveness in the performance of its function is enhanced by inappreciable conditions of tissue dependent on imperfect development, often associated with others, such as anæmia.—Dr. SAVAGE said that the broad ligaments were never unsymmetrical; the uterus was always the centre of it. Apparent elongation of one side was due to deficient uterine development on that side. Uterine casts never contained glands, but only circlets of cells surrounding the apertures of glands. Fragments of casts, more or less minute, always came away with menstrual fluid.—Dr. ROBERT BARNES agreed that imperfect development of the uterus was a factor in dysmenorrhœa, though he thought Dr. Williams's estimate of the proportion was too high. The frequency with which pregnancy followed the treatment of dysmenorrhœa showed that the uterus was fairly developed. He believed also that Dr. Williams had underestimated the frequency of acquired dysmenorrhœa in single women. From retroversion or other causes, dysmenorrhœa might be produced. The two most frequent causes of dysmenorrhœa and sterility, in his opinion, were a narrow os externum uteri and flexion. Where one or both of these conditions were present, dysmenorrhœa would commonly persist until they were remedied. He was pleased that Dr. Williams did not adopt the unphilosophical doctrine of spasmodic dysmenorrhœa as a primary or essential condition. Enlargement of the uterus was due not only to excessive muscular action, but to constant congestion of the organ from its impeded circulation. This produced a subacute endometritis and the shedding of dysmenorrhœal membranes. By the enlargement of a narrow os externum, access was gained to the uterine cavity, so that the unhealthy mucous membrane could be directly treated.—Dr. WYNN WILLIAMS could not agree that displacements were not acquired in virgins. He had noticed that falls on the back commonly produced retroflexion; on the face, ante flexion. In his experience, the most frequent and persistent cause of dysmenorrhœa was ante flexion, which could only be cured by permanently straightening the uterine canal; and this, he believed, could be done. He agreed with Dr. Barnes as to the importance of a small os externum. He thought the author had not laid sufficient stress on metritis and fundal endometritis as causes of dysmenorrhœa.—Dr. GRAILY HEWITT had remarked the frequency with which general malnutrition, involving also the uterus, was observed with uterine symptoms. In these cases, during the early part of their course, the uterus was soft, incapable of maintaining its proper shape and position, and hence became flexed, prolapsed, or compressed upon itself. Probably some of the cases described by Dr. Williams as cases of imperfect development were of this latter kind. One of the symptoms that arose was dysmenorrhœa, due to difficulty in the escape of secretions, owing to the altered shape of the organ. All cases of uterine distortion were not accompanied with dysmenorrhœa, nor was dysmenorrhœa always due to uterine distortion. The circulation of the uterus was often much interfered with, and the congestion might cause pain. He hardly ever failed to relieve dysmenorrhœa by measures to keep the uterus in proper position, and its canal straight; and this seemed to him conclusive as to the connection between the distortion or displacement and the dysmenorrhœa. He thought, in opposition to Dr. Williams, that dysmenorrhœa was often secondary.—The discussion was adjourned till the next meeting.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, APRIL 21ST, 1882.

J. W. TRIPE, M.D., President, in the Chair.

The Notification of Infectious Disease.—Dr. VINEN read replies from Sir Trevor Lawrence, M.P., and Dr. Farquharson, M.P., to a letter forwarding resolutions of the Society on the Compulsory Notification of Infectious Diseases Bill. Sir Trevor Lawrence urged that the duty of notifying should rest upon the medical attendant, while Dr. Farquharson stated that this point would be considered by a Select Committee. The Society then adopted a report of the Council on this subject. They recommended: 1. That the Act should apply to the metropolis; 2. That erysipelas should be excluded from the list of diseases to be notified; and 3. That the duty of notifying should rest on the person in charge of the sick person, or his house; but that it should be a legal obligation on every medical practitioner in attendance to give immediate written information concerning the nature of the disease to the person responsible for reporting it to the sanitary authority.

Sanitary Legislation for Prevention of Infection by Milk.—Mr. FOSBROKE, President of the Birmingham and Midland Association of Medical Officers of Health, brought up the following resolutions: the first, "That the sanitary supervision of dairies and milkshops, and the carrying out of any legislative enactments for the prevention of the spread of human infectious disease by milk, should come under the jurisdiction of the sanitary officers of the locality in which the dairy or milk shop is situated." This was carried; and it was referred to the Council to advise what further steps should be taken to give effect to the resolution.

Closure of Schools affected with Infectious Disease.—The second resolution was as follows: "That this meeting, feeling that some dangerous infectious diseases are disseminated through the agency of public elementary schools, approves of the action of the Educational Department in investing sanitary authorities with the power of requiring the closure of such institutions, with a view to preventing the spread of such diseases." This resolution was also adopted, and a copy of it was ordered to be sent to the Educational Department.

Suggestions for the Re-organisation of the Sanitary Service.—Dr. E. F. WILLOUGHBY read a paper on this subject. The author began by pointing out the shortcomings of the Public Health Acts of 1872 and 1875, which had failed to provide the country with a class of trained health-officers, or of men devoting their whole time and attention to sanitary questions; even the few rural combinations, from which much might have been expected, having been broken up whenever the medical officer of health chanced to give umbrage to influential offenders. He insisted on the importance of medical officers of health being free from private practice, and the necessity of their being independent of the local authority—arguing that their duties were those of inspectors of the public health, and they were not servants or agents of the local boards, as were surveyors, parish surgeons, etc. They ought to be appointed by the Central Government, as much as Her Majesty's inspectors of mines, shipping, etc., whom it would be deemed absurd to place at the mercy of the persons over whose acts they have to watch. The medical officer of health ought to show proof of a knowledge of physics, chemistry, engineering, and sanitary science generally—subjects which form no part of the education or examination of the ordinary medical student; in other words, he should possess a certificate in sanitary science, as well as diplomas in medicine and surgery, which are all that are required of him at present. Such certificates, he thought, ought to require an examination in forensic medicine, and the law of evidence also; in fact, to cover the whole ground of State medicine. Poor-law medical relief he maintained to be a department of the public health; and, as such, it ought to be separated from pecuniary relief, and transferred from the guardians to the sanitary authority. The medical officers of health and the parish surgeons would thus be drawn closer together, and the former would gain access to much valuable information—e.g., as to the prevalence of diseases other than infectious, which are no mean indications of the hygienic conditions of a district. Dr. Willoughby could not agree with those who advocated the creation of a minister of health, who would, in this country at least, not be a medical man. The director of the public health must be a permanent officer, independent of changes of political parties; in fact, a permanent under-secretary of State. He would propose the division of the duties and functions of the Local Government Board between two co-ordinate departments: a Poor-law board and a board of health; the latter taking cognisance of all matters in any way affecting the public health, including sanitary works, medical poor-

relief, and a few matters at present referred to other branches of the Government; the Poor-law Board retaining those relating to finance, poor-relief, workhouses, etc., not of a sanitary character. Each should be under a vice-president, responsible only to the President for the time being of the Local Government Board. The vice-president of the board of health should always be a physician, chosen for his special knowledge and administrative ability; and the board would consist of six other members—three medical men, two engineers, and one chemist. The present medical officer and senior inspectors would constitute the first board, future vacancies being filled by selection from inspectors and medical officers of health. The whole country should be divided into urban and rural sanitary districts; the former comprising only towns of 80,000 or 100,000 inhabitants; the latter consisting of large rural areas, each with a considerable central town, and, as far as possible, even by readjustments, division of other, especially registration, districts should be avoided. He did not think that the medical officers of single parishes over the country would lose anything by being superseded; such as desired to qualify themselves for the sanitary service would be promoted, and the position of those at present devoted to it would be improved; the rest had much better retire altogether. The local boards, though no longer appointing the medical officer of health, ought to have some acquaintance with the nature of his work. He proposed that in each sanitary district, urban or rural, there should be a local board of health, composed partly of members elected by the rate-payers, and partly of others nominated by the Board of Health in Whitehall. The latter would, of course, be men known to be interested in sanitary work or specially versed in some collateral science; the former should, by preference, be medical men, architects, engineers, and the like. Registration of births and deaths originally bore only on the descent of property; but, since the value of vital statistics had begun to be recognised, the present system was sure to be very imperfect. A large proportion of the causes of death were untrustworthy, being either "uncertified" and furnished by the friends, or suggested by the registrar (?); while many of those certified by medical men were most unsatisfactory. The correction (?) of the returns by a non-medical superintendent registrar was worse than useless; and, though the medical officer of health was often able to revise the duplicates furnished to him for the use of the sanitary authority, his corrections did not reach the office of the Registrar-General. The appointment of medical men as superintendent registrars had been proposed, and seemed unobjectionable; but the same end would be attained, and perhaps better, if the superintendent registrar had his office in the same building as the medical officer of health, and all district registration returns were first submitted for examination to the latter. Information of death should be given sooner than was now required; and, in all cases of uncertified or doubtful causes, the medical officer of health would institute an inquiry on the spot—giving a corrected certificate if perfectly satisfied, or reporting the case to the coroner if not. There would thus be more inquiries, but fewer inquests; and many cases of foul play would probably be brought to light, which were at present concealed by the practice of accepting uncertified causes. The nosological value of the Registrar-General's reports would be greatly enhanced. The whole method of taking medical and scientific evidence in court was radically wrong. The equality, in the eye of the law, of all medical and scientific men was a mischievous fiction; but the fundamental mistake lay in the custom of retaining medical and scientific men as witnesses for the prosecution and defence, thus inevitably converting the expert into the advocate. The function of the expert should be to assist the court by stating, without reserve and regardless of either side, scientific facts, which judge and jury could not otherwise know, in language generally accessible, and, at the same time, intelligible to unscientific persons, avoiding excess of confidence or of caution, and in accordance with the sometimes arbitrary laws of evidence. To do this with credit, demanded study and practice; and there was an urgent need for a class of trained and skilled medical experts. Through questions of many of the most remote consequences of railway accidents, and a few others, would thus require the services of specialists, experts in forensic medicine generally, and the allied scientific subjects, would be ready to hand in the persons of medical officers of health, such as had been designated, and in every branch of State medicine, and familiar with the methods of scientific investigation. If the local authorities were deprived of the right of appointing medical officers of health, a power which they had often shown themselves unfit to exercise, they would be compelled on to provide their services; but this change would surely be necessary as a necessity of wanting a much desired relief to the local authorities. The case of the metropolis, which did not come under the Local Government Act, need not present any real difficulty. Some of the medical officers of health were paid by the State, it could be divided into more or less districts, and under a medical officer of health, and a few more or less assistants; the Metropolitan Council of Health.

HARVEIAN SOCIETY.

APRIL 27TH, 1882.

HENRY POWER, Esq., F.R.C.S., in the Chair.

Scarification in Acne Rosacea.—MR. MALCOLM MORRIS gave a short account of the treatment of severe acne rosacea by scarification. He pointed out that, under the name of acne rosacea, there were two classes of cases: the one consisted of acne spots surrounded by red patches, the nose being considerably enlarged from hypertrophy of the tissues; in the other, there was flushing of the nose, erythema, a varicose condition of the veins, and hypertrophy without acne. It was in the latter class of cases Mr. Morris advocated scarification. This condition of nose occurred in persons with feeble circulation, whose hands were generally cold, and who were easily affected by changes of temperature; in a hot room, the nose itched, and caused great discomfort; when exposed to cold, there was intense pain. Mr. Morris performed the scarification thus: first of all, he filled the nostrils with cotton-wool, and made the skin tense; next, he slit up all the blood-vessels that could be seen on the nose throughout their length by a knife, the extremity alone of which was sharp on both edges; and then, by an instrument having a number of fine blades close together, he thoroughly divided the vessels transversely; free hemorrhage followed, which was beneficial, and encouraged; the clots and serum were absorbed with blotting-paper; and the patient was enjoined not to touch the nose for several days. In a few days, the scarification had all healed, no scars being left. This operation was to be repeated a number of times, eight or more, until the nose was reduced to a normal size. Mr. Morris had scarified in twenty-eight cases successfully; one, which he did as far back as 1879, had remained well ever since. He considered, by destruction of the vessels, resolution of the hypertrophied tissues was obtained.—MR. POWER inquired if there was any general diathesis in these cases, any connection with gout?—DR. ROYSTON asked if acne of the face could be similarly treated.—MR. MORRIS, in reply, stated there was no special diathesis, or connection with gout, and acne could not be treated by scarification.

Rotheln.—MR. H. CRIPPS LAWRENCE read a paper on this subject. He confined his attention to remarks upon the etiology, diagnosis, prognosis, and treatment of the disease. The author concurred with the views held by Hildebrand and Schönlein, who recognised the origin of *rotheln de novo*, due either "to an infecting agent of a special nature, generated outside the organism during the simultaneous prevalence of epidemics of measles and scarlet fever;" or, "to a simultaneous infection with both contagions." Special reference was made to the researches of Dr. Cheadle on *rotheln*. The chief points of diagnosis were discussed, with regard to the temperature, enlargement of the cervical and other glands, and desquamation, as aiding the differential diagnosis between *rotheln* and its congeners, measles and scarlet fever. In referring to prognosis, the author dwelt upon the necessity of realising that *rotheln* may assume a form of considerable severity, a dangerous and even a malignant type, attended by sequelæ which, if not necessarily dangerous, may seriously retard convalescence. *Rotheln* was auto-genetic. Mr. Lawrence remarked that authors paid treatment as scant attention as they did prognosis in *rotheln*; he advocated the reduction of pyrexia and development of the eruption, as speedily as possible, by use of the warm bath and diffusible stimulants, and considered chlorate of potash and nitric ether valuable adjuncts. Purgatives, given early, hindered the development of the eruption. Quarantine was necessary as regards infection. The part played by desquamation, in propagating *rotheln* by contagion, the author considered of great importance.

A discussion was carried on by Mr. Power, Mr. Malcolm Morris, Mr. Rayner, Dr. Royston, who treated cases with carbonate of ammonia and chloric ether, Mr. W. H. Evans, and Mr. Lant, who found the period of incubation in two cases to be twelve and in another fourteen days.—MR. LAWRENCE replied; and the meeting then adjourned.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

APRIL 27TH, 1882.

T. MORTON, M.D., in the Chair.

On the Treatment of Tuberculosis in Infants.—DR. STRETCH DOWSE read a paper on this subject. He prefaced his paper by referring to the recent very valuable discovery of Dr. Koch, concerning the tubercle bacillus, and he thought that the inflammatory theory of tubercle, and Dr. Sanderson's recent lectures at the College of Physicians on inflammation, tended to support rather than to detract from the results of Dr. Koch's original investigations. Dr. Dowse, through the kindness of Dr. Blake, was enabled to show to the members present many forms

of respirators, including one of Dr. Blake's invention, which were useful and adapted for the purposes of inhalation. Dr. Dowse said that it was more than ten years ago when he first began to treat pulmonary consumption by inhalation; and he regretted that, until recently, he had not carried out his experiments with that care which so important a subject demanded. During the months of September, October, November, and December, 1881, he had treated his patients, in the North London Hospital, for consumption, by several forms of inhalation; and he almost invariably had good results. He thought, however, that the process of inhalation was far from perfect, and he hoped for better results in the future. Short histories and notes of several cases were brought forward, as evidence in favour of this mode of treatment. He spoke particularly of the value of acetic ether as an inhalant; in fact, he went so far as to say this drug was, in his opinion, capable of dissolving nascent tubercle. The mixture which he generally used had the following composition: R. Thymol. ʒiij ; ætheris aceticæ ʒiij ; ætheris sulph. ʒi ; creasoti ʒiij ; acidi carbolicæ ℥xv ; terebine ad ʒiv . Ten drops to be used at a time for an inhalation. He laid great stress upon continuous inhalation: for instance, two hours morning, afternoon, and evening, as well as during the whole night. The subject appeared to be of considerable interest. A lively discussion followed.

Radiating Veins in Chest.—Dr. BLAKE exhibited some very interesting drawings, showing small and distinct venous radiating tufts, which took the course of the diaphragm, from the epigastrium centrally to the hypochondria, on each side. He said that these prominent veins were most surely associated with an emphysematous lung, and probably with a dilated right heart.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL SECTION: ORDINARY MEETING.

APRIL 28TH, 1882.

J. F. WEST, F.R.C.S., in the Chair.

Spinal Abscess.—Mr. J. F. WEST showed a young woman, who, after walking from London to Coventry, was attacked with symptoms like rheumatic fever; and, after a month in bed, presented great tenderness of the large dorsal region, with flexion of the left thigh on the abdomen, and deep-seated fluctuation in the upper part of the thigh. Aspiration failed to detect any pus; but, on incision, it welled up profusely. Under drainage and antiseptics, the abscess cavity healed; but, as the pain in the back continued, a Sayre's jacket was applied. She was now quite cured, and about to be discharged from hospital.

Malignant Infiltration of Breast.—Dr. H. G. BARLING showed the patient from whom the tumour was removed, which he had described at the last meeting, and upon which some discussion had taken place. The tumour had unfortunately recurred, so that all doubt as to its malignant nature must cease.

Central Necrosis of Os Calcis.—Mr. FURNEAUX JORDAN showed a specimen of central necrosis of the os calcis, for which he had performed Syme's amputation.

Lateral Half of Tongue, and Submaxillary Gland, Removed by Whitehead's method.—Mr. BENNETT MAY showed these specimens, which were removed for epithelioma. The patient died of septicæmia, in spite of antiseptics. His experience led him to think that Mr. Whitehead over-estimated the advantages of his method in avoiding hæmorrhage; and he would, in future, tie the lingual arteries before operating.

Scirrhus Cancer of Stomach.—Mr. JORDAN LLOYD showed this specimen, removed from the body of a man who supposed himself to be in fair health, and died suddenly with symptoms of internal hæmorrhage. The cancer was situated near the cardiac end of the stomach, and caused hæmorrhage by eroding the coronary artery.

Fatty Embolism in Fractures and Diabetes.—Dr. SAUNDEY and Dr. BARLING read a paper, illustrated by microscopical specimens and drawings, in which they stated that they had found embola in the lungs, as a rule, in all cases of fracture, though usually only to a limited extent. In one case only were there symptoms present during life, which pointed to this condition, and in that the embola were very numerous. In diabetes, with fatty blood, embola were not often found, probably because the fat was too fairly divided; and it was doubtful whether the appearances which had been figured as such, by some observers, should not be regarded as simple *post mortem* thrombi, in which some globules of oil were entangled. There was very little evidence in support of the view, that the striking phenomena of diabetic coma could be correctly attributed to fatty embolism.

Syphilitic Iritis.—Mr. EALES showed a patient, in whom gummatous nodules of large size had formed very rapidly on both irides, and

had caused absolute glaucoma of one eye, but the other was in a fair way towards recovery.

Talipes Calcaneo-Valgus.—Mr. HASLAM showed a child presenting this rare deformity. He was hopeful that the condition could be improved by tenotomy and the use of suitable boots.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, APRIL 5TH, 1882.

J. W. MOORE, M.D., Vice-President, in the Chair.

The late Sir Edward B. Sinclair.—Dr. FITZPATRICK, Vice-President, proposed, and Dr. HENRY KENNEDY seconded, the following resolution, which was adopted in solemn silence. "That at this, the first meeting of the Medical Society held since the lamented death of Sir Edward B. Sinclair, M.D., who filled the position of Honorary Secretary for two sessions, when this Society was known as the Association of Fellows and Licentiates of the College of Physicians, and who was afterwards appointed a member of Council, all the time taking an active part in furthering its best interests, the Society desires to place on record the great loss which the medical profession in this city has sustained by his demise; and the members wish to convey to Lady Sinclair their heartfelt sympathy with her and the other members of his family in this their sad hour of trial."

Peculiar Form of Sensory Paralysis.—Dr. WALTER SMITH exhibited a patient affected with a peculiar form of sensory paralysis of the left side. He was a labourer, aged 27, and applied at the dispensary of Sir Patrick Dun's Hospital, on account of numbness of the side, of six months' duration. He worked at the Ringsend Bottle Works, and could assign no cause for the affection. Down the left side, from neck to hip, and accurately limited by the middle line, he was scarcely able to appreciate painful impressions or changes of temperature. Thus, he could not distinguish between two test-tubes, one containing cold and the other boiling water, nor did a strong induction current, directed upon the skin by a wire brush, cause him any uneasiness. Yet he would distinguish a blunt from a sharp object, and his sense of localisation seemed to be unimpaired. The motor system was unaffected, and there were no alterations of nutrition.—Dr. NIXON said the case was of interest as affording evidence that there must be a special nerve-tract for the transmission of painful impressions, as distinct from ordinary tactile impressions.

Peritonitis caused by Caseous Mesenteric Glands.—Dr. C. J. NIXON showed the thoracic and abdominal viscera of a girl, aged 13, who died of peritonitis, after six days' acute illness. Some years ago, she had a scrofulous enlargement of the glands of the neck, which suppurated and discharged for a considerable time. Afterwards, what was apparently a strumous ulcer, about as large as a crown-piece, formed in the centre of the sternum. As there were also physical signs of disease in the apex of the left lung when symptoms of peritonitis set in, it seemed natural to conclude that some strumous or caseous ulceration in the glands of the intestines was going on, and that one of these ulcerations had reached the surface of the peritoneum, and set up peritonitis. After death, the intestines were found matted together. The patches of Peyer were unusually well marked; and, towards the ileo-cæcal valve, some of them presented the appearance known as the "shaven beard", but there was no ulceration in the intestines. The mesentery was enormously thickened; and, in the thickened portion of the peritoneum, there were greatly enlarged mesenteric glands, some of which had undergone caseation, and some even calcification. One of these glands had, at one point apparently, ulcerated through the peritoneum. On examining the thoracic organs, the left lung was found to present a very good example of fibroid phthisis or cirrhosis of the lung. The lung is considerably reduced in size; and a through section of it discloses an enormous development of fibroid tissue with very well marked bronchiectasis.—Dr. WALTER SMITH said that Dr. Nixon's theory of the peritonitis having been caused by perforation produced by an eroding caseous mesenteric gland, found an analogy in what sometimes, although rarely, took place in the chest when there was an erosion of the bronchus by a caseous tracheal gland. He had seen a case of gangrene of the lung caused by the sucking in of a portion of the rotten gland through an ulcerated bronchus. Dr. Gee some years ago recorded a series of such cases in the *St. Bartholomew's Hospital Reports*.

Acute Diphtheritic Endocarditis in Chronic Valvular Disease.—Dr. C. J. NIXON exhibited the heart of a patient who had suffered from very well marked aortic patency with mitral regurgitation. The case was probably one in which acute diphtheritic endocarditis supervened on a chronic valvular lesion. The extension of valvulitis from the

posterior segment of the aortic valve to the anterior flap of the mitral valve by contiguity was well shown. The specimen further presented a good example of acute aneurysm of the mitral valve, projecting into the auricle. There was "sago"-spleen, and the kidneys showed amyloid degeneration.

Skeleton Respirator for Antiseptic Inhalations.—Dr. E. M. COSGRAVE exhibited and described a respirator—or, more properly, an inhaler—for use in antiseptic inhalations. It simply consisted of a light cage, the four sides of which were completely open, so that the air could pass through them. There was a grating in front for holding the piece of lint, which was to be saturated with the antiseptic solution. In the first place, this respirator prevented the breathing again of foul air. The expired air was diffused from the vicinity of the mouth, and fresh air was drawn in, which was a great advantage in cases in which the lungs were much affected. Again, it did not heat the air in the way in which Dr. Coghill's respirator did, nor did it cause any oppression of breathing. It could be used in cases in which Dr. Coghill's respirator could not, because the latter interfered with the breathing, especially in cases of young persons who had serious lung-disease, and who had a nervous dread of anything interfering with their respiration. It allowed the patient to speak without its being removed, it was very light, and the lint had not to be recharged nearly so often as with other respirators. It was being used at present by several physicians in England; and he had notes of cases in which it had been used with success, especially by Dr. Mackey of Brighton.—A discussion ensued, in which the Vice-President, Dr. Tweedy, Dr. Duffey, Dr. Walter Smith, and Dr. Doyle took part.—Dr. COSGRAVE, in reply, said he should more properly have called the instrument which he had submitted an inhaler. No doubt it was sometimes an advantage that a respirator should heat the inspired air, but there were other cases in which it was desirable to apply antiseptic vapour to the lungs without heating the air; where it was desirable to heat the air, he thought Coghill's respirator the best. He considered carbolic acid quite a sufficiently strong antiseptic. No doubt breathing through the nostrils was the normal process, but people sometimes did not do it; and, when they were suffering from some affection of the chest, it was no time to teach them to do so. They would then require some kind of antiseptic respirator in front of the nose and mouth.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, APRIL 14TH, 1882.

JOHN K. BARTON, M.D., Vice-President, in the Chair.

Myeloid Tumour of Right Upper Jaw.—Mr. ORMSBY showed a myeloid tumour of the right upper jaw of a woman aged 60, which he had recently removed. The swelling of the jaw was noticed for the first time about last Christmas; since then it had greatly increased. It was removed by Ferguson's incision for excision of the lower jaw. Considerable hæmorrhage occurred during the operation, which was restrained by the use of the actual cautery, and plugs of wood, which were driven into the bone and left there.

A Case of Ablation of Fundus Uteri by Abdominal Section.—Dr. ATTHILL read a paper on ablation of the uterus, in which, after contrasting the various operations in use for the partial or complete removal of the uterus, and the results obtained by different operators in each method, he gave the details of a case in which he had recently performed a modification of Porro's operation. The patient, a woman aged 58, was first seen by Dr. Atthill in October 1881. The os and cervix uteri were healthy; but the fundus was enlarged, the sound passing two inches and a half. A clot of blood was daily expelled from the uterus when the pain came on. Not being certain of the condition of the fundus uteri, Dr. Atthill dilated the os and cervix, but found no tumour, as he had partly expected from her previous history. He therefore concluded that the disease was malignant, and advised removal of the uterus above its insertion into the vagina. The operation was performed on January 16th, 1882. An incision commencing one inch above the umbilicus served to open the pelvic cavity; the fundus uteri was seized, while a ligature was passed round the suspensory ligament at either side. The ovaries were found atrophied, but were not removed. A ligature was passed round the neck of the uterus; the fundus cut off; and the raw surface of the stump was touched with the actual cautery, and allowed to go back into the pelvis. The wound in the abdomen was then sewn up. The operation lasted an hour and a half. At 7 P.M. on the day of operation, the temperature was 99°, and the pulse 118; and within twenty-four hours the woman died. The walls of the fundus uteri were cancerous and epitheliomatous; and the stump, which had been driven back into the pelvis, was not free from epithelioma. This was the first case of epithelioma of the cervix uteri which he had seen. It was, therefore, a rare affection; so that he was not certain of the

exact nature of the case up to the end of the operation. He regarded the operation by abdominal section as a safer one than that through the vagina, though the latter was usually done for epithelioma.—Dr. W. SMYLY referred to two cases recorded by Dr. Müller of Bern, in one of which, the greater part of the cervix having been removed subsequently to the amputation of the fundus, the peritoneal cavity was closed above it with sutures. The clamp was used in the second case. Both recovered. It had been advised by Ruge and Veit, in cases where the disease was limited to the body of the organ, first to amputate, then to excise the cervix, and lastly to close the upper end of the funnel-shaped cavity thus left by means of sutures. Where the cervix was also diseased, the entire organ should be removed by the vaginal method, as practised by Billroth and Czerny. Freund's operation, as shown by statistics, compared very unfavourably with those of the vaginal method.—Mr. BENNETT said the cause of death was evidently a septic peritonitis, caused by the remains of the stump lying as a fœtid source in the pelvis. It was, therefore, of vital importance in such cases that the stump should be as perfectly disinfected as possible. The great difficulty experienced by Dr. Atthill in finding and securing the bleeding vessels was of interest in the general question of the treatment of punctured wounds of the abdomen; for if, in a case like that, there was difficulty, how much greater would it be in cases of bullet-wound, etc., of the abdomen, in which Dr. Marion Sims had recommended enlarging the wound and tying the bleeding vessel.—Mr. CORLEY did not think that there would be such great difficulty in finding a bleeding vessel in an abdomen; for, in a case in which he had opened the abdomen for obstruction, he could with ease examine every portion of the intestine, and could certainly have discovered the seat of a hæmorrhage.—Mr. THORNLEY STOKER thought it a matter of vital importance that the pedicle should be kept outside the abdominal wound, so that it should not act as an infective centre, as in the case recounted, where it was thrown back into the pelvis.—Dr. ORMSBY also spoke; and Dr. ATTHILL, in reply, said the fixing of the stump in the abdominal wound was in his case an impossibility. He thought that the best and safest thing to do in all cases of malignant disease of the uterus was to remove the whole uterus like a cyst, as there was nearly always disease in the cervix as well as in the fundus.

Stricture of the Rectum treated by Colotomy.—Mr. KENDAL FRANKS read a paper on this subject. The patient, a man aged 33, was admitted to the Adelaide Hospital on the 12th of November last. In 1867, he contracted a soft chancre, but had never had any evidences of syphilis. In the same year, he was attacked with dysentery, and suffered from it for four months. Afterwards, he frequently passed feces tinged with blood and pus. In 1876, he had a slight return of dysentery at Singapore, and in 1879, he was troubled with diarrhoea. Since that time, he had been troubled with frequent calls to defæcate—about five in the day. The evacuations were preceded by some watery discharge; and the feces, which were expelled with a great amount of straining, appeared squeezed. About nine months previous to admission, while he was straining at stool, a gush of flatus escaped through the urethra, and this was followed by some fecal matter. Since that time, the discharge of wind and feces *per urethram* had continued, and two days rarely passed without its occurrence. When he tried to pass urine, he felt the urine passing back into the rectum, and this frequently was passed unintentionally *per anum*. On admission, he was carefully examined. There were no abdominal symptoms. No distension and no tumefaction were discovered. A rectal examination was made. The finger passed easily up to the second part, about two inches; it was here arrested by a rough ring, into which the tip of the finger could just enter. Below this obstruction, the rectum was quite healthy. A small catheter with a bulbous point (No. 6) was used, to try and get through the stricture; but, after passing through the lower part, it could be got no further. Some blood and pus came away on the end of the finger. It was concluded that the stricture was the result of dysenteric ulceration in the rectum. On November 22nd, the patient was placed under the influence of ether, and an incision was made in the oblique direction recommended by Mr. Bryant. It began two inches from the spine on the right side, about a finger's breadth below the last rib, and was carried downwards and forwards to a point three inches and a half posterior to the anterior superior spine of the ilium. It measured seven inches in length. A point was previously marked on the skin three-fourths of an inch behind the centre of the crest of the ilium, as a guide to the situation of the colon. Everything was divided on a Ferguson's director, layer by layer, till the fascia transversalis was exposed. Only one vessel required to be ligatured. The fascia was then seized, and divided on the director in the direction of the original incision. The peritoneum, containing some fat, at once protruded through the wound. It was carefully re-

turned. The colon then appeared; it was collapsed, but was recognised by a longitudinal band. Three double ligatures were passed through it and through the margins of the wound. It was then opened for about an inch over the sutures, which were one by one drawn forwards, divided, and secured. There was no escape of feces or flatus. The intestine was further secured in its position by numerous points of carbolised catgut sutures. A long drainage-tube was then inserted, passing behind the sutures on one side of the intestine, and protruding at each end of the wound. The margins of the original incision were then brought together with catgut. During the operation, the spray was not used; but otherwise it was conducted on strict antiseptic principles. The wound was dressed in the following manner. A carbolised sponge was inserted into the opening of the gut. Lint soaked in carboloid oil was placed on each side of this over the line of incision, and extending well beyond it. A large and thick pad of carboloid tow was applied over all, and an ordinary bandage was used to keep everything *in situ*. The case progressed most satisfactorily. On the third day, the whole length of the incision was firmly united by first intention; the drainage-tube was removed next day; and in two days the openings where it had been were completely sealed up. The bowel was firmly united in its new position. The highest temperature recorded was 100.4°, on the second day. There was no inflammation, and no pus was ever observed. On the second day, the bowel was cleaned out by means of an enema, when a large quantity of feces came away. On the fourth day, there was a spontaneous evacuation through the artificial opening. On the eighth day, he was allowed up on the sofa; and in two days more he was able to walk about the ward. He was now kept in hospital with the view of dilating the stricture, so as ultimately to allow of external rectotomy being performed; but, when Mr. Franks had succeeded in dilating the stricture so as to admit a rectal bougie about a quarter of an inch in diameter, the patient refused to remain longer in hospital, and accordingly left on the 4th of January last. On February 3rd, he walked from Dublin to Kilkenny, and thence to Waterford, and back again to Dublin. On the 25th, he applied for readmission, as he was anxious to have the stricture cured, and the opening in the loin closed. The opening looked perfectly healthy. There was no prolapse, and the functional powers were under perfect control. On several occasions, he obtained permission to go out for a short time, each time returning under the influence of drink. He was consequently refused a pass out for the future, and accordingly on March 3rd he left the hospital. By this time, all appearance of vesico-intestinal fistula had gone; the urine was perfectly clear. He occasionally passed small soft pieces of feces through the normal anus.—Mr. TUFNELL suggested the use of a guiding bougie in the treatment of rectal strictures, similar in principle to that used in Hutton's railway catheter.

The VICE-PRESIDENT made a speech, in which he gave a *résumé* of the work done during the session which had just terminated, and congratulated the Society on the number and merit of the papers and specimens which had come before it. He also alluded to the question of the amalgamation of the Medical Societies in Dublin, and stated that the Council of the Surgical Society did not court the scheme, but would, if amalgamation took place, wish to retain their old name of "The Surgical Society of Ireland".

THE STATISTICAL SOCIETY.—At the seventh ordinary meeting of this society, Mr. Burdett read a paper on The Relative Mortality after Amputations in Large and Small Hospitals and the Influence of the Antiseptic System upon such Mortality. Mr. Burdett's contention was that the rate of mortality after serious surgical operations was lower when such operations were performed in small hospitals, or those of the cottage class, than in the large general hospitals of the country. Mr. Burdett also showed that the antiseptic treatment of such cases had resulted to a great extent in equalising the death-rate in the cottage and larger hospitals. A short discussion followed the reading of the paper.

CEYLON.—The rumour current in England, that chinchona planting in the colony is likely to be a failure consequent upon large numbers of the trees originally planted having died out, is strongly contradicted in the colony. It is asserted that the variety *officinalis*, which formed the bulk of the original planting, is the only one which has been found to be unsuited to the climate, it being a very delicate variety, and only flourishing in very carefully attended nurseries. But the *succirubra* and *ledgeriana* are doing well wherever they have been planted, and although the industry received a temporary check by the unexpected failure of the original growth, these two latter varieties will soon have everywhere supplanted it, and the estates will become more flourishing than ever. We hear of *succirubra* plants about four years old selling freely in any quantity offered at ten-shillings each.

REVIEWS AND NOTICES.

PHYSIOLOGIE DES MUSCLES ET DES NERFS. Par CHARLES RICHEL, M.D., D.Sc. Pp. 924, and 100 Figures. Paris: Germer Baillière, 1882.

THE work before us consists of twenty-four lectures delivered at the Paris Faculty of Medicine. They do not cover the whole field of the general physiology of nerves and muscles, but deal chiefly with the subject of irritability. The author embodies in them the results of his original labours, and to these we shall refer here more particularly. His experiments on the muscle of the crayfish are of special interest. The comparative study of physiological phenomena in the lower animals is a fruitful field of research, and will throw much light upon the complex manifestations of life displayed in the higher organisms.

After giving an account of the irritability of simple cells, the author passes to the consideration of muscular contraction. Authors vary in their estimation of the latent time of excitation. This does not imply that their measurements are erroneous, but that this period varies greatly. Tracings from the crustacean muscles show clearly that the strength of the stimulus, the fatigue, load, temperature, are very important factors. Dr. RICHEL has obtained important results, showing the influence of previous subminimal stimuli; they shorten the latency to a minimum of .002 sec. (Compare Sewall, *Journal of Physiology*, vol. ii, p. 164.) Certain poisons have the same influence when given in small doses (veratrin, strychnia). The muscular latency varies greatly in different species of animals, and, according to Mendelssohn, in various pathological conditions of the human subject. A simple geometrical construction shows, on myographical tracings, that the rate of ascent during the first half of the rise is much more rapid than during the second half, and is the more rapid the more protracted the muscular contraction. The shape of the muscular curve, and the relative length of the ascent and descent, vary greatly with the temperature, fatigue, and load. A strong single stimulus throws the crayfish-muscle into a state of contracture. The phenomenon of idiomuscular contraction, or contraction localised at the point of stimulation, is observed in many invertebrata; in man, a similar phenomenon occurs (myoedema) in certain diseases. Under the name of "secondary wave", the author describes a spontaneous contraction which follows relaxation after a period of electrical tetanus. Different muscles contract differently. In the crayfish, the muscles of the tail and claw differ, the former giving a rapid, the latter a slow contraction, in accordance to their physiological uses. The number of excitations required to obtain tetanus of the tail is greater than that required with the claw—a fact which illustrates a general axiom in physiology. Fatigue and other conditions diminish the stimulation frequently necessary for the production of tetanus. The duration of tetanus is short for the tail-muscles, but indefinite for the claw, where it may pass directly into cadaveric rigidity. The author thinks that the initial contraction is a physiological, and not a physical phenomenon, governed by the strength rather than by the rapidity of the interruptions. The tracings obtained from the crayfish are very interesting, and show also the phenomenon of rhythmical tetanus, which he explains by alternatives of increasing and diminishing excitability.

The subject of muscular elasticity is treated at a considerable length. Dr. Richet considers the two factors of elasticity separately—extensibility and retractility. Experimentation is made here difficult by the indefinite duration of the phenomena, and the alterations they suffer under varying conditions, physical or vital. For Dr. Richet, indeed, muscular retractility and contractility are the same; and he brings together many facts and arguments to prove that there is a great difference between the elasticity of muscles and that of inert substances. He discusses the "latent contraction" of the muscle in the lobster, in which the relative influences of increasing load and stimulus are much better known than in the frog's muscle; and from the influence of load on the myographic curve he concludes, with Weber, that the contraction is a sudden change in the elasticity.

In the lectures on muscular irritability and excitability, the author gives a summary of the chief facts concerning these important points. He describes some interesting experiments, made on the human subject, on muscular anæmia produced by means of an Esmarch's band. The electrical stimulation of muscle is, perhaps, not so fully adverted to as one might expect in a work like the present. This curious sentence occurs at page 252: "We call electrotonus this peculiar chemical state provoked by the polarisation of the electrode." It may be also noted, *en passant*, that Dr. Richet persists in speaking of "le cathode". Many expressions occurring in the book betray the comparative neglect in which electro-physiological studies have hitherto been left in France.

We pass over the chemistry of muscle and the phenomena of rigor mortis, which the author discusses without bringing any original experiments to bear upon them. With reference to the thermic manifestations accompanying muscular contractions, he found that, in dogs tetanised by means of powerful faradic currents, the temperature rose from 38 to 44 or 45° Cent. (100° to 111° or 113° Fahr.) The cause of death under such circumstances must be this excessive temperature; for, if it be checked by keeping the animal in cold water, no serious consequences follow. Another factor, however, is not to be lost sight of in death from general tetanus; and that is the excess of carbonic acid in the blood. This, rather than actual interference with the respiratory movements, Dr. Richet says, explains the very rapid death of tetanised rabbits.

Though much has been written about the electrical organs of certain fishes, much remains to be done to elucidate their functions. The author's view, however, is that there is a fundamental analogy between these mysterious structures and muscular fibre. In both, we find an enormous internal energy set free by identical processes of nervous stimulation. Many physiological problems connected with nerve and muscle are beyond the reach of our experimental methods, and we agree with the author that they are best studied in certain pathological conditions—Nature's own vivisections. We only wish the lecture devoted to this subject had been longer and fuller.

The second half of the book is devoted to the nervous system. An account is given of the general phenomena of transmission (or vibration, irritability, and excitability). Here, again, we have evidence of the scanty attention paid to electro-physiological facts already alluded to. On the other hand, the question of reflexes is treated at great length; and this part of the work will be read with special interest by the physician. Hering's "laws" of reflexes are reduced by Dr. Richet to two—those of facilitation and of irradiation; and he adds two accessory laws, of co-ordination and of prolonged excitement. The highly complex phenomena of co-ordinated reflexes observed in certain of the lower animals deprived of their hemispheres have been accounted for by some physiologists on the assumption of a "spinal consciousness". It is certainly a very difficult task to explain such adapted movements, varying with the stimulus, on the principles of reflex action pure and simple. The author recognises this, but wisely abstains from premature hypotheses. The manifestations of "prolonged excitement" are compared by him to "an elementary form of spinal memory". The discussion of the various conditions modifying reflex action is of considerable practical interest, as well as the account of the most important reflexes (iris, heart, respiration, vaso-motor, deglutition, vomiting; intestinal, genital secretory, trophic inhibitory reflexes).

Two interesting lectures deal with the conditions of cerebral life and cerebral irritability. In the former, an account of our present knowledge of the physiology and pathology of cerebral circulation is given; in the latter, we find many important facts concerning the electrical stimulation of nerve-centres. The objections made to the experiments of Ferriar and others, that the current does not excite the cortical substance, but, by diffusion, the subjacent white matter, appears to be satisfactorily refuted by the results of Franck and Pitres (quite recently confirmed by Hensen and Heidenhain) that the latent period of stimulation is much longer when the current is applied to the grey than when applied to the white matter. Moreover, the effects are not the same in both cases. In the former, the excitation produces localised movements, than an epileptiform attack, which does not occur in the latter case.

The author has used on the crayfish what he calls the ganglio-muscular method of excitation. One electrode is applied to the nerve-centres; the other to the nerve. His results lead him to conclude that the response of nerve-centres is much more prolonged (about ten times) than that of the nerve or muscle. In the frog, stimulation of the brain diminishes the neuro-muscular irritability; stimulation of the hemispheres increases it, a fact which points to a cerebral influence influencing muscular contraction. Dr. Richet has measured the time which elapses between a sensory stimulation and the voluntary response in the frog. The minimum time was found to be 15 seconds. Dependence of the experiment on conductivity brought in the period, which at the first stimulation is not affected, but which, with repeated stimulation, decreases to a minimum. Powerful excitations act as inhibitory influences upon voluntary movement.

From what precedes, the reader will be able to form an idea of the contents of the volume before us. Many facts recorded by the author are of a kind which are of considerable interest to the physician, and, though they are described in a somewhat technical manner, the author's explanations are so clear and so convincing, that the reader will find it easy to follow him. At the same time, his views are founded on a sound basis, and the book will amply repay perusal by physiologists and clinicians alike. It is not equal in style and diction to

the lectures of a Claude Bernard, yet it possesses the clearness we are in the habit of finding in French writings of its class, and contains copious references to all the recent results in English and German physiology.

RECHERCHES CLINIQUES ET THÉRAPEUTIQUES SUR L'ÉPILEPSIE, L'HYSTÉRIE, ET L'IDIOTIE. Par BOURNEVILLE et H. D'OLIER. Paris: Aux Bureaux du *Progrès Médical*. 1881.

THE first part of this small work relates to M. BOURNEVILLE'S struggles to improve the condition of the idiots and imbeciles at Bicêtre. The sanitary evils so prevalent in French hospitals and infirmaries have been dealt with by M. Bourneville courageously and successfully. The filth and misery to which the unfortunate inmates of Bicêtre were subjected only a few years ago was so revolting, that a distinguished English physician remarked, during a visit to the institution, "that such a disgraceful condition of affairs would not be tolerated in London for twenty-four hours."

Following in the steps of Seguin of New York, M. Bourneville devoted himself to the moral and hygienic amelioration of his hapless patients. Unfortunately, the authorities failed to render the assistance which might reasonably have been expected. In spite of difficulties and lay opposition, the condition of Bicêtre is remarkably improved, as we know from personal experience. In the clinical part of this work, a somewhat rare case of congenital cardiac disease is described. After death, the foramen ovale was found patent, the aorta taking origin from the common ventricle, and the pulmonary orifice much contracted. But the most interesting point in this anomalous condition was extreme narrowing of the ventricular orifice of the infundibulum. In fact, the infundibulum constituted a kind of supernumerary ventricle. Contrary to the experience of many observers, M. Bourneville finds the temperature generally subnormal in these cases of congenital heart-disease. Indeed, he asserts that the temperature becomes progressively lowered until death. An interesting case of "cretinism with myxœdema" is described and discussed by MM. Bourneville and D'Olier. The condition of the patient presented a great resemblance to that of myxœdema. The affection was congenital, the subject being a young man aged 19, with the development of a child two or three years old. Cases of prolonged abstinence from food are not uncommon among certain hysterical and melancholic patients; but a "fasting idiot" is certainly rare. The boy whose history is narrated in this work abstained on several occasions from all food for intervals varying from three to twenty-eight days, and drank nothing but a little water.

The cause of this condition is quite unknown, but it is worthy of remark that the influence of mystical or melancholic ideas cannot be given in explanation. A case of hystero-epilepsy with hemianæsthesia in a boy is described by M. Bourneville, with the object of proving that this affection exhibits identical symptoms in both sexes. The inhalation of bromide of ethyl has been found by M. Bourneville to arrest hysterical attacks with great promptitude. The administration of this drug during the tonic period of an epileptic attack occasionally brought about complete muscular relaxation. The daily use of the drug was very efficacious in diminishing the frequency of the fits.

Two cases of epilepsy, dependent in one instance on asymmetry of the hemispheres, and in the other on partial cerebral atrophy, are carefully described by M. D'Olier. This gentleman, also, narrates a case, with the necropsy, which corroborates M. Bourneville's idea that there is a special form of idiocy dependent on generalised cerebral pachymeningitis. This work, we must allow, gives an excellent résumé of the most interesting cases observed in Bicêtre during the year 1880.

A TREATISE ON THE CONTINUED FEVERS. By JAMES C. MURCHISON, M.D., Physician to the Philadelphia Hospital, etc. With an Introduction by J. M. DA COSTA, M.D., Professor of the Practice of Medicine and Clinical Medicine at the Jefferson Medical College, etc. Low's Library of Standard Medical Authors. London: 1881.

THIS work is similar in arrangement to the great standard work of the late Dr. Murchison, to which, also, it owes not a little of its material. In addition to the fevers discussed in Dr. Murchison's treatise, there are here included under the somewhat meaningless term "continued fevers," the typhoid, dengue, and cerebral spinal meningitis.

In the chapters allotted to enteric fever, considerable space is devoted to the etiology of the disease. The exciting cause the author believes to be a contagium vivum, which is eliminated solely by the fecal discharges, and is incapable of reproducing the fever without undergoing certain changes outside the body. We are surprised to find in a work of this sort a statement so dogmatic, and that, too, with scarcely a reference to the numerous opinions of an opposing character. That the poison of this fever is, at least partly, excreted with the stools, no one will be prepared to deny; but if pathological lesion indicates the

path by which the poison is thrown off, then, inasmuch as the larynx is often affected as well as the intestine, it is at least conceivable that some of the poison may also pass off in the breath. The assertion that the stools, before becoming capable of reproducing the fever, must first decompose, cannot be held to be proved. Analogy would lead us to presume that the poison would be most powerful on its first exit from the body, and that the longer it was exposed to the decomposing influence of the atmosphere, the less powerful it would become. Most of the facts, also, seem to us to point to this conclusion; for, when drains are held to be the cause of the spread of the fever, it is because the drains are blocked, or, in other words, because the poison has not been so exposed. Moreover, it is a fact that attendants on patients suffering from this fever do contract the disease; and several cases have been recorded by Piedvache, Collie, Sharkey, and others, which, if they do not prove that the disease is directly contagious, seem at least to prove that decomposition is not a necessary element to the contagion. At present, the "drain theory" is the fashion; but, when the profession recognise that the drain is not the fountain of all evil it is now supposed to be, other factors in the spread of disease may have a chance of a hearing.

The chapter on the treatment of this fever is comprehensive, and contains an appreciative analysis of all the most recent methods. One or two of the minor points we cannot approve. Thus, in view of the danger of perforation, we doubt the wisdom of advising "palpation and percussion twice daily" over the suprapubic region, to discover the necessity for catheterisation, and of "frequent explorations of the chest by methods of physical diagnosis." The existence of retention may be discovered by other and less dangerous means than palpation and percussion of the bladder; and the degree of congestion of the lungs may be readily learned, without disturbing the patient, from a study of his face alone.

The description of typhus is full, succinct, and, on the whole, accurate. In the chapter on treatment, the recommendation that "never more than four or six together" should be placed in the same ward is somewhat absurd, and the value of alcohol (not as a stimulant only, but as a food) is underestimated.

Our space will not permit us to enter into greater detail; but we must not omit all mention of the masterly introduction by Dr. Da Costa on the treatment of fevers. This short essay forms not the least valuable part of the work.

On the whole, notwithstanding some inaccuracies of statement and a few blemishes in style, the book is one we can heartily recommend.

NOTES ON BOOKS.

A Visit to Madeira in the Winter 1880-81. By DENNIS EMBLETON, M.D., F.R.C.P. London and Newcastle: 1882. 8vo. Pp. 90. In the form of two lectures, delivered at Newcastle, Dr. Embleton has given us a pleasant account of a recent visit to Madeira. He records the very favourable impression which the island made on him, and the benefit which it did to the health of a son who accompanied him. He has brought together, almost with enthusiasm, a large mass of information about the island, its early history, its geology and botany, its institutions and products, and its present condition, which is well worthy of the attention of intending visitors. There is a tolerably full account of the climate, chiefly as contrasted with the inclement winters of the north of England. There is not much that is purely medical in the book; but it gives an account of the various hospitals, including a well managed modern one for consumption, which had, at the time of his visit, but few occupants, although that disease is by no means rare in Madeira. The old leper hospital seems to be a curious specimen of what these institutions were in the middle ages. Its condition was not very pleasant. It was capable of holding twenty or thirty patients, but there were only eight or nine in the home. There is no hint as to the increase or decrease of leprosy in the island.

On the evening of May 10th, Mr. Edwin Saunders, the President of the Metropolitan Counties Branch, gave a *conversazione* to the members and a number of guests at the South Kensington Museum. About twelve hundred visitors were present, among whom were Sir Thomas Gladstone, Sir Edmund Lechmere, Sir Charles McGrigor, and a large number of ladies. The band of the Second Life Guards, conducted by Mr. Winterbottom, performed a selection of musical pieces; and madrigals, glees, and part-songs were sung by Mr. Edwin Moss, of the Foundling Chapel, and his assistants. The meeting was very successful; and the company departed much gratified with the friendly reception which they had taken part.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 27TH, 1882.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

A QUESTION of great importance which has lately arisen, involving the expenditure of some thousands of pounds of the funds of this College, was discussed at a special meeting of the Fellows, summoned by requisition, on Thursday, May 25th. Owing to the time at which we are obliged to go to press, we are unable to give the result of the meeting; but the circumstances in connection with the expenditure alluded to are of such special interest, that we deem it right to place them before our readers.

For some years past, the school connected with the College has diminished in the number of its students; consequently, soon after the appointment of the new anatomical professor, Dr. Cunningham, a special School Commission was appointed by the Council, from amongst its own members, to inquire into the working of the various departments of the school. This Commission, composed in large part of the professors of the school itself, held a number of meetings, and came to certain conclusions. What these are is not yet known; but an "interim report" was laid before the Council at the end of last month. This report did not give any information as to the matters directed to be inquired into, but recommended the immediate expenditure of a sum, which may be roughly estimated at £3,000 at least, on buildings and additional teaching appliances for the use of the school. Although this interim report was only laid before the Council at the time stated, it was immediately adopted—not, however, without protest from some influential members of the Council; and in less than a fortnight all the arrangements connected with this large outlay were practically completed. Several members of the Council and many Fellows believed that these proceedings, involving such vital consequences to the College, were forced on with undue haste and without sufficient deliberation, especially as the yearly election of a new Council takes place on June 5th. It was, therefore, urged that such an important matter should not be decided without the full knowledge of the Fellows, and an expression of opinion from them as to its advisability or necessity. The majority of the Council, however, would hear of no delay; and it required a formal notice of motion to have the question of postponement even considered. Such a motion was at last reluctantly agreed to; and on Thursday week, when it was passed, a requisition was handed in, in compliance with which Thursday's special meeting was summoned.

The main reason advanced for the postponement and further discussion of the matter by the Fellows at large was, that the pecuniary resources of the College are extremely limited. Its fixed income is only £400 a year, the interest on a mortgage of £10,000; and, but for this interest and the money obtained last year from the rather questionable granting of some hundreds of dental diplomas, the College would be absolutely in debt. As the granting of these dental diplomas, although so profitable in the past, will practically cease this year, a financial difficulty also threatens in the immediate future. Besides this, the effect of the new education scheme recently adopted by the College, which many think likely to be pecu-

niarily injurious to it; the probable effect of the recommendations of the Royal Commission; and the formidable rivalry of the new Royal University, with its cheaper degrees and requirement of fewer courses of lectures, will in all probability still further diminish the income which the College derives from the issue of its qualifications. Under these circumstances, it was considered by some of the independent members of the Council, and by many of the Fellows, that it would be not only inopportune, but opposed to the true interests of a corporation such as a Royal College of Surgeons should be, to alienate for ever a large portion of the only fixed income the College possesses, and by means of which it has lately only been able to meet its yearly liabilities. Whatever can be said of the benefit which may accrue to the particular school connected with the College and to its professors by the proposed expenditure, it is difficult to maintain that it can, in the words of the College charter, be "for the common good of the Fellows" at large, or tend to the more efficient maintenance of their museum and library, or to the advancement in Ireland of surgical science by such measures, for example, as the colleges in the sister countries are in a position to accomplish.

HUNGER AND APPETITE.

M. LEVEN remarks, in a paper read recently to the Société de Biologie, that hunger and appetite are two sensations which have been studied by physiologists, but of which the analysis cannot be made by the experimental method. These two terms are employed indiscriminately one for the other, but they have different significations. Hunger and appetite can only be studied in the human subject, either in a healthy condition or in a state of disease. Pure hunger can only be observed in new-born children during the three or four first months of life. Impelled by the instinct for food, they take the breast of the nurse, draw from it a quantity of milk sufficient to satisfy this instinct, and go to sleep, until the sensation of hunger awakens them, and they again take the breast. Hunger in infants is a simple sensation that milk alone can calm. If any other food be added to this repast, the weak organism of the infant is put into jeopardy. Four or five months should be allowed to pass until the strength of the child is increased; the organs will then be stronger, and eggs and broth, and farinaceous foods, may be added without risk. At this period of existence, the intelligence of the child will show itself; it will accept and refuse on a certain day such and such of these foods, after having consulted the nerves of taste and smell. Its brain becomes active, and only obeys the impressions which are imparted to it by certain substances; so long as it alone drank milk, the brain was passive, impelled only by the instinct of hunger; when the nerves of taste and smell intervened, it was determined by appetite. We must, therefore, distinguish between hunger, which only has its origin in a nerve, and the sensation of appetite which is the result of the sensations provoked by the nerves of hunger, smell, and taste.

Whenever we take a meal when in a healthy condition, these three groups of nerves act simultaneously. The appetite may remain intact in dyspepsia; but, as a rule, it decreases or disappears entirely. The nerves are simultaneously disturbed; food has a disagreeable smell and taste, if taken without hunger. In a great number of cases, the functional disassociation of these nerves occurs, and hunger is observed modified alone, without the nerves of taste or smell being touched; or the nerves of taste alone are attacked, or even the nerves of smell are deranged, when the nerves of hunger and of taste have escaped the influence of dyspepsia.

These different functional disorders may be characterised as follows. In certain patients, so soon as a mouthful of food taken with pleasure, and welcomed by the nerves of taste and smell, is introduced into the stomach, hunger is calmed, and the patient dares no longer to continue the repast; or, if he do so, he has sensations of nausea. In other cases, the hunger incessantly increases, and is as acute when the meal is finished as before it is commenced. This is what is termed *bulimia*. There are, and I suppose infinitely, who feel the necessity of eating, no longer and the normal taste in the food, or else they have

a craving for exciting or extraordinary substances, such as vinegar, chalk, and charcoal, and would with pleasure fill the stomach with these materials. Pregnant women show types of these derangements of the taste, in dyspepsia brought on by pregnancy. Finally, there is another category of dyspeptics in whom the nerves of smell only are deranged in action. M. Leven has treated a patient, forty years of age, suffering from dilatation of the stomach, who was hungry, and took meat with pleasure; but for twelve hours it left with him a sensation of putrefaction, which only disappeared when the stomach had recovered its natural condition. The seats of these sensations are in the nerves of the tongue and of the nose. The seat of hunger is, however, a point which is not yet determined. Sédillot and Longet have cut the pneumogastric nerves in dogs, and have seen them eat three or four days after the operation; but they have never been able to cut the great sympathetic. Is it not, therefore, that nerve which, in the absence of the pneumogastric nerves, transmits the sensation to the stomach and to the brain?

Longet and Schiff have maintained that hunger is not seated in the stomach, but in the whole organism; that we hunger throughout all our tissues, in our muscles, and in our nerves; and that a true equation may be established between the degree of hunger and the losses of the organism. It is easy to object to this that some people never feel hungry, and that the greatest wasting of the organism occurs in the febrile condition when there is no hunger.

Schiff has made experiments to show that hunger is not localised in the stomach. He took fasting starving dogs, which howled incessantly. He injected peptones into their veins; the dogs left off howling. All physiologists have, however, observed that, if water be injected into the veins of fasting dogs, they leave off howling, and become quiet, so that nothing can be deduced from these experiments. That, however, which appears certain is, that the sensation of hunger is localised in the stomach, and transmitted to the brain by both the sympathetic and the pneumogastric nerves. In order that hunger should be felt, it is necessary that the mucous membrane of the stomach should not be congested, and that it should be in a healthy condition.

The practical deduction to be drawn from these data is that hunger cannot be restored by medicine, but by an alimentary regimen, by making the number of meals of solid food in proportion to the congested condition of the mucous membrane. Hunger cannot be restored by the use of quinine wine, iron, or bitter preparations, but by treating dyspepsia in a rational way.

THE ELECTRIC LIGHT.

THE influence of the electric light upon the sight is a subject likely to attract much attention. Numerous observations, especially in France, lead to the undoubted conclusion that there is nothing prejudicial in the nature of the rays derived from electric light, but that, on the other hand, this light may be of great benefit by reason of its superior illuminating power. Indeed, it is highly probable that many eye-diseases, many, among others, are produced, and more are aggravated, by the strain of vision under circumstances of defective illumination. The sense of discomfort experienced even by a possessor of sound eyesight, who reads for some time in the dim twilight, will demonstrate to anyone the probability of what we have said.

On the other hand, there is a risk attendant on the use of too bright illumination. Practically, this is effective only in the case of those whose occupations in connection with electricity lead them into close relation with the light; but, even in such cases, the resulting inflammations, whether of iris or conjunctiva, are neither grave nor lasting. And, in the not far distant days of electric house-illumination, the companies may be trusted, if only for the sake of their pockets, not to do any serious injury to the general public by an excessive supply of light. It may, however, conduce to the peace of mind of nervous persons to know that, even in such a case, glasses, suitably tinted, will give relief. We must remember, however, that electric lighting is still in its infancy. Future scientific improvements may be trusted to remove what now is

a more serious drawback to the light in an hygienic point of view than that of which we have spoken, viz., its unsteadiness. This once palliated, we shall find direct benefit, not only from the more perfect illumination, but also from the fact that this will allow of the lights being so placed, that the eyes are protected, especially in near work, from their direct rays.

HER MAJESTY, on her arrival at Perth, on Saturday last, *en route* for Balmoral, was pleased to accept of a basket of orchids from Dr. Patterson, Bridge of Allan.

SIR ERASMUS WILSON is now able to get up during the day, and sit in his room. The warmer weather has relieved the dyspnoea, and considerably hastened recovery.

WE note, as a curious recommendation of the proposed process for preserving meat by injecting boracic acid into the arterial system, that "the acid is stated to have even a beneficial effect on the consumer". It will, however, be as well to know when we are being benefited in this way, and not to be blessed with too much boracic acid unawares.

THE death of Dr. Hodgen of St. Louis is reported. Dr. Hodgen was Dean of the Medical College of St. Louis, and Professor of Surgical Anatomy. During 1881, he was President of the American Medical Association. Dr. Hodgen has been a welcome visitor more than once at our annual meetings, and was widely known and esteemed. His loss is much mourned in his native city.

THE following is an extract from a letter from a medical officer in one of the lunatic asylums in the west of Ireland. The writer says: "It is to be hoped that something will at last be done to restore order in the country. I have had two men admitted here lately who have been driven out of their minds by fear of assassination: one of them, from near this, whose house was fired into because his sons worked for Mr. —; and the other is the son of the old man —, who was shot while sitting at his son's fireside."

SIR JOHN ROSE CORMACK.

We greatly regret to learn that the late Sir John Rose Cormack died in very straitened circumstances, leaving his family entirely without means. An influential committee is being formed, and is raising funds to supply the immediate wants of the family, and to assist in making some further provision. Communications may be addressed to the Hon. A. Herbert, M.D., 21, Rue Miroménil, Paris; or subscriptions will be received at this office. We have to acknowledge the following, received to-day: Dr. Chepmell, £10; Mr. Ernest Hart, £10.

DARWIN MEMORIAL FUND.

It is felt by the many friends and admirers of the late Charles Darwin that, though his works are his best and most enduring memorial, this should not be the only one; and they are desirous of handing down to posterity the likeness of a man who has done so much for the advancement of natural knowledge. They wish also to establish a fund associated with his name, the proceeds of which will be devoted to the furtherance of biological science. A committee has been formed, which consists, as it is fitting it should, of the most eminent in science and in every rank of society. The honorary secretaries are Mr. T. G. Bonney and Mr. P. Edward Dove, to whom subscriptions should be sent.

MICRO-ORGANISMS.

THE meeting of the Royal Medical and Chirurgical Society on Tuesday last was very largely attended. The papers and the discussion on certain important points in laryngeal surgery were no doubt of great interest, but to most of those who attended the promised demonstration of the bacilli of tubercle was probably the chief attraction. The specimens shown by Mr. Watson Cheyne and Mr. E. M. Nelson were the same as those exhibited at King's College some weeks ago, and described in our columns at the time (p. 709), but with two important

additions. Professor Tyndall recently received from Professor Ehrlich specimens of the bacilli, prepared evidently by some new method, for they were stained far more brilliantly and deeply than in Koch's specimens. Under a high power the individual bacilli were beautifully defined, and under a low power—a quarter-inch—their deeply-stained light purple masses showed in brilliant contrast with the comparatively slightly brown-stained surrounding tissue. In the letter which accompanied the specimens Professor Ehrlich did not describe the method he used, but the product is most satisfactory. Mr. Cheyne showed a number of other pathogenic organisms, and Mr. Horsley also contributed an interesting series. Of these latter one was of special interest to the surgeon; it was a specimen of pus taken from an abscess of the breast, which had been opened and treated with iodoform. The pus was laudable, and smelt distinctly of iodoform, yet it was seen to swarm with micrococci; the abscess, however, had been, we believe, recently opened, and this may afford an explanation of the presence of the organisms. On this subject we would refer the reader to Dr. Ogston's paper published in our columns in March 1881.

SIR JOHN HOLKER.

WE understand that the immediate cause of Sir John Holker's death was failure of strength. When he was first seen by Dr. Dobell in 1879, he was suffering from fatty degeneration of the heart. Some months ago, Dr. Dobell discovered a serious condition of the kidneys, which, however, was arrested by treatment. A few days before his death, he was seized with an attack of diaphragmatic pleurisy, which seriously embarrassed his breathing, and thus favoured the accumulation of mucus in the bronchial tubes, and tended to exhaust his little remaining strength. In spite of the serious changes in the structure of the kidneys, there were no symptoms of uræmia throughout. He remained conscious almost to the last moment, bravely struggling against his disease.

THE LATE DUKE OF GRAFTON.

THE death of the Duke of Grafton this week from typhoid fever has once more directed attention to the lurking dangers of infection within the homes of the wealthy, as well as of the middle and lower classes. We understand, however, in this case, that the examination of the houses of the Duke of Grafton, both in town and country, does not reveal the sources of infection. It appears, however, that in the neighbourhood of his country house, where he has recently been staying, typhoid had recently been imported, and great carelessness shown in dealing with the excreta containing the poison, which, it is alleged, had been spread upon the fields.

LEAD-POISONING.

THE Guardians of Gateshead-on-Tyne, at their recent fortnightly meeting, discussed the question of lead-poisoning, several cases having recently been brought under their notice, which have been exciting a great deal of interest in the district. It was unanimously agreed that the following resolution be forwarded to the Home Secretary: "As guardians of the Gateshead Union, our attention has repeatedly been drawn to the great fatality attendant upon the employment of females in the whitelead-works of the neighbourhood. Decrepitude, palsy, blindness, and even death, are the frequent results of lead-poisoning. We therefore venture to ask you to establish an inquiry into the method of such employment, with a view to the introduction of machinery to do the most dangerous parts of the work."

MEDICAL MEMBERS OF PARLIAMENT.

CANADIAN medical men take great interest in politics, according to the *Canadian Medical Journal*, and are largely represented in the various Parliaments. There are six physicians in the Dominion Senate, and sixteen in the House of Commons, ten in the Local Parliament of Ontario, ten in Quebec, three in Nova Scotia, two in New Brunswick, and two in Manitoba. They are also largely represented in Municipal Councils.

CHARGING CROSS HOSPITAL.

THEIR Royal Highnesses the Duke and Duchess of Edinburgh paid a visit to the Medical School of the Charging Cross Hospital, Chandos Street, on Thursday last, at three o'clock, when they were received by the Dean, Medical School Committee, and staff. The royal visitors were conducted to the lecture theatre, where a report of the Medical School for the past year was read by the Dean. The successful students were presented to Her Royal Highness the Duchess of Edinburgh, and from her received the medals and certificates. A short address was given by the Right Honourable W. H. Smith; after which their Royal Highnesses proceeded to the hospital, and were received by the treasurer, council, and medical and surgical staff. They here visited the wards, attended by the council and staff; and were afterwards conducted to the board-room, and an address read and presented by the treasurer. The ladies who had collected purses were presented to Her Royal Highness the Duchess of Edinburgh, who received the purses. A vote of thanks was proposed to their Royal Highnesses, to which His Royal Highness the Duke of Edinburgh suitably replied.

THE CASTOR-OIL PLANT AS A FLY-KILLER.

OBSERVATIONS made by M. Rafford, a member of the Société d'Horticulture at Limoges, show that, a castor-oil plant having been placed in a room infested with flies, they disappeared, as by enchantment. Wishing to find the cause, he soon found under the castor-oil plant a number of dead flies, and a large number of bodies had remained clinging to the under-surface of the leaves. It would, therefore, appear that the leaves of the castor-oil plant give out an essential oil, or some toxic principle which possesses very strong insecticide qualities. Castor-oil plants are in France very much used as ornamental plants in rooms, and they resist very well variations of atmosphere and temperature. As the castor-oil plant is very much grown and cultivated in all gardens, the *Journal d'Agriculture* points out that it would be worth while to try decoctions of the leaves to destroy the green flies and other insects which in summer are so destructive to plants and fruit-trees. Anyhow, M. Rafford's observations merit that trial should be made of the properties of the castor-oil plant both for the destruction of flies in dwellings and of other troublesome insects.

MEDICINE AS A CIVILISING AGENT.

NEVER does our profession appear to greater advantage than in its dealings with savage or semi-savage nations. We are far from including the people of India in either of the above categories, but it must be admitted that the great mass of the natives of our Indian Empire are grossly ignorant. The part played by the medical profession in reconciling the people of India to the rule of a race alien in blood and religion, from the earliest days of our connection with that country, has been most important, although the Government has never been forward in acknowledging it. When the missionary and educator adds a competent knowledge of medicine and surgery to his other qualifications for his work, he is doubly armed. The present Bishop of Rangoon is a Doctor of Medicine; for many years before he was consecrated bishop of his diocese, he laboured as a missionary in the district of Tinivelly, in Southern India, a district containing the largest community of native Christians in that country. It is a well known fact that the medical and surgical skill of our now right reverend brother gave him an influence far surpassing that of any labourer in the civilising work to which his life has been devoted. We have been led to make the above remarks by the receipt of a copy of the report of the Grey Native Hospital in King William's Town. It does not appear that Dr. Fitzgerald, the superintendent, is engaged in missionary work; but it is impossible to read the record of his labours for a single year without seeing that, as in India, so in South Africa, the healer is after all the most powerful civiliser; 600 cases of disease were treated in the hospital, and 1,700 as out-door patients. It appears that natives continue to travel very long distances to this hospital for medical aid, coming from beyond the Cape, from England, Port Beaufort, Kuskama Hoek, and

other distant places. Dr. Fitzgerald relates the following as an instance of the impression made on the minds of natives by the successful application of sound surgical knowledge.

"Only yesterday, a native woman was brought in a wagon from the Bashee, suffering from complete inversion of the entire eyelashes of both upper eyelids; the eyelashes lay on the balls of the eyes, brushing up and down at every motion of the lids, causing intense irritation, which would soon end in the total loss of sight. One can easily understand the suffering which this poor woman endured, if we consider the pain and irritation caused by only one eyelash in the eye. The eyes were very much inflamed. On questioning this woman, I found that she had been suffering from this diseased state of the eyes for some years, and that she had consulted several distinguished members of the native faculty without any relief of her suffering. She was informed by her medical attendants that the spirits were angry with her because they never had any food given to them at her expense. In consequence of this opinion, a cow and a young ox were slaughtered, and plentifully partaken of by the doctors and their attendants, and the bones were burnt and offered up as a sacrifice to appease the spirits. The patient's eyes were then covered with cow-dung, and pieces of sticks and leaves sucked out of her eyes and exhibited to her friends, leaving, of course, her eyes as bad as they were before the operation. Not getting any relief from the profession in its uncivilised state, she was advised by a native woman, who had been operated on at this hospital for a similar disease, to come here, and this day all her pain and sufferings were put an end to by an operation; her eyelids and eyelashes restored to their natural state, and she will soon be able to leave here for her distant home, with good sight, and free from pain. Cases of this sort make a great impression amongst the natives, and afford an interesting subject for conversation and wonder at their kraals."

Dr. Fitzgerald urges the Government he serves so well to favourably consider his suggestion to extend the system of medical relief amongst the native tribes, not only on grounds of humanity, but as a powerful means in helping on the civilisation of the native races; in this wise recommendation we entirely concur.

POISONING BY CASTOR-OIL.

AN inquest was recently held by the Coroner for Central Middlesex which serves forcibly to illustrate the necessity for care in the administration of purgatives to children. From the evidence, it would appear that a woman purchased some castor-oil, and gave her child—only a month or two old—"a dose", thinking that its "stomach was out of order", and that it might do it good. A severe convulsion followed, in which the child died; and the doctor who was called in expressed a decided opinion that death had resulted from the treatment. The coroner said that the practice of giving young children aperients whenever they seemed unwell was one of the most dangerous and pernicious with which he was acquainted. It could not be too generally known that, when a child vomited, the stomach and intestines became absolutely empty, and collapse might ensue. Parents should be careful to get cold-drawn oil, for many of the preparations sold were only for horses, and, if administered to a child, might set up intense irritation, and cause convulsions and death. Whilst coinciding with the coroner in his remarks on the necessity for caution in the administration of aperients, we think there is one other point to which it may be as well to call attention. It appears not to be generally known that castor-oil is very commonly adulterated with croton-oil to increase its activity. Cases of death from castor-oil alone are very rare; and we entertain no doubt that, in the case now under consideration, the fatal termination was due to a more powerful irritant.

FATALITIES INCIDENTALS TO THE LUNATIC ASYLUMS.

It will be seen, in the report which we publish in another column, that the House of Lords has given judgment in favour of the appeal of one of the managers of the Metropolitan Asylums Board, in the Hampstead Hospital case. The result of this decision will be to re-open the whole case, and to allow the managers to have it re-tried. It is impossible not to sympathise with the managers of the Metropolitan Asylums Board, in the infinite worry to which they are exposed, in their efforts to carry out the highly skilled advice with which they have been provided, and the important public duties on which they are

intent. A battle between private interests and public needs is one which is fraught with vast importance; and no doubt, also, it is one on which there is a great deal to be said on both sides. It cannot, however, but be felt that the vast public importance of making adequate provision for the isolation and treatment of infectious cases entitles the Metropolitan Asylums Board to great sympathy and support, in the efforts which they are making to provide adequate isolation of hospitals for the treatment of infectious diseases in the metropolis; and, in some sense, the result of their efforts will be watched as test instances of great importance to the profession, and to local sanitary administration throughout the country. Litigation will now commence again; and it is to be hoped that the case of the Board will be presented with more completeness; and that the evidence discussed by the judges will be in a more satisfactory state than the House of Lords has found that it was on the last occasion.

STUDENT MEMBERS OF THE CONGRESS.

THE consideration of the executive of the late International Medical Congress might, we think, with advantage be given to the subject of the letter which we publish in another column under the head of "Student's Grievance". The writer complains that, whereas students were allowed to attend at the Congress at a diminished rate, with some announcement and intention of liberality, they were, on the other hand, excluded from many of the amusements of the members, which, under the circumstances, was unavoidable; and it now appears that they are deprived of the *Transactions*, and compelled to purchase them at the published price. The most permanent and lasting benefit of the Congress is undoubtedly the study of these volumes; and our correspondent suggests what will, we believe, be likely to be regarded with much favour by the executive, when he says that the claim of the students to a receipt of the *Transactions*, under some less onerous conditions than those now open, should be considered and accepted. The request is, we think, a reasonable and laudable one; and it is hoped that means will be found of satisfying it. We fear, however, that it comes rather late.

MEDICAL BOOK ADVERTISEMENTS.

WE trust that the practice of advertising medical treatises in the daily newspapers, once much abused, will not be revived. It is open to many and serious objections, which we have more than once discussed at length. Briefly, they are that these works are ostensibly in all cases, really in the majority of cases, addressed to medical readers, and deal with their subject in a technical manner, suitable only for technically informed readers. To the general public, such treatises are not only useless, but mischievous; they could only understand morsels of them, and then only imperfectly; in the hands of other than medical readers, medical treatises and handbooks are wandering lights, which lead those who follow them into various quicksands. Moreover, practically, such books are not purchased by the public; and the advertisement of the books by the author is justly regarded rather as a means of advertising the author's name to the public in connection with the treatment of particular forms of disease, than of fulfilling the legitimate purpose of advertisement of books—namely, the sale of such books. Some years ago, we discussed this subject repeatedly and urgently in the *BRITISH MEDICAL JOURNAL*, and called for some authoritative expression of opinion on the subject; with the result that several principal corporations passed resolutions expressing their disapproval of the practice of advertising technical medical works in the daily papers, and the leading authors signified their views accordingly to their publishers. The practice has fallen into discredit, and the "quacks' corner in the papers has now but seldom the countenance of the company of advertisements of medical works of a higher order. The legitimate intimation to public libraries and others of the publication of new books is held to be satisfied by the announcement among "new books". A whole-page advertisement in the *Times* of medical books on the list of a very eminent and scrupulous firm of publishers has, therefore, attracted our attention, with much regret. We find,

however, on inquiry, that the authors were in no way consulted in this matter, and are not responsible. The publishing firm were the authors of the advertisement, which they issued as part of their general publishing business, and not suspecting that any objection would be felt in any quarter whatever. No repetition will, we understand, be made; and this exceptional and unwitting breach of a salutary regulation will, we trust, only serve more emphatically to mark the rule.

SANITARY INSTITUTE OF GREAT BRITAIN.

AT the annual general meeting held at 9, Conduit Street, on Wednesday, May 17th, Professor F. S. B. F. De Chaumont, M.D., F.R.S., in the chair, a favourable report was presented by the Council on the progress made by the Institute during the past year. The Chairman gave an address, and the officers for the ensuing year were elected; the President being His Grace the Duke of Northumberland, K.G.; and the trustees Sir John Lubbock, Bart., D.C.L., F.R.S.; Dr. B. W. Richardson, F.R.S.; and Mr. Thomas Salt.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of the society was held on Wednesday, May 17th, at 5 P.M., in the Library of the Royal Medical and Chirurgical Society. The chair was taken by Dr. Pitman, Vice-President, in the unavoidable absence of the President, Sir George Burrows, Bart. On the recommendation of the Court of Directors, Dr. Bisset Hawkins was elected a vice-president in the place of Dr. Billing, deceased; and Mr. Steel, Dr. F. Weber, Dr. Burdon Sanderson, Mr. Evershed, Mr. T. S. Wilkinson, and Mr. Rivington, were elected directors in the place of the six senior, who retired by rotation; the other officers were eligible for re-election, and were re-elected. From the financial statement of the acting treasurer, it appeared that a sum of £2,947 had been distributed, during the past year, to sixty widows, fifteen orphans, and three recipients of relief from the Copeland Fund. The expenses of the year had been £181 15s. 8d. The funded property had been increased by the purchase of £466 Metropolitan Consolidated Stock. No legacies had been received during the year. The report was read, and showed that the number of members of the society had fallen to three hundred and sixty-eight; five new members had been elected during 1881; nine had died, and three had resigned or ceased to be members. The number of widows on the books at the end of the year was fifty-eight, that of orphans nine, and three orphans were on the Copeland Fund. Two fresh widows had been elected; four had died or ceased to be eligible. Six orphans had become, through age, no longer recipients of grants. A discussion followed the reading of the report, on the desirability of considering whether any alteration could be made in the mode of granting relief, and in the admission of members, to make the society more useful and popular; and a resolution was passed, referring the subject to the Court of Directors. A vote of thanks to the editors of the medical journals was carried unanimously. A vote of thanks to the chairman, Dr. Pitman, for his kindness in presiding at the meeting, closed the proceedings.

BÉCHAMP ON MICROZYMES.

M. Béchamp's researches, made twenty years ago, are the origin of his theory "that elements of living tissues, under the form of molecules, or rather cells, so minute that a cubic millimetre contains fifteen millions, form the basis of organic matter." These molecules or microzymes are living, and their vitality is indestructible. After dissociation, different chemical evolutions, decomposition, etc., they constitute a residuum which resists the action of all reagents, and remains unchanged by analysis; under favourable circumstances, the residuum quickly reconstitutes itself, and forms the framework of a living element. Every system, every apparatus, every gland, every tissue, of the animal economy has its special microzyme, the term microzyme signifying small ferment. M. Béchamp believes the microzyme to be the active secreting agent in the primary cells of the gastric glands; it is an insoluble element furnishing soluble substances instrumental in dissolving other elements. Microzymes are capable of developing into

bacteria. M. Gautier admits the value of M. Béchamp's theories; also his priority in the detection of the presence of insoluble granulations in the gastric glands, but refuses to admit their vitality, and states the following reasons. 1. Microscopical examination of these granulations fails to reveal any structure possessing that regular form which denotes vitality; 2. They are not reproductive; 3. When the gastric juice is filtered through a kaolin filter, and the residuum remaining on the filter is treated with ether, and washed for fifteen days to remove the pepsine, an acid substance is obtained, which is soluble in weak soda, and crystallises; the crystals have the form of needles, and are green. This acid substance transforms fibrin into peptone, which, if not perfect, is certainly characteristic. M. Gautier asks if it is possible to suppose that a crystallised ferment is a living substance? M. Béchamp maintains his theory that microzymes are living, and undertakes to prove his assertion in a future communication.

OPIATES AND PERISTALSIS.

PROFESSOR NOTHNAGEL of Vienna recently communicated to a German society the results of experiments on the action of opium and morphia on the intestine. The constipating power of these drugs appear due to their being irritants of the splanchnic, the inhibitory nerve of the intestine. That nerve is specifically influenced by morphia, just as the vagus, the inhibitory nerve of the heart, is acted upon by digitalis; in fact, in both cases, small doses excite, large doses paralyse. It was observed, in a discussion on this question, that the peristaltic action of the intestines is not necessarily the same in man as in animals. Antiperistalsis does not appear to occur in the latter; in our species it is known to exist; though, when obstruction exists, peristalsis in the ordinary direction is quite sufficient to account for fecal vomiting. Dr. Rosenstein, however, had seen chronic fecal vomiting in a patient of his where no mechanical obstruction could be found. Professor Preyer stated that he had seen antiperistaltic movements of the small intestine in animals, and pointed out that the filling and emptying of the cæcum, especially of the very long cæcum of some animals, could only be effected by alternate peristalsis and antiperistalsis.

THE DIGESTION OF CANE-SUGAR.

PROFESSOR LEUBE of Erlangen finds, from practical research, that cane-sugar is converted into grape-sugar by the gastric juice in health, and also in disease, as long as the juice is secreted at all. In healthy subjects, the grape-sugar thus formed is rapidly absorbed; in disease, this absorption remains incomplete, much grape-sugar passing into the intestines with the chyme. Professor Leube, in several subjects healthy and sickly, introduced grape-sugar into the stomach, and pumped out some of the contents after a short period, when the glucose was found to have disappeared. He likewise contrived a hollow sound, filled with a solution of cane-sugar and gastric juice; this could be retained for about half an hour in the stomach, into which a solution of cane-sugar had also been introduced by ordinary deglutition. When the sound was withdrawn, its contents, protected from absorption, were found to be charged with grape-sugar, whilst no sugar of any kind could be detected in the contents of the stomach, pumped out at the same time. The gastric juice appears to play the principal, though not the sole, part in this process, by which the kind of sugar most familiar in domestic economy and commerce is changed into the kind more closely associated with the tissues in the animal kingdom.

THE TREATMENT OF WRITERS' CRAMP.

Dr. TH. SCHOTT, of Nauchheim, writes to the *Deutsche Medicinische Zeitung* to draw for his brother (Dr. Aug. Schott) and himself, priority in the name of treatment recently described by M. Romain Viganioux as Viganioux's method, and which was communicated by them to Wolff in 1875. He gives a very clear description of the method, which consists of a combination of gymnastics and shampooing. The gymnastics are active and passive. The latter are performed by the patient alone. They last 20, 30, to 45 minutes. Commencing with the fingers, these

are flexed, extended, abducted and adducted; the thumb is treated separately. Then follow four movements of the wrist, flexion and extension of the forearm, on the arm, and finally movements of both arms in four directions. Each exercise should be repeated six to twelve times, and with sufficient effort to redden the face. After each series of movements there should be a short pause. In the active gymnastics the same movements are made, but each must be arrested, or rather opposed, by another person, so that for each a distinct muscular effort is required. These exercises should last as long as the preceding series. They should be repeated three or four times a day. In the process of shampooing, the operator oils his hands and the patient's limbs, and commences by light friction over the course of the principal nerve-trunks, from the periphery to the centre, gradually increasing the force of the pressure, and again relaxing it towards the end. This part should last about ten minutes. Shampooing of the muscles is performed by taking the body of a muscle in the hand and rubbing it longitudinally and transversely, without compressing it too much on the subjacent bone, commencing with the hand and finishing with the shoulder. The duration is the same as for the nerves. Care must be taken to avoid bruising, which does harm. A single daily shampooing is enough. The improvement which is manifested by the third or fourth week should not cause a cessation of these exercises, but they should be continued for six or eight weeks to ensure a complete cure. In the early period of treatment the patient should abstain from work, and go back to gradually avoiding all cause of fatigue. To prevent relapses, Dr. Schott recommends daily employment of the passive exercise for some weeks, and the use of the local cold douches suggested by Esmarch. He has cured all his patients, and has seen no relapses. Most of them were the female pupils of the Conservatoire of Music, at Frankfort, sufferers from pianists' cramp.

INTERNATIONAL HYGIENIC CONGRESS.

AN international hygienic congress is announced to be held at Geneva in September next. The arrangements are under the charge of Dr. Louis Dunant. Medical men of all countries, and all who have the advancement of hygienic science at heart, will be eligible to attend the sittings, provided they send in their names beforehand.

GLANDERS IN THE HUMAN SUBJECT.

IN a recent number of the *St. Petersb. Med. Wochenschrift*, Dr. Zdekauer describes a case where the clinical symptoms of glanders were observed, although no distinct history of infection could be obtained. A lady, aged 46, and in very good health, was attacked, at the beginning of January, with swelling of several large joints, and high fever. At the end of three weeks, the temperature continued over 104°, with no eruption, slight enlargement of the spleen, and very feeble pulse. Dr. Zdekauer diagnosed "latent blood-poisoning complicated by rheumatic polyarthritis". On January 26th, the face became oedematous, with pustules as large as a bean; there were great heaviness of the lower eyelids, no glandular swellings, and a typhoid condition. On the next day, the face was enormously swollen, and large greyish swellings, with dilated lymphatic vessels between them, covered the left lids, the nose, and the mouth. Several pustules, of the size of cherries, with livid bases, were found on the arm; the patient became comatose, and died in the evening.

VACCINATION AND SMALL-POX.

IN his last annual report on Ashton-in-Makerfield, Mr. Nathan Hannah gives a remarkable instance of the efficacy of vaccination as a prophylactic of small-pox. Small-pox was seriously prevalent in the town, and Mr. Hannah made a house-to-house visitation for the purpose of revaccinating all who were willing to undergo the operation. In one house, where a child had the disease in a modified form with only imperfect marks of primary vaccination, he requested the other occupants, consisting of two families, to be revaccinated. They ridiculed the idea, retorting "that the operation was useless, as the prevalence of the disease, to their mind, showed." On a second case arising in the same

house, Mr. Hannah again urged the necessity for revaccinating the remainder, and, with one exception, they this time acceded to his request; with the result that those vaccinated escaped, whilst the woman that refused contracted the disease, and had a severe attack. The health-officer for Gateshead (Mr. Charles Green) has some instructive figures bearing on the same point in his report for 1881. Reporting on all the cases of small-pox that came under his notice last year, he says that of ten vaccinated persons who were attacked, none had the disease severely, but all were mild cases which recovered. Of fourteen unvaccinated persons attacked, however, twelve had severe attacks, and three died. In five different families, every unvaccinated member of the family who had not previously gone through the disease was attacked by it. The figures given by Dr. Gayton, in his last report on the admissions to the Homerton Small-pox Hospital, point even more strongly in the same direction. Out of a total of 840 patients, 128 had good vaccination marks, of whom 1 died; 424 were imperfectly vaccinated, of whom 27 died; 85 were said to be vaccinated, but had no visible marks, and of these 22 died; whilst 203 were unvaccinated, of whom 64, or nearly a third, died. Figures like these are not to be explained away by any artifices of the antivaccinators, to whose special consideration they may be commended.

MORTALITY IN THE PUNJAB.

DURING 1880, only 274 deaths were registered in the Punjab from cholera, against 26,135 of the epidemic outbreak of the disease in the previous year. A similarly remarkable decrease is shown in the mortality from small-pox, the total deaths amounting to 9,145, the lowest number ever yet registered from the disease since the introduction of the registration system in 1868. These figures show a very complete subsidence of the epidemic activity of the disease during the two previous years, when the number of deaths registered from small-pox rose to 40,271 in 1878, and 49,489 in 1879, against 12,296 in 1877 and 10,254 in 1876, which last was the next lowest mortality from this disease registered in any year since 1868.

VACCINATION IN BRITISH BURMA.

THE total number of persons vaccinated in British Burma during 1880-1 was 47,241, or about twelve per thousand of the population, as compared with 54,320 in 1879-80. The number of vaccinations was greater, and the cost of the department was greater, than in the previous year. Subject to certain exceptions, the supply of lymph was sufficient, and the lymph was of good quality. The decrease in the number of operations is not explained. The percentage of successful cases was 77, as compared with 72 in 1879-80; but the average cost of each successful case rose nearly a half. Vaccination statistics in Burma contrast unfavourably with those recorded for most other provinces of the Indian Empire, not only in respect of deaths from small-pox, but also in comparison with the proportion of yearly vaccinations to the population, while the cost of each vaccination shows an increase. It is to be hoped that during the coming cold season, municipal authorities and others will make greater efforts to popularise and promote vaccination. During 1880, the Vaccination Act became law. Applications have since been received from the municipal committees at Rangoon and Akyab, for the extension of the provisions of the Act to those places. At Akyab, opposition has been raised to the introduction of the Act; and in Rangoon, there has been no sufficient establishment or organisation for vaccinating all comers. The honorary magistrates had not begun to sit, and so could not try offences against the Act; and under these circumstances it was considered expedient to postpone the extension of the Act to Rangoon. Complete success, however, cannot be expected for some considerable period, since the task of overcoming the popular dislike for inoculation and disbelief in vaccination must necessarily be a work of time. The civil medical officer, whilst complaining of the carelessness and absence of interest shown by the vaccinators, suggests, as an inducement for them to work well, and to create an interest in vaccination, that a scale of promotion should be adopted; and that a

more liberal remuneration should be given. The promotion, according to his suggestion, should be triennial, and awarded for excellence of work, together with interest and attention evinced in the performance of the duties of vaccinator.

CHOLERAIC DIARRHŒA AND POLLUTED WATER.

IN a recently published American blue-book, an interesting account is given of an epidemic of choleraic diarrhœa attacking within a short period nearly a quarter of the entire population of a town, and apparently caused by polluted water. From the account given, it appears that, on June 15th, 1881, and during the few days following, a large number of persons in the town of Adams were sick with "cholera". The attacks came on suddenly, were of short duration, and were in no case fatal. The symptoms consisted in vomiting, diarrhœa, and pain in the stomach and bowels. Some had not more than one of these symptoms, while others had, in addition, coldness of the extremities, faintness, and cramps in the bowels and legs. Those first attacked sent promptly for medical advice; but, their symptoms speedily yielding to mild remedies, people generally found such assistance unnecessary, and not one in twenty was seen by a physician. The largest number of attacks occurred in the evening or night of June 15th; on the morning of the 16th, some alarm prevailed, but the mild character of the sickness being discovered, all fear subsided, and by the 19th the epidemic was over. The town possessed a population of 4,634 inhabitants, and of these no less than 1,112, or 23.9 per cent., were attacked. Adults were the chief sufferers, 831 of the total number being ranked in this class; 214 were between the ages of five and fifteen, and 67 were infants. Attention was first directed to the water-supply, which was obtained from various sources, well-water being used by some families, and spring or brook-water by a few others. The general supply, however, was obtained from a public reservoir. An analysis of this water showed it to be of great purity, and the only foreign matter that could be discovered in the reservoir was a mass of leaves and sticks. Nearly one-half of the population used this water; and, of these, 715, or 32.5 per cent., were attacked. Of those using only well, spring, or brook-waters (986), 63, or 6.3 per cent., suffered. The number using both well and reservoir water was 622. This class included many who had access to both kinds of water, and could not remember which they drank, but it is probable that nearly all drank reservoir-water. Of these, 202, or 32.4 per cent. were sick, being exactly the same proportion of those using only reservoir-water. The evidence against the reservoir-water afforded by these figures seems sufficiently strong to attract suspicion. The epidemic was limited to the districts supplied from this reservoir and in the outlying districts, 10 only of 321 persons who drank only well, spring, or brook-water were attacked; while of 37 who had been to town and drank reservoir-water, 21, or more than one-half, were sick. In all parts of the town, it was found that a much larger percentage of sickness had happened amongst persons using only reservoir-water than amongst those using well or spring water; being, on the average, 32.5 per cent. for the former, and 6.3 for the latter. As many as 41 persons stated that the water tasted or smelled badly. The symptoms were, moreover, such as are generally produced by some article of food or drink, and no evidence could be found against any such article except the water. If the water were responsible for the sickness, it must have arisen from some temporary impurity, which in a few hours passed through the pipes, and disappeared. In what this impurity consisted, it seems impossible to say, since the water, when examined, was found to be perfectly pure. Some putrescent animal substance may have caused it; but no trace of any such thing could be found. An attempt to trace the cause to the shutting off of the water on the previous day proved fruitless. It is stated that only metallic lead was used in making connections on the main-pipe, and that it was impossible for any poisonous substance to get into the pipes at that time. The figures given certainly seem to implicate the reservoir-water as the cause of the mischief; though its influence for evil cannot be regarded as by any means proved.

SCOTLAND.

THE GLASGOW FACULTY LECTURESHIP.

THE present course of Faculty Lectures on the Physiology and Pathology of Respiration, was brought to a close on the 19th instant. In his third and concluding lecture, Dr. McVail described the various means by which the respiratory movements in normal and abnormal conditions have been measured and recorded. He then directed special attention to the large respiratory reserve space possessed in health; and he next spoke of the mode in which the inspiratory force acts on the lung in distending it, and showed that the distending forces act with enormously greater power on the external air-cells than on those more deeply placed. In consequence of this, he considered that in every person there is being developed very gradually a physiological emphysema, which, under certain circumstances and conditions, may pass into the very large dilatations of pathological emphysema. Attention was next directed to the relative forces of the inspiratory and expiratory currents of air in the air-cells and air-tubes in inspiration and expiration; and the lecturer stated that, in normal circumstances, the expiratory current is stronger than the inspiratory one, owing to the expired air being greater in volume than the inspired air. To this fact was chiefly to be attributed the circumstance that mucous fluid travels always outwards from the innermost recesses of the lung, from air-cells possessing neither ciliated epithelium nor muscular fibres. In concluding, Dr. McVail spoke of the enormous expenditure of mechanical power in effecting the respiratory movements in certain abnormal conditions. In the future, he expected that the whole subject of the conservation of mechanical energy in the abnormal vital processes will receive an ever-increasing degree of attention from clinical investigators, and that the mechanical appliances necessary for this will be as familiar to students in the wards of an hospital as stethoscopes and clinical thermometers now are. A cordial vote of thanks was given by the President of the Faculty to Dr. McVail for a course of lectures which were listened to with great interest and satisfaction.

APPOINTMENT OF PHYSICIAN IN ORDINARY TO THE QUEEN IN SCOTLAND.

ANOTHER of the appointments, rendered vacant by the death of Sir Robert Christison, Bart.—that of one of the Physicians in Ordinary to the Queen in Scotland—has been filled up this week by the election of Dr. T. Grainger Stewart, Professor of Practice of Physic and of Clinical Medicine in the University of Edinburgh.

SMALL-POX IN DUNBAR.

VARICELLA has been prevalent for some time in Dunbar. Last week, however, a case of small-pox was reported to the local authority, by whom the removal of the patient to the Contagious Diseases Hospital was ordered. No other case of small-pox has as yet been reported in the district.

DR. ANGUS MACDONALD.

WE are much pleased to learn that Dr. Angus Macdonald has returned to Edinburgh in good health, and on Wednesday resumed his duties at the Royal Infirmary. The profession, and Dr. Macdonald's many friends, are to be congratulated on the happy effect that his sojourn on the Riviera has had on Dr. Macdonald's health. During his absence, his duties in the ward for the diseases of women, in the Royal Infirmary, Edinburgh, have been discharged by Dr. J. O. Attkin, senior assistant-physician.

ABERDEEN ROYAL INFIRMARY.

IN the Aberdeen Royal Infirmary, there has existed the anticipated arrangement by which the superintendent of the infirmary was also appointed to it, and has been. The committee of management have recommended certain important changes, and these were considered at a special court of the managers, held on Monday, and by it approved.

The recommendations were: 1. That the offices in question be separated; 2. That the office of superintendent should be held by a fully qualified medical man, and the office of dispenser by a legally qualified apothecary; 3. That the salary of the superintendent should be £250 *per annum* (with a house), and that the salary of the apothecary should be £75 *per annum*. The appointment of the superintendent will be by the court of managers; that of the apothecary will be by the committee of management.

PROSECUTION UNDER THE PUBLIC HEALTH ACT.

EVER since attention has been drawn to the dangers arising from even the temporary residence in a city of a large number of foreign emigrants, the authorities in Glasgow have kept a strict watch over the lodging-houses where these emigrants take up their abode. Recently, the sanitary department instituted a prosecution under the Public Health (Scotland) Act, against one of the lodging-house keepers, for contravening the regulations enacted by the local authority, and allowing overcrowding in his house. The charge was found proven, and, seeing that the keeper was aware of the removal of a small-pox patient from the house the very day before the overcrowding occurred, the judge very properly regarded the case as an aggravated one, and imposed the full penalty allowed by the statute.

GLASGOW DISTRICT LUNACY BOARD.

THE first meeting of the recently elected Glasgow District Board of Lunacy was held on the 17th instant, when the chief matter under discussion was the question of the purchase of Eastshield as a site for the proposed new asylum. Considerable difference of opinion showed itself as to the eligibility of the place recommended, and eventually the final settlement of the matter was deferred for a month, to admit of the committee inspecting other properties available for the purpose, and within easier access of the city. Seeing the urgent need there is of increased asylum accommodation for pauper patients, it is to be hoped some decision will soon be arrived at in the matter.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending May 13th, it appears that the death-rate in the eight principal towns during the week was 22.1 per 1,000 of estimated population. This rate is 1.5 above that for the corresponding week of last year, but 1.6 below that for the previous week of the present year. The lowest mortality was recorded at Leith, viz., 9.0 per 1,000; and the highest in Glasgow, viz., 25.8 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.3 per 1,000, or 0.3 above the rate for the previous week. Whooping-cough continues to be the most fatal epidemic in Glasgow, and measles in Edinburgh. Acute diseases of the chest caused 113 deaths, or 4 less than the number recorded during the previous week. The mean temperature was 47.3°, being 0.4° above that of the week immediately preceding, but 3.3° below that of the corresponding week of last year.

IRELAND.

FEVER prevails to a considerable extent in Lurgan, and last week sixteen patients were admitted into the Workhouse Hospital suffering from the disease.

THERE will be a meeting of the governors of Jervis Street Hospital on Thursday next, the 1st prox., to elect, by ballot, a surgeon in place of the late Surgeon Forrest.

BELFAST ROYAL HOSPITAL.

A QUARTERLY meeting of the Committee of Management was held last Monday, and it was reported that since the last quarterly meeting much had been done to improve the financial position of the charity. Cards containing the privileges of subscribers of one guinea and upwards have been sent to mills, factories, workshops, and other centres of industry, in the hope that by making the privileges of sub-

scribers more generally known, the subscriptions from the working classes in the town might be increased and a greater sympathy with the institution created. The Board next proceeded to elect a surgeon to the hospital in the room of Dr. H. Murney who had resigned after twenty-seven years' service, and for the vacancy created by his resignation there were two candidates, Dr. O'Neill, assistant-surgeon, and Dr. Spedding; the former being elected by 73 votes against 40. Dr. Murney will, however, not be dissociated from the institution which he has so faithfully served, as he has been appointed a consulting surgeon to the hospital.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

A LARGELY attended deputation from the College waited on the Lord-Lieutenant last Tuesday for the purpose of presenting him with an address on his arrival in Ireland. The address expressed the hope that His Excellency would shortly honour the College with his presence, so that he might witness its extension since his last visit to it. The College "expressed this hope with greater confidence in consequence of the earnest and intelligent interest manifested by His Excellency in medical education whilst Lord President of the Council." In the course of his reply, the Lord-Lieutenant, referring to the allusion in the address to his official connection, as Lord President of the Council, with the medical profession, said: "I assure you that I attach the utmost importance to the subjects which are now being considered by the Royal Commission. Their report will shortly be published, and it will be one of the serious duties of the Government to deal with their recommendations, and endeavour to settle questions which for a long time have been the subject of controversy in the medical and surgical professions, and which have material influence on the success and efficiency of your members. I need not assure you that I appreciate the eminent services of your college in the past; and I feel assured that you will continue that admirable work by which the sufferings of so many individuals are alleviated." The annual election of the council and officers of the college will be held on Monday week, June 5th. Mr. J. Kellock Barton, of the Adelaide Hospital and Carmichael College of Medicine, Vice-President of the College of Surgeons, will step into the presidential chair unopposed. But there will be a close contest for the vice-presidency, between Mr. Stokes, of the Richmond Hospital and Professor of Surgery in the College School, and Mr. W. I. Wheeler, of the City of Dublin Hospital. In addition to the nineteen outgoing members of the Council (a body of twenty-one members, including the President and Vice-President), all of whom seek re-election, there are thirteen new candidates for the office of Councillors. This, we understand, is a larger number than there has been for any former similar occasion.

PROPOSED AMALGAMATION OF THE MEDICAL SOCIETIES OF DUBLIN. In response to circulars issued to the members of the four principal medical societies of Dublin by their respective honorary secretaries, asking the members to express their views in favour of or against the proposed scheme, to which we have on previous occasions referred, 318 replies have been received in favour of amalgamation, and 27 against. Of course, these numbers do not represent separate individuals, as many persons are members of two or more of the societies. However, 127 gentlemen have signified their wish to be enrolled as Fellows of the proposed Academy of Medicine, 62 as Members, and 3 as Associates. A joint general meeting of all the societies will shortly be held, to elect a Committee to frame rules for the construction and working of the Academy.

HEALTH OF DUBLIN: QUARTERLY REPORT.

THE births registered during the quarter ended April 1st amounted to 2,667, being equal to an annual ratio of 1 in 32.6 or 30.6 per 1,000. The deaths numbered 3,048 or 35.0 in every 1,000 of the population, but omitting the deaths (65) of persons admitted into institutions from places outside the district, the rate was 34.3. The average number of deaths registered in the first quarter of the ten years 1872-81 was 2,844,

equivalent to an annual mortality of 32.7 per 1,000. Zymotic diseases caused 607 deaths or 278 above the preceding quarter, and 89, or 17 per cent. over the average for the corresponding quarter of the past ten years. The deaths from these diseases were equal to 7.0 per 1,000, and this high rate of mortality was due to the prevalence of measles, which proved fatal in 432 cases during the quarter. Fever, caused 60 deaths; scarlatina, 18; diarrhoea, 32; erysipelas, 13; and whooping-cough, 14. To phthisis, 325 deaths were ascribed; bronchitis, 537, and pneumonia, 147. Diseases of the circulatory system caused 135 deaths; diseases of the brain, 156; diseases of the urinary system, 43; while 52 deaths were accidental, and 2 suicidal.

COTTAGE HOSPITALS: TESTIMONIAL TO MR. NAPPER.

A MEETING was held at Willis's Rooms on Thursday, May 18th, for the purpose of supporting the proposal of giving a testimonial to Mr. Albert Napper of Cranleigh, the founder of Cottage Hospitals. The chair was taken by Mr. J. ERIC ERICHSEN, F.R.S., Consulting Surgeon to University College Hospital. Mr. F. B. HALLOWES of Redhill, the President of the South-Eastern Branch, gave an explanation of the proceedings which had taken place in reference to the matter. He referred to the claim made by the Rev. Canon Sapse of having been the founder of the cottage hospital at Cranleigh, and said that documentary evidence distinctly proved that Mr. Napper was the originator and founder of the cottage hospital system, while there was also good reason for believing that he was the originator of the Cranleigh Cottage Hospital. The following resolutions were unanimously passed.

1. Proposed by Dr. BOWLES (Folkestone), seconded by Mr. EDWIN SAUNDERS (President of the Metropolitan Counties Branch), and supported by Dr. COLES (Bourton-on-the-Water):

"That this meeting gives its cordial support to the proposal to present a testimonial to Mr. Albert Napper, and approves of the action taken by the Provisional Committee for carrying out that proposal."

2. Proposed by Mr. HALLOWES, and seconded by Dr. BRAXTON HICKS:

"That a General Committee be formed, to consist of Mr. J. Eric Erichsen, Dr. Braxton Hicks, Mr. E. Saunders, Dr. W. C. Coles, and the members of the present Provisional Committee, with power to add to their number."

3. Proposed by Mr. HENRY SMITH, and seconded by Mr. WYMAN: "That the General Committee meet as nearly as possible at a month from the present date, to receive a report from the Treasurer of the amount collected, to consider the question of continuing the appeal, and for any further business."

A vote of thanks to the Chairman, proposed by Mr. H. C. BURDETT, and seconded by Dr. HOLMAN (Reigate), was unanimously carried.

In acknowledging the vote, Mr. ERICHSEN said he did not think that any one who had read the correspondence respecting the claim of priority, and the documentary evidence, calmly and dispassionately, as he had done, could have any doubt that Mr. Napper was justly entitled to the distinction of having been the founder of cottage hospitals. He also spoke strongly in favour of cottage hospitals as means of affording aid in urgent and critical cases of accident, and also in cases of chronic disease unsuited for the large hospitals. They were also free from those influences of separation from friends, and other circumstances, which in the large hospitals often exercised an injurious effect on the patients. They also afforded an admirable field of instruction to practitioners and pupils. He concluded by repeating that the cottage hospital movement had his hearty sympathy, and that he would co-operate in the best way he could in the objects of the meeting.

Mr. HALLOWES, in announcing that about £200 had already been collected, expressed regret that very few of the cottage hospitals had as yet responded to the appeal made to them. He trusted that they would send subscriptions, however small they might be.

The Provisional Committee above referred to, which has now become part of the General Committee, consists of Mr. F. B. Hallowses (Redhill), Dr. C. Holman (Reigate), Dr. H. T. Lanchester (Croydon), Mr. W. A. Berridge (Redhill), Mr. T. M. Butler (Guildford), Mr. H. C. Burdett (London), Mr. C. W. Chaldecott (Dorking), Dr. W. Chessall (Horley), Mr. R. Gravely (Newick), Mr. T. Hopcroft (Dorking), Mr. A. Kelsey (Redhill), Dr. H. S. Stone (Reigate), Dr. J. Walters (Reigate). The Honorary Secretaries are Mr. H. C. Burdett (39, Gloucester Road, N.W.), Dr. Charles Parsons (2, St. James's Street, Dover), Dr. J. Herbert Stowers (23, Finsbury Circus, E.C.). The Treasurers are Dr. C. Holman (Reigate) and Mr. Malcolm Morris (63, Montagu Square, W.).

We heartily commend the project to the favourable consideration of our readers, especially those connected with the numerous cottage hospitals that have been established throughout the country; and we trust that the Committee will receive much valuable aid from them in their endeavour to recognise the important services rendered to humanity by Mr. Napper.

ADMINISTRATION OF HOSPITALS.

THE Home Secretary having been asked by the Council of the Social Science Association to receive a deputation to urge the prayer of a memorial that Her Majesty might be pleased to issue a Royal Commission to inquire into the management and administration of hospitals, Sir William Vernon Harcourt has expressed a wish to have the "desires and suggestions of the Council" conveyed to him in writing, instead of by deputation. Mr. Clifford Smith, the Secretary of the Association, has therefore forwarded to the Home Office a "Memorial," to which was attached an explanatory "Memorandum," which were adopted a few weeks ago by the Council, on the recommendation of a special committee they had previously appointed. Amongst those who served on this committee were the following: Mr. F. S. Powell (chairman), Sir Thomas F. Buxton, Bart., Mr. I. H. Buxton, Mr. H. C. Bartlett, Dr. Alfred Carpenter, Mr. William Clode, Mr. H. H. Collins, Dr. Farquharson, M.P., Dr. Grigg, Dr. Habershon, Mr. R. Hamilton, Mr. Timothy Holmes, Colonel Keatinge, V.C., Mr. C. Macnamara, Mr. F. G. P. Neison, Dr. Phené, F.S.A., Sir William Robinson, Mr. Edwin Saunders, Dr. Gilbert Smith.

The following are the terms of the memorial.

MEMORIAL OF THE COUNCIL.

To the Right Honourable Sir William Vernon Harcourt, M.P., Her Majesty's Secretary of State for the Home Department.

The Memorial of the Council of the National Association for the Promotion of Social Science, sheweth,—

1. That your memorialists have had their attention directed to the question of the administration of metropolitan hospitals, and the other institutions for the medical treatment of the sick, and have, by public discussions held under the auspices of the Association, in which those well qualified from their position and experience to join have taken part, and by other modes of inquiry, arrived at the conclusion that reforms are desirable in the existing system of administration.

2. That your memorialists have agreed upon the following resolutions: (a) That the hospital accommodation of London is imperfectly distributed, and, in many districts, altogether inadequate. (b) That the want of organisation and co-operation among the medical institutions of the metropolis materially lessens their usefulness, and leads to unnecessary expense. (c) That the present system of indiscriminate relief injuriously affects the independence and self-reliance of those who are able to meet, in some degree at least, the cost of medical and surgical treatment. (d) That the funds at present available, either for proper maintenance of nearly all the existing institutions, or for the extension of relief to districts hitherto unprovided for, are very insufficient. (e) That the hospitals are managed (some of them under Acts of Parliament on very different systems, and some of these systems can hardly be worked consistently with the advance which has been made in medical science, and with the change of opinion which is taking place regarding the administration of medical charity. (f) That it is desirable to make more use of the present made, in the education of medical students, of the materials contained in the numerous hospitals and dispensaries now administered by the Poor-law Department and the Metropolitan Asylums Board, and that there should be more intimate communication between these and the general hospitals. (g) That the operations and administration of the numerous special hospitals and dispensaries should be enquired into, in order to inform the public as to the advantages and disadvantages of such institutions. (h) That it is desirable that a uniform system should be devised and adopted of keeping the books of accounts and registers of disease in all hospitals.

3. That your memorialists, while anxious to disavow the intention of obtaining any recognition in favour of compulsory Government control or supervision of voluntary hospitals, are not less anxious of expressing their opinion that a favourable time has now come for the consideration of a full and important inquiry into the administration of the metropolitan hospitals and the other institutions for the medical treatment of the sick.

4. That your memorialists venture to accompany any this memorial with a statement of some of the reasons in which the above resolutions have been framed.

5. That your memorialists therefore humbly pray that Her Majesty may be pleased to cause a Royal Commission to be appointed to ascertain fully the needs of the

metropolis in the above respects, with a view to obtain reliable data upon which to base such reforms as may be necessary, and to make such recommendations as may appear to it desirable. And your memorialists, etc.,

May, 1882.

(Signed)

G. W. HASTINGS,

President of Council.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:

NOTICE OF QUARTERLY MEETINGS FOR 1882: ELECTION OF MEMBERS.

MEETINGS of the Committee of Council will be held on Wednesday, July 12th, and October 18th. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than 21 days before each meeting—viz., June 22nd, and September 27th, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

November 4th, 1881.

FRANCIS FOWKE, General Secretary.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—The annual dinner will take place at the St. James's Restaurant, Regent Street, on Friday, June 2nd, at 6.30 P.M.; Dr. Farquharson, M.P., Vice-President of the Branch, in the chair. Tickets 7s. 6d. each, exclusive of wine. Members of the Branch intending to dine, or to introduce friends, are requested to give notice to the Honorary Secretary as early as possible.—H. NELSON HARDY, Honorary Secretary, The Grove, Dulwich, S.E.—May 15th, 1882.

SOUTH MIDLAND BRANCH.—The annual meeting of this Branch will be held in the Committee Room of the Northampton General Hospital, on Thursday, June 1st, at 8 P.M. The President of the Branch, Mr. J. H. K. Smith, M.D., has been elected, and papers have been promised: 1. W. Newman, M.D.: Short Notes on a Case of Heart Disease. 2. H. H. K. Smith, M.D.: Notes on a Case of Syphilis. 3. J. H. K. Smith, M.D.: Cases of Syphilis. 4. W. H. Bull, Esq.: Treatment of Surgical Cases in General Practice. 5. J. H. K. Smith, M.D.: Cases of Syphilis. 6. H. H. K. Smith, M.D.: Cases of Syphilis. 7. David Thomson, M.D.: Uterine Displacements and their Treatment. 8. George Hardy, Esq.: Cases of Syphilis. 9. W. H. Bull, Esq.: Cases of Syphilis. 10. J. H. K. Smith, M.D.: Cases of Syphilis. 11. A. H. Jones, M.D.: Cases of Syphilis. 12. David Thomson, M.D.: Cases of Syphilis. 13. George Hardy, Esq.: Cases of Syphilis. 14. W. H. Bull, Esq.: Cases of Syphilis. 15. J. H. K. Smith, M.D.: Cases of Syphilis. 16. A. H. Jones, M.D.: Cases of Syphilis. 17. David Thomson, M.D.: Cases of Syphilis. 18. George Hardy, Esq.: Cases of Syphilis. 19. W. H. Bull, Esq.: Cases of Syphilis. 20. J. H. K. Smith, M.D.: Cases of Syphilis. 21. A. H. Jones, M.D.: Cases of Syphilis. 22. David Thomson, M.D.: Cases of Syphilis. 23. George Hardy, Esq.: Cases of Syphilis. 24. W. H. Bull, Esq.: Cases of Syphilis. 25. J. H. K. Smith, M.D.: Cases of Syphilis. 26. A. H. Jones, M.D.: Cases of Syphilis. 27. David Thomson, M.D.: Cases of Syphilis. 28. George Hardy, Esq.: Cases of Syphilis. 29. W. H. Bull, Esq.: Cases of Syphilis. 30. J. H. K. Smith, M.D.: Cases of Syphilis. 31. A. H. Jones, M.D.: Cases of Syphilis. 32. David Thomson, M.D.: Cases of Syphilis. 33. George Hardy, Esq.: Cases of Syphilis. 34. W. H. Bull, Esq.: Cases of Syphilis. 35. J. H. K. Smith, M.D.: Cases of Syphilis. 36. A. H. Jones, M.D.: Cases of Syphilis. 37. David Thomson, M.D.: Cases of Syphilis. 38. George Hardy, Esq.: Cases of Syphilis. 39. W. H. Bull, Esq.: Cases of Syphilis. 40. J. H. K. Smith, M.D.: Cases of Syphilis. 41. A. H. Jones, M.D.: Cases of Syphilis. 42. David Thomson, M.D.: Cases of Syphilis. 43. George Hardy, Esq.: Cases of Syphilis. 44. W. H. Bull, Esq.: Cases of Syphilis. 45. J. H. K. Smith, M.D.: Cases of Syphilis. 46. A. H. Jones, M.D.: Cases of Syphilis. 47. David Thomson, M.D.: Cases of Syphilis. 48. George Hardy, Esq.: Cases of Syphilis. 49. W. H. Bull, Esq.: Cases of Syphilis. 50. J. H. K. Smith, M.D.: Cases of Syphilis. 51. A. H. Jones, M.D.: Cases of Syphilis. 52. David Thomson, M.D.: Cases of Syphilis. 53. George Hardy, Esq.: Cases of Syphilis. 54. W. H. Bull, Esq.: Cases of Syphilis. 55. J. H. K. Smith, M.D.: Cases of Syphilis. 56. A. H. Jones, M.D.: Cases of Syphilis. 57. David Thomson, M.D.: Cases of Syphilis. 58. George Hardy, Esq.: Cases of Syphilis. 59. W. H. Bull, Esq.: Cases of Syphilis. 60. J. H. K. Smith, M.D.: Cases of Syphilis. 61. A. H. Jones, M.D.: Cases of Syphilis. 62. David Thomson, M.D.: Cases of Syphilis. 63. George Hardy, Esq.: Cases of Syphilis. 64. W. H. Bull, Esq.: Cases of Syphilis. 65. J. H. K. Smith, M.D.: Cases of Syphilis. 66. A. H. Jones, M.D.: Cases of Syphilis. 67. David Thomson, M.D.: Cases of Syphilis. 68. George Hardy, Esq.: Cases of Syphilis. 69. W. H. Bull, Esq.: Cases of Syphilis. 70. J. H. K. Smith, M.D.: Cases of Syphilis. 71. A. H. Jones, M.D.: Cases of Syphilis. 72. David Thomson, M.D.: Cases of Syphilis. 73. George Hardy, Esq.: Cases of Syphilis. 74. W. H. Bull, Esq.: Cases of Syphilis. 75. J. H. K. Smith, M.D.: Cases of Syphilis. 76. A. H. Jones, M.D.: Cases of Syphilis. 77. David Thomson, M.D.: Cases of Syphilis. 78. George Hardy, Esq.: Cases of Syphilis. 79. W. H. Bull, Esq.: Cases of Syphilis. 80. J. H. K. Smith, M.D.: Cases of Syphilis. 81. A. H. Jones, M.D.: Cases of Syphilis. 82. David Thomson, M.D.: Cases of Syphilis. 83. George Hardy, Esq.: Cases of Syphilis. 84. W. H. Bull, Esq.: Cases of Syphilis. 85. J. H. K. Smith, M.D.: Cases of Syphilis. 86. A. H. Jones, M.D.: Cases of Syphilis. 87. David Thomson, M.D.: Cases of Syphilis. 88. George Hardy, Esq.: Cases of Syphilis. 89. W. H. Bull, Esq.: Cases of Syphilis. 90. J. H. K. Smith, M.D.: Cases of Syphilis. 91. A. H. Jones, M.D.: Cases of Syphilis. 92. David Thomson, M.D.: Cases of Syphilis. 93. George Hardy, Esq.: Cases of Syphilis. 94. W. H. Bull, Esq.: Cases of Syphilis. 95. J. H. K. Smith, M.D.: Cases of Syphilis. 96. A. H. Jones, M.D.: Cases of Syphilis. 97. David Thomson, M.D.: Cases of Syphilis. 98. George Hardy, Esq.: Cases of Syphilis. 99. W. H. Bull, Esq.: Cases of Syphilis. 100. J. H. K. Smith, M.D.: Cases of Syphilis. 101. A. H. Jones, M.D.: Cases of Syphilis. 102. David Thomson, M.D.: Cases of Syphilis. 103. George Hardy, Esq.: Cases of Syphilis. 104. W. H. Bull, Esq.: Cases of Syphilis. 105. J. H. K. Smith, M.D.: Cases of Syphilis. 106. A. H. Jones, M.D.: Cases of Syphilis. 107. David Thomson, M.D.: Cases of Syphilis. 108. George Hardy, Esq.: Cases of Syphilis. 109. W. H. Bull, Esq.: Cases of Syphilis. 110. J. H. K. Smith, M.D.: Cases of Syphilis. 111. A. H. Jones, M.D.: Cases of Syphilis. 112. David Thomson, M.D.: Cases of Syphilis. 113. George Hardy, Esq.: Cases of Syphilis. 114. W. H. Bull, Esq.: Cases of Syphilis. 115. J. H. K. Smith, M.D.: Cases of Syphilis. 116. A. H. Jones, M.D.: Cases of Syphilis. 117. David Thomson, M.D.: Cases of Syphilis. 118. George Hardy, Esq.: Cases of Syphilis. 119. W. H. Bull, Esq.: Cases of Syphilis. 120. J. H. K. Smith, M.D.: Cases of Syphilis. 121. A. H. Jones, M.D.: Cases of Syphilis. 122. David Thomson, M.D.: Cases of Syphilis. 123. George Hardy, Esq.: Cases of Syphilis. 124. W. H. Bull, Esq.: Cases of Syphilis. 125. J. H. K. Smith, M.D.: Cases of Syphilis. 126. A. H. Jones, M.D.: Cases of Syphilis. 127. David Thomson, M.D.: Cases of Syphilis. 128. George Hardy, Esq.: Cases of Syphilis. 129. W. H. Bull, Esq.: Cases of Syphilis. 130. J. H. K. Smith, M.D.: Cases of Syphilis. 131. A. H. Jones, M.D.: Cases of Syphilis. 132. David Thomson, M.D.: Cases of Syphilis. 133. George Hardy, Esq.: Cases of Syphilis. 134. W. H. Bull, Esq.: Cases of Syphilis. 135. J. H. K. Smith, M.D.: Cases of Syphilis. 136. A. H. Jones, M.D.: Cases of Syphilis. 137. David Thomson, M.D.: Cases of Syphilis. 138. George Hardy, Esq.: Cases of Syphilis. 139. W. H. Bull, Esq.: Cases of Syphilis. 140. J. H. K. Smith, M.D.: Cases of Syphilis. 141. A. H. Jones, M.D.: Cases of Syphilis. 142. David Thomson, M.D.: Cases of Syphilis. 143. George Hardy, Esq.: Cases of Syphilis. 144. W. H. Bull, Esq.: Cases of Syphilis. 145. J. H. K. Smith, M.D.: Cases of Syphilis. 146. A. H. Jones, M.D.: Cases of Syphilis. 147. David Thomson, M.D.: Cases of Syphilis. 148. George Hardy, Esq.: Cases of Syphilis. 149. W. H. Bull, Esq.: Cases of Syphilis. 150. J. H. K. Smith, M.D.: Cases of Syphilis. 151. A. H. Jones, M.D.: Cases of Syphilis. 152. David Thomson, M.D.: Cases of Syphilis. 153. George Hardy, Esq.: Cases of Syphilis. 154. W. H. Bull, Esq.: Cases of Syphilis. 155. J. H. K. Smith, M.D.: Cases of Syphilis. 156. A. H. Jones, M.D.: Cases of Syphilis. 157. David Thomson, M.D.: Cases of Syphilis. 158. George Hardy, Esq.: Cases of Syphilis. 159. W. H. Bull, Esq.: Cases of Syphilis. 160. J. H. K. Smith, M.D.: Cases of Syphilis. 161. A. H. Jones, M.D.: Cases of Syphilis. 162. David Thomson, M.D.: Cases of Syphilis. 163. George Hardy, Esq.: Cases of Syphilis. 164. W. H. Bull, Esq.: Cases of Syphilis. 165. J. H. K. Smith, M.D.: Cases of Syphilis. 166. A. H. Jones, M.D.: Cases of Syphilis. 167. David Thomson, M.D.: Cases of Syphilis. 168. George Hardy, Esq.: Cases of Syphilis. 169. W. H. Bull, Esq.: Cases of Syphilis. 170. J. H. K. Smith, M.D.: Cases of Syphilis. 171. A. H. Jones, M.D.: Cases of Syphilis. 172. David Thomson, M.D.: Cases of Syphilis. 173. George Hardy, Esq.: Cases of Syphilis. 174. W. H. Bull, Esq.: Cases of Syphilis. 175. J. H. K. Smith, M.D.: Cases of Syphilis. 176. A. H. Jones, M.D.: Cases of Syphilis. 177. David Thomson, M.D.: Cases of Syphilis. 178. George Hardy, Esq.: Cases of Syphilis. 179. W. H. Bull, Esq.: Cases of Syphilis. 180. J. H. K. Smith, M.D.: Cases of Syphilis. 181. A. H. Jones, M.D.: Cases of Syphilis. 182. David Thomson, M.D.: Cases of Syphilis. 183. George Hardy, Esq.: Cases of Syphilis. 184. W. H. Bull, Esq.: Cases of Syphilis. 185. J. H. K. Smith, M.D.: Cases of Syphilis. 186. A. H. Jones, M.D.: Cases of Syphilis. 187. David Thomson, M.D.: Cases of Syphilis. 188. George Hardy, Esq.: Cases of Syphilis. 189. W. H. Bull, Esq.: Cases of Syphilis. 190. J. H. K. Smith, M.D.: Cases of Syphilis. 191. A. H. Jones, M.D.: Cases of Syphilis. 192. David Thomson, M.D.: Cases of Syphilis. 193. George Hardy, Esq.: Cases of Syphilis. 194. W. H. Bull, Esq.: Cases of Syphilis. 195. J. H. K. Smith, M.D.: Cases of Syphilis. 196. A. H. Jones, M.D.: Cases of Syphilis. 197. David Thomson, M.D.: Cases of Syphilis. 198. George Hardy, Esq.: Cases of Syphilis. 199. W. H. Bull, Esq.: Cases of Syphilis. 200. J. H. K. Smith, M.D.: Cases of Syphilis. 201. A. H. Jones, M.D.: Cases of Syphilis. 202. David Thomson, M.D.: Cases of Syphilis. 203. George Hardy, Esq.: Cases of Syphilis. 204. W. H. Bull, Esq.: Cases of Syphilis. 205. J. H. K. Smith, M.D.: Cases of Syphilis. 206. A. H. Jones, M.D.: Cases of Syphilis. 207. David Thomson, M.D.: Cases of Syphilis. 208. George Hardy, Esq.: Cases of Syphilis. 209. W. H. Bull, Esq.: Cases of Syphilis. 210. J. H. K. Smith, M.D.: Cases of Syphilis. 211. A. H. Jones, M.D.: Cases of Syphilis. 212. David Thomson, M.D.: Cases of Syphilis. 213. George Hardy, Esq.: Cases of Syphilis. 214. W. H. Bull, Esq.: Cases of Syphilis. 215. J. H. K. Smith, M.D.: Cases of Syphilis. 216. A. H. Jones, M.D.: Cases of Syphilis. 217. David Thomson, M.D.: Cases of Syphilis. 218. George Hardy, Esq.: Cases of Syphilis. 219. W. H. Bull, Esq.: Cases of Syphilis. 220. J. H. K. Smith, M.D.: Cases of Syphilis. 221. A. H. Jones, M.D.: Cases of Syphilis. 222. David Thomson, M.D.: Cases of Syphilis. 223. George Hardy, Esq.: Cases of Syphilis. 224. W. H. Bull, Esq.: Cases of Syphilis. 225. J. H. K. Smith, M.D.: Cases of Syphilis. 226. A. H. Jones, M.D.: Cases of Syphilis. 227. David Thomson, M.D.: Cases of Syphilis. 228. George Hardy, Esq.: Cases of Syphilis. 229. W. H. Bull, Esq.: Cases of Syphilis. 230. J. H. K. Smith, M.D.: Cases of Syphilis. 231. A. H. Jones, M.D.: Cases of Syphilis. 232. David Thomson, M.D.: Cases of Syphilis. 233. George Hardy, Esq.: Cases of Syphilis. 234. W. H. Bull, Esq.: Cases of Syphilis. 235. J. H. K. Smith, M.D.: Cases of Syphilis. 236. A. H. Jones, M.D.: Cases of Syphilis. 237. David Thomson, M.D.: Cases of Syphilis. 238. George Hardy, Esq.: Cases of Syphilis. 239. W. H. Bull, Esq.: Cases of Syphilis. 240. J. H. K. Smith, M.D.: Cases of Syphilis. 241. A. H. Jones, M.D.: Cases of Syphilis. 242. David Thomson, M.D.: Cases of Syphilis. 243. George Hardy, Esq.: Cases of Syphilis. 244. W. H. Bull, Esq.: Cases of Syphilis. 245. J. H. K. Smith, M.D.: Cases of Syphilis. 246. A. H. Jones, M.D.: Cases of Syphilis. 247. David Thomson, M.D.: Cases of Syphilis. 248. George Hardy, Esq.: Cases of Syphilis. 249. W. H. Bull, Esq.: Cases of Syphilis. 250. J. H. K. Smith, M.D.: Cases of Syphilis. 251. A. H. Jones, M.D.: Cases of Syphilis. 252. David Thomson, M.D.: Cases of Syphilis. 253. George Hardy, Esq.: Cases of Syphilis. 254. W. H. Bull, Esq.: Cases of Syphilis. 255. J. H. K. Smith, M.D.: Cases of Syphilis. 256. A. H. Jones, M.D.: Cases of Syphilis. 257. David Thomson, M.D.: Cases of Syphilis. 258. George Hardy, Esq.: Cases of Syphilis. 259. W. H. Bull, Esq.: Cases of Syphilis. 260. J. H. K. Smith, M.D.: Cases of Syphilis. 261. A. H. Jones, M.D.: Cases of Syphilis. 262. David Thomson, M.D.: Cases of Syphilis. 263. George Hardy, Esq.: Cases of Syphilis. 264. W. H. Bull, Esq.: Cases of Syphilis. 265. J. H. K. Smith, M.D.: Cases of Syphilis. 266. A. H. Jones, M.D.: Cases of Syphilis. 267. David Thomson, M.D.: Cases of Syphilis. 268. George Hardy, Esq.: Cases of Syphilis. 269. W. H. Bull, Esq.: Cases of Syphilis. 270. J. H. K. Smith, M.D.: Cases of Syphilis. 271. A. H. Jones, M.D.: Cases of Syphilis. 272. David Thomson, M.D.: Cases of Syphilis. 273. George Hardy, Esq.: Cases of Syphilis. 274. W. H. Bull, Esq.: Cases of Syphilis. 275. J. H. K. Smith, M.D.: Cases of Syphilis. 276. A. H. Jones, M.D.: Cases of Syphilis. 277. David Thomson, M.D.: Cases of Syphilis. 278. George Hardy, Esq.: Cases of Syphilis. 279. W. H. Bull, Esq.: Cases of Syphilis. 280. J. H. K. Smith, M.D.: Cases of Syphilis. 281. A. H. Jones, M.D.: Cases of Syphilis. 282. David Thomson, M.D.: Cases of Syphilis. 283. George Hardy, Esq.: Cases of Syphilis. 284. W. H. Bull, Esq.: Cases of Syphilis. 285. J. H. K. Smith, M.D.: Cases of Syphilis. 286. A. H. Jones, M.D.: Cases of Syphilis. 287. David Thomson, M.D.: Cases of Syphilis. 288. George Hardy, Esq.: Cases of Syphilis. 289. W. H. Bull, Esq.: Cases of Syphilis. 290. J. H. K. Smith, M.D.: Cases of Syphilis. 291. A. H. Jones, M.D.: Cases of Syphilis. 292. David Thomson, M.D.: Cases of Syphilis. 293. George Hardy, Esq.: Cases of Syphilis. 294. W. H. Bull, Esq.: Cases of Syphilis. 295. J. H. K. Smith, M.D.: Cases of Syphilis. 296. A. H. Jones, M.D.: Cases of Syphilis. 297. David Thomson, M.D.: Cases of Syphilis. 298. George Hardy, Esq.: Cases of Syphilis. 299. W. H. Bull, Esq.: Cases of Syphilis. 300. J. H. K. Smith, M.D.: Cases of Syphilis. 301. A. H. Jones, M.D.: Cases of Syphilis. 302. David Thomson, M.D.: Cases of Syphilis. 303. George Hardy, Esq.: Cases of Syphilis. 304. W. H. Bull, Esq.: Cases of Syphilis. 305. J. H. K. Smith, M.D.: Cases of Syphilis. 306. A. H. Jones, M.D.: Cases of Syphilis. 307. David Thomson, M.D.: Cases of Syphilis. 308. George Hardy, Esq.: Cases of Syphilis. 309. W. H. Bull, Esq.: Cases of Syphilis. 310. J. H. K. Smith, M.D.: Cases of Syphilis. 311. A. H. Jones, M.D.: Cases of Syphilis. 312. David Thomson, M.D.: Cases of Syphilis. 313. George Hardy, Esq.: Cases of Syphilis. 314. W. H. Bull, Esq.: Cases of Syphilis. 315. J. H. K. Smith, M.D.: Cases of Syphilis. 316. A. H. Jones, M.D.: Cases of Syphilis. 317. David Thomson, M.D.: Cases of Syphilis. 318. George Hardy, Esq.: Cases of Syphilis. 319. W. H. Bull, Esq.: Cases of Syphilis. 320. J. H. K. Smith, M.D.: Cases of Syphilis. 321. A. H. Jones, M.D.: Cases of Syphilis. 322. David Thomson, M.D.: Cases of Syphilis. 323. George Hardy, Esq.: Cases of Syphilis. 324. W. H. Bull, Esq.: Cases of Syphilis. 325. J. H. K. Smith, M.D.: Cases of Syphilis. 326. A. H. Jones, M.D.: Cases of Syphilis. 327. David Thomson, M.D.: Cases of Syphilis. 328. George Hardy, Esq.: Cases of Syphilis. 329. W. H. Bull, Esq.: Cases of Syphilis. 330. J. H. K. Smith, M.D.: Cases of Syphilis. 331. A. H. Jones, M.D.: Cases of Syphilis. 332. David Thomson, M.D.: Cases of Syphilis. 333. George Hardy, Esq.: Cases of Syphilis. 334. W. H. Bull, Esq.: Cases of Syphilis. 335. J. H. K. Smith, M.D.: Cases of Syphilis. 336. A. H. Jones, M.D.: Cases of Syphilis. 337. David Thomson, M.D.: Cases of Syphilis. 338. George Hardy, Esq.: Cases of Syphilis. 339. W. H. Bull, Esq.: Cases of Syphilis. 340. J. H. K. Smith, M.D.: Cases of Syphilis. 341. A. H. Jones, M.D.: Cases of Syphilis. 342. David Thomson, M.D.: Cases of Syphilis. 343. George Hardy, Esq.: Cases of Syphilis. 344. W. H. Bull, Esq.: Cases of Syphilis. 345. J. H. K. Smith, M.D.: Cases of Syphilis. 346. A. H. Jones, M.D.: Cases of Syphilis. 347. David Thomson, M.D.: Cases of Syphilis. 348. George Hardy, Esq.: Cases of Syphilis. 349. W. H. Bull, Esq.: Cases of Syphilis. 350. J. H. K. Smith, M.D.: Cases of Syphilis. 351. A. H. Jones, M.D.: Cases of Syphilis. 352. David Thomson, M.D.: Cases of Syphilis. 353. George Hardy, Esq.: Cases of Syphilis. 354. W. H. Bull, Esq.: Cases of Syphilis. 355. J. H. K. Smith, M.D.: Cases of Syphilis. 356. A. H. Jones, M.D.: Cases of Syphilis. 357. David Thomson, M.D.: Cases of Syphilis. 358. George Hardy, Esq.: Cases of Syphilis. 359. W. H. Bull, Esq.: Cases of Syphilis. 360. J. H. K. Smith, M.D.: Cases of Syphilis. 361. A. H. Jones, M.D.: Cases of Syphilis. 362. David Thomson, M.D.: Cases of Syphilis. 363. George Hardy, Esq.: Cases of Syphilis. 364. W. H. Bull, Esq.: Cases of Syphilis. 365. J. H. K. Smith, M.D.: Cases of Syphilis. 366. A. H. Jones, M.D.: Cases of Syphilis. 367. David Thomson, M.D.: Cases of Syphilis. 368. George Hardy, Esq.: Cases of Syphilis. 369. W. H. Bull, Esq.: Cases of Syphilis. 370. J. H. K. Smith, M.D.: Cases of Syphilis. 371. A. H. Jones, M.D.: Cases of Syphilis. 372. David Thomson, M.D.: Cases of Syphilis. 373. George Hardy, Esq.: Cases of Syphilis. 374. W. H. Bull, Esq.: Cases of Syphilis. 375. J. H. K. Smith, M.D.: Cases of Syphilis. 376. A. H. Jones, M.D.: Cases of Syphilis. 377. David Thomson, M.D.: Cases of Syphilis. 378. George Hardy, Esq.: Cases of Syphilis. 379. W. H. Bull, Esq.: Cases of Syphilis. 380. J. H. K. Smith, M.D.: Cases of Syphilis. 381. A. H. Jones, M.D.: Cases of Syphilis. 382. David Thomson, M.D.: Cases of Syphilis. 383. George Hardy, Esq.: Cases of Syphilis. 384. W. H. Bull, Esq.: Cases of Syphilis. 385. J. H. K. Smith, M.D.: Cases of Syphilis. 386. A. H. Jones, M.D.: Cases of Syphilis. 387. David Thomson, M.D.: Cases of Syphilis. 388. George Hardy, Esq.: Cases of Syphilis. 389. W. H. Bull, Esq.: Cases of Syphilis. 390. J. H. K. Smith, M.D.: Cases of Syphilis. 391. A. H. Jones, M.D.: Cases of Syphilis. 392. David Thomson, M.D.: Cases of Syphilis. 393. George Hardy, Esq.: Cases of Syphilis. 394. W. H. Bull, Esq.: Cases of Syphilis. 395. J. H. K. Smith, M.D.: Cases of Syphilis. 396. A. H. Jones, M.D.: Cases of Syphilis. 397. David Thomson, M.D.: Cases of Syphilis. 398. George Hardy, Esq.: Cases of Syphilis. 399. W. H. Bull, Esq.: Cases of Syphilis. 400. J. H. K. Smith, M.D.: Cases of Syphilis. 401. A. H. Jones, M.D.: Cases of Syphilis. 402. David Thomson, M.D.: Cases of Syphilis. 403. George Hardy, Esq.: Cases of Syphilis. 404. W. H. Bull, Esq.: Cases of Syphilis. 405. J. H. K. Smith, M.D.: Cases of Syphilis. 406. A. H. Jones, M.D.: Cases of Syphilis. 407. David Thomson, M.D.: Cases of Syphilis. 408. George Hardy, Esq.: Cases of Syphilis. 409. W. H. Bull, Esq.: Cases of Syphilis. 410. J. H. K. Smith, M.D.: Cases of Syphilis. 411. A. H. Jones, M.D.: Cases of Syphilis. 412. David Thomson, M.D.: Cases of Syphilis. 413. George Hardy, Esq.: Cases of Syphilis. 414. W. H. Bull, Esq.: Cases of Syphilis. 415. J. H. K. Smith, M.D.: Cases of Syphilis. 416. A. H. Jones, M.D.: Cases of Syphilis. 417. David Thomson, M.D.: Cases of Syphilis. 418. George Hardy, Esq.: Cases of Syphilis. 419. W. H. Bull, Esq.: Cases of Syphilis. 420. J. H. K. Smith, M.D.: Cases of Syphilis. 421. A. H. Jones, M.D.: Cases of Syphilis. 422. David Thomson, M.D.: Cases of Syphilis. 423. George Hardy, Esq.: Cases of Syphilis. 424. W. H. Bull, Esq.: Cases of Syphilis. 425. J. H. K. Smith, M.D.: Cases of Syphilis. 426. A. H. Jones, M.D.: Cases of Syphilis. 427. David Thomson, M.D.: Cases of Syphilis. 428. George Hardy, Esq.: Cases of Syphilis. 429. W. H. Bull, Esq.: Cases of Syphilis. 430. J. H. K. Smith, M.D.: Cases of Syphilis. 431. A. H. Jones, M.D.: Cases of Syphilis. 432. David Thomson, M.D.: Cases of Syphilis. 433. George Hardy, Esq.: Cases of Syphilis. 434. W. H. Bull, Esq.: Cases of Syphilis. 435. J. H. K. Smith, M.D.: Cases of Syphilis. 436. A. H. Jones, M.D.: Cases of Syphilis. 437. David Thomson, M.D.: Cases of Syphilis. 438. George Hardy, Esq.: Cases of Syphilis. 439. W. H. Bull, Esq.: Cases of Syphilis. 440. J. H. K. Smith, M.D.: Cases of Syphilis. 441. A. H. Jones, M.D.: Cases of Syphilis. 442. David Thomson, M.D.: Cases of Syphilis. 443. George Hardy, Esq.: Cases of Syphilis. 444. W. H. Bull, Esq.: Cases of Syphilis. 445. J. H. K. Smith, M.D.: Cases of Syphilis. 446. A. H. Jones, M.D.: Cases of Syphilis. 447. David Thomson, M.D.: Cases of Syphilis. 448. George Hardy, Esq.: Cases of Syphilis. 449. W. H. Bull, Esq.: Cases of Syphilis. 450. J. H. K. Smith, M.D.: Cases of Syphilis. 451. A. H. Jones, M.D.: Cases of Syphilis. 452. David Thomson, M.D.: Cases of Syphilis. 453. George Hardy, Esq.: Cases of Syphilis. 454. W. H. Bull, Esq.: Cases of Syphilis. 455. J. H. K. Smith, M.D.: Cases of Syphilis. 456. A. H. Jones, M.D.: Cases of Syphilis. 457. David Thomson, M.D.: Cases of Syphilis. 458. George Hardy, Esq.: Cases of Syphilis. 459. W. H. Bull, Esq.: Cases of Syphilis. 460. J. H. K. Smith, M.D.: Cases of Syphilis. 461. A. H. Jones, M.D.: Cases of Syphilis. 462. David Thomson, M.D.: Cases of Syphilis. 463. George Hardy, Esq.: Cases of Syphilis. 464. W. H. Bull, Esq.: Cases of Syphilis. 465. J. H. K. Smith, M.D.: Cases of Syphilis. 466. A. H. Jones, M.D.: Cases of Syphilis. 467. David Thomson, M.D.: Cases of Syphilis. 468. George Hardy, Esq.: Cases of Syphilis. 469. W. H. Bull, Esq.: Cases of Syphilis. 470. J. H. K. Smith, M.D.: Cases of Syphilis. 471. A. H. Jones, M.D.: Cases of Syphilis. 472. David Thomson, M.D.: Cases of Syphilis. 473. George Hardy, Esq.: Cases of Syphilis. 474. W. H. Bull, Esq.: Cases of Syphilis. 475. J. H. K. Smith, M.D.: Cases of Syphilis. 476. A. H. Jones, M.D.: Cases of Syphilis. 477. David Thomson, M.D.: Cases of Syphilis. 478. George Hardy, Esq.: Cases of Syphilis. 479. W. H. Bull, Esq.: Cases of Syphilis. 480. J. H. K. Smith, M.D.: Cases of Syphilis. 481. A. H. Jones, M.D.: Cases of Syphilis. 482. David Thomson, M.D.: Cases of Syphilis. 483. George Hardy, Esq.: Cases of Syphilis. 484. W. H. Bull, Esq.: Cases of Syphilis. 485. J. H. K. Smith, M.D.: Cases of Syphilis. 486. A. H. Jones, M.D.: Cases of Syphilis. 487. David Thomson, M.D.: Cases of Syphilis. 488. George Hardy, Esq.: Cases of Syphilis. 489. W. H. Bull, Esq.: Cases of Syphilis. 490. J. H. K. Smith, M.D.: Cases of Syphilis. 491. A. H. Jones, M.D.: Cases of Syphilis. 492. David Thomson, M.D.: Cases of Syphilis. 493. George Hardy, Esq.: Cases of Syphilis. 494. W. H. Bull, Esq.: Cases of Syphilis. 495. J. H. K. Smith, M.D.: Cases of Syphilis. 496. A. H. Jones, M.D.: Cases of Syphilis. 497. David Thomson, M.D.: Cases of Syphilis. 498. George Hardy, Esq.: Cases of Syphilis. 499. W. H. Bull, Esq.: Cases of Syphilis. 500. J. H. K. Smith, M.D.: Cases of Syphilis. 501. A. H. Jones, M.D.: Cases of Syphilis. 502. David Thomson, M.D.: Cases of Syphilis. 503. George Hardy, Esq.: Cases of Syphilis. 504. W. H. Bull, Esq.: Cases of Syphilis. 505. J. H. K. Smith, M.D.: Cases of Syphilis. 506. A. H. Jones, M.D.: Cases of Syphilis. 507. David Thomson, M.D.: Cases of Syphilis. 508. George Hardy, Esq.: Cases of Syphilis. 509. W. H. Bull, Esq.: Cases of Syphilis. 510. J. H. K. Smith, M.D.: Cases of Syphilis. 511. A. H. Jones, M.D.: Cases of Syphilis. 512. David Thomson, M.D.: Cases of Syphilis. 513. George Hardy, Esq.: Cases of Syphilis. 514. W. H. Bull, Esq.: Cases of Syphilis. 515. J. H. K. Smith, M.D.: Cases of Syphilis. 516. A. H. Jones, M.D.: Cases of Syphilis. 517. David Thomson, M.D.: Cases of Syphilis. 518. George Hardy, Esq.: Cases of Syphilis. 519. W. H. Bull, Esq.: Cases of Syphilis. 520. J. H. K. Smith

2. Dr. Hunt read a paper on the Diagnosis and Treatment of Pleuritic Effusions in Children.

3. Dr. Stephen Mackenzie read a paper on Vertigo, especially dealing with Auditory Vertigo or Menière's Disease.

Collective Investigation.—The members present agreed to form a sub-committee to carry out the objects of the Collective Investigation Committee, which were explained by the Chairman.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE annual meeting of the above District was held at the County Hospital, Canterbury, on May 4th; J. E. SEaton, Esq., in the chair.

The Accounts for the year were audited and passed.

Secretary.—A vote of thanks was passed to the Honorary District Secretary for his past services, and he was re-elected.

Meetings.—A conjoint meeting with the West Kent District was arranged for September at Folkestone, and Dr. Bowles was elected President.—A meeting at Deal was also arranged for March 1883.

Communications.—The following communications were made.

1. Mr. Bishop showed a large Sarcomatous Tumour, weighing 15 lbs., that he had removed from the occipital region of a woman aged 27. It recurred in twenty-one days, and appeared to start from the parotid region.

2. Dr. Gogarty read a case of Suppression of Urine, that lasted five days; cold was the exciting cause; there were no convulsions nor coma; at the necropsy, the left kidney was found to be absent, and there was blood-infiltration into the fat around the right kidney.

3. Dr. Gogarty also showed two perfectly Sacculated Kidneys from a boy aged 18, who had a calculus in each, and pain over his muscles on pressure. The urine contained one-eighth of albumen, and the quantity varied from forty-six to eleven ounces in the twenty-four hours.

Dinner.—The members afterwards dined together at the Fleur de Lis Hotel.

LANCASHIRE AND CHESHIRE BRANCH.

AN ordinary meeting of this Branch was held at Blackpool, on Wednesday, May 17th, 1882; Dr. R. C. BROWN, of Preston, presiding. About eighty or ninety members were present.

Communications.—The following communications were made.

1. Mr. Rushton Parker (Liverpool) read a paper on the Materials of Blood-poisoning, and showed, with Dr. A. Barron's assistance, a number of microscopic preparations of septic organisms.

2. Mr. W. Whitehead (Manchester) showed a patient who had the Tongue removed for Epithelioma, and on whom tracheotomy required to be performed, and afterwards gastrostomy; the mode of feeding him with milk was shown.

3. Mr. Whitehead also showed casts and photographs of a case of Endemic Elephantiasis of the Leg, which had been successfully treated.

4. Dr. Walters (Manchester) read a case of Hystero-Epilepsy which had been cured by the operation of excising both ovaries.

5. Dr. Rich (Liverpool) gave an account of the symptoms in a number of cases of Poisoning from Cray-fish which had occurred under his care in one of the mail steamers.

6. Mr. Farrar (Morecambe) read notes of a case of Poisoning by Mussels.

Luncheon.—Dr. Leslie Jones of Blackpool entertained the members present at lunch at Bailey's Hotel before the meeting.

Dinner.—Over seventy members were present at the dinner; the Mayor of Blackpool and the Vicar attending as guests.

HOSPITAL SUNDAY FUND.—A meeting of the council of the Hospital Sunday Fund was held this week at the Mansion-house. The Lord Mayor presided, and there were present Bishop Beckles, Mr. Samuel Morley, M.P., Mr. R. F. Martin, M.P., Mr. Alderman M'Arthur, M.P., Sir J. Risdon Bennett, the Rev. Canon Nisbet, Mr. Thomson Hankey, and others. The Lord Mayor, in expressing his cordial co-operation with the council, intimated his intention of attending with the Sheriffs and the Corporation in State at St. Paul's Cathedral and Westminster Abbey on Hospital Sunday, June 11th. The Rev. S. Hansard thought that those who had received treatment and who were constantly making use of the medical charities of London should, as far possible, be made alive to their duties to contribute on Hospital Sunday to the full extent of their means. The council then proceeded to make the necessary arrangements for the collection on June 11th. Mr. S. Morley, M.P., in proposing a vote of thanks to the Lord Mayor for presiding, conveyed to him the congratulations of the council on the honour conferred on him by Her Majesty, and, the Lord Mayor having replied, the meeting adjourned.

CORRESPONDENCE.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

SIR,—As a very large number of the Fellows of the Irish College of Surgeons are members of the Association, I take the liberty of asking them, through your columns, to consider what would be the wisest course to pursue at the approaching elections on June 5th for Vice-President and Council.

If, at the beginning of the College year, two candidates should be nominated for the office of Vice-President, it is the usual and, I believe, the proper course for the candidate of junior professional standing, even though he might make the contest a close one, to retire in favour of his senior. By doing so, he not only saves the College from an undesirable contest, but he places his brethren under a kind of obligation which generally redounded in his own favour on a future occasion. Unhappily, at present a different feeling prevails.

One candidate, a very junior Fellow—although he is no doubt a very promising man, but, as yet, is comparatively little known in the surgical world. Relying, however, upon great electioneering energy, he has point-blank refused to retire. Now, the caucuses, cliques and stratagems of a contest are bad enough, but, when a distribution of first-class return-tickets becomes a potent element of warfare, we must feel the dignity of our College is in danger. The legality of the election, carried on under this modified form of bribery, may yet be questioned, but of its gross impropriety there can be little doubt.

For the Council, it appears, there are as many new candidates up as there are old members of Council who seek re-election. The Council, as at present constituted, is a most heterogeneous body. It may be divided into many cliques—such as schemers (*i.e.*, those who support the new educational scheme), anti-schemers, College of Surgeons' schoolmen, private schoolmen, and non-schoolmen. These cliques all appear to be working against each other, and it is really impossible for an outsider to know what to do or what section to support.

Among the new candidates are Fellows who have very recently passed, and, it seems, they entirely forget what a Council of the College should be composed of. At one time it was considered—and, I think, very properly so—that the office of councillor was reserved for representative men, or the seniors of the profession who have justly won the position by a long career of honourable and genuine work.

Matters are entirely changed now in this respect, for the most junior of Fellows of a few months' standing aspire to the position; and hence the scramble for places, in fact turning the whole election into a burlesque.

This election, I feel, will have one good effect: it will teach young men that they must win their spurs before they can wear them. And when the poll is declared, these juveniles will find that few will be got to appreciate their latent ability; and, if they secure their own vote on this occasion, it will be as much as they can reasonably expect.—I am, sir, etc.,

"A PERPLEXED IRISH FELLOW."

A STUDENT'S GRIEVANCE.

SIR,—Having noticed in your issue of last week that £300 balance money has been handed by the Executive Committee of the International Medical Congress to Dr. S. Wilks, as Treasurer of the Association for the Advancement of Medicine by Research, I would ask whether it is generally known that copies of the *Transactions* have not been supplied to the "student members" of the Congress. There was considerable talk at the time about the liberality of allowing students to become members on payment of half-a-guinea. In addition to the fact that we participated in few of the amusements provided for the members, we are now (for the first time) informed that the *Transactions* will be supplied to us only on receipt of the published price. Would not the liberality have been more apparent had we been allowed to pay the full fee, and participate in the most tangible benefit of the meeting?—I am, sir, yours obediently, A STUDENT MEMBER.

SIMPLE AND ASEPTIC OVARIOTOMY.

SIR,—Allow me to make a few remarks on your article on simple and aseptic ovariectomy in last week's JOURNAL. The writer thereof speaks of the apparently contradictory results of experience in Switzerland and in Edinburgh. The reverse is the case: the experience is the same. Professor Kocher has given up carbolic spray in private practice as injurious in the conditions where it is not indispensable. I have done the same. I have found it injurious, and have given it up, though not in ordinary surgical work. The long list of success I once had is apparently attributed by your correspondent to the use of the

carbolic spray, instead of, as I do in a great measure, to the frequent use of the drainage-tube. After this long run of success there came a weary list of bad results—also all done with the utmost care under carbolic spray and without drainage; then again followed a long list of successful cases without any spray and with drainage. When the run of bad cases happened to me, the managers of the Royal Infirmary did not do as the House Committee of the Samaritan Hospital seem to have done under similar circumstances. They did not call my attention to the necessity of draining more, nor did they tell me to throw my carbolic spray producer out of the window. They allowed me to do that for myself; and if I care to take it up again I know well that they will not interfere with me; they know their own business; they trust me that I know mine. Save us from the meddling of a London House Committee in surgical matters.

Lastly, I protest against the way in which the statistics of a single year in any hospital are made use of to try to prove anything, to say nothing of the unfairness and unkindness of drawing attention to the surgeon who has had the misfortune to have a run of bad cases. With all our care and anxiety to do the very uttermost for those who trust their lives in our hands, a bad succession of cases will come to all of us who practise surgery, so long as the general conditions of patients are what they are, and so long as all are liable to accidental and disturbing influences. If I honestly think that carbolic acid has killed some of my patients, and if I get as good results without it, and better results than any one has yet got with it, others can do so equally well. Then, for God's sake, let us alone; let each one work as he thinks best, and a little time will clear up all our doubts. Certainly the spirit in which the article is written will not convince us, neither will any House Committee.—I am yours obediently,

T. KEITH.

2, North Charlotte Street, Edinburgh, May 22nd, 1882.

MERCURY IN SYMPATHETIC OPHTHALMIA.

SIR,—I observe from your report, on the 20th instant, of the recent meeting of the Ophthalmological Society, that the discussion, following the reading of a short paper of mine on a case of sympathetic ophthalmia, occurring after enucleation of an eyeball for injury (foreign body), and a somewhat similar case by Mr. Frost, turned in some measure on the use of mercury in this disease. It was remarked that, in both instances, this drug was employed; and the clinical grounds for this treatment was desired. I regret I was prevented from being present at the meeting, but would here offer a few remarks on the subject.

The question is one of importance and interest; and I would observe, that experience in other cases appeared to me to testify to the value of this mode of treatment: hence its use in the present instance. In a case, reported by me in the *Lancet* (vol. ii, page 498, 1877), where severe sympathetic irido-cyclitis had existed for the long period of twenty-one months, enucleation of the injured eye, and the administration of the perchloride of mercury, continued for three or four months, resulted in recovery of excellent sight (Jäger 1). The mercury may or may not have contributed to this end. I believe it did so: for, some time subsequently, he again came under my care for a return of inflammatory symptoms, and a second time the perchloride was administered with good results. Subsequently, an old lady, seventy-one years of age, three months after iridectomy for chronic glaucoma, where there was copious hemorrhage and a tedious recovery, suffered from sympathetic iritis. A few days later, consent was obtained for enucleating the iridectomised and now blind eye. This was performed, and in a few weeks a good recovery had resulted. Perchloride of mercury was here also used; but, true, the enucleation of the offending injured eye may have been the only aid to recovery. Here again, however, a return, after some time, of the inflammatory symptoms occurred, and readily yielded under the use of the perchloride. I might refer also to the case of a little boy, aged 9, in whom long-continued small doses of the perchloride of mercury appeared to me to be of service, where the disease had existed for some time before the injured globe was excised. And, in all these cases, if I should be mentioned, was used.

I quite agree with the speakers at the meeting, as to the inutility of mercury in traumatic inflammation generally; but I repeat that, in the class of cases I have referred to, with as much evidence as we ordinarily have as to the effect of drugs on disease, it has appeared to me of service in aiding in preserving vision in some of these very distressing cases. In conclusion, I may mention that, among authors, the value of this treatment is recognised. For instance, Wexler, in his *Manual of Ophthalmology*, advocates "energetic mercurialisation"; and Lawson, in his *Lectures on the Eye*, etc., says that, "in some cases, he has seen decided benefit from the moderate inunction of mercury."—I am, sir, your obedient servant,

SIMON SNEILL.

Sheffield, May 23rd, 1882.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, May 22nd.

The Hampstead Small-Pox Hospital.—The House of Lords gave judgment in the appeal in the case of the Managers of the Metropolitan Asylum District v. Hill and others. The noble and learned lords present were the Lord Chancellor, Lords O'Hagan, Blackburn, and Watson. There were two appeals to the House of Lords, both of which were elaborately argued, and in which the question was, substantially, whether the Small-pox Hospital at Hampstead could be continued. In Appeal No. 2, the judgment of the House, given in the course of last year, affirmed that the Asylum Board had no statutory power to create a nuisance. The object of the present appeal was to obtain a new trial, which the Court of Appeal had refused, except upon the terms of the appellants paying the whole cost of the former trial before Mr. Baron Pollock and a special jury. The Lord Chancellor, in moving the judgment of the House, said the issues to be determined were, whether the Small-pox Hospital at Hampstead was necessarily a nuisance, however well it might be managed; and whether there were any faults or defects of management which made it so. The jury had found, on both questions, for the plaintiffs in the action. The plaintiffs ought not to have less than justice, because the duties of an important branch of public administration, with reference to the public health and to the care and treatment of persons suffering from a dangerous disease, might be embarrassed and rendered difficult or impracticable by their success; but, on the other hand, less than justice ought not to be done to those who had the care of those large public interests. There ought to be a new trial, because the verdict on the main issue was not founded on a state of evidence which was satisfactory. With respect to the maps showing the area of three hundred yards round the hospital site, and the preponderance of small-pox cases, the inferences were open to question. Evidence as to effects (or absence of effects) of the Homerton and Stockwell Small-pox Hospitals ought to have been admissible, and was material. But that was no reason for making the appellants pay costs, from which, in the event of a final decision in their favour, they would be free. The other noble and learned lords present concurred; and ultimately the order of the Court of Appeal was reversed, and the order for a new trial, as made by the Queen's Bench Division, was restored.

HOUSE OF COMMONS, Tuesday, May 23rd.

Deleterious Milk.—Lord G. HAMILTON, asked the Vice-President of the Council whether steps were being generally taken by local authorities to carry out the provisions of the Dairies, Cowsheds, and Milkshops Order, of July 1879; and considering the supposed transmissibility of tubercular disease through infected milk, he would take steps to make tuberculosis a "disease," for the purposes of paragraph 8 of that Order. Mr. MUNDELLA:—We have reason to believe that, except for the purpose of registration, very few local authorities have carried out the provisions of the Dairies Order, as they have no special officers for the inspection of dairies. The Privy Council have been in communication with the Local Government Board on this subject, and inasmuch as the question relates rather to human health than to the prevention of animal diseases, it has been agreed to bring in a short Bill to repeal section 34 of the Contagious Diseases (Animals) Act, and to authorise the Local Government Board to treat the question as one affecting the public health. The Bill is in preparation, and will shortly be introduced.

Medical Practitioners.—Mr. DUFFY has given notice of a question to the Chancellor of the Exchequer, whether he will favourably consider the exemption of vehicles, and of persons employed by medical men for the purpose of their profession, from the increased tax on carriages.—A petition against the tax has been presented from the medical practitioners of Rangoon.

Medical Department.—In the debate on the Estimates last week, Dr. F. A. STANTON asked whether the Secretary of State for War did not think that the time had come for abolishing the needless post of Commandant at Netley. Although the original object with which this office was established—i.e., to relieve the medical department of the trouble of a housekeeping work—was a laudable one, the regulations of the service now most distinctly laid down that the principal medical officer must always be engaged in his own hospital, both in matters connected with discipline and with internal economy; and, under these circumstances, the Commandant could claim no real authority; and when we came to inquire into what his duties actually were, we found that they were exclusively connected with the discharge depot, the

existence of which at Netley was a source of much inconvenience and annoyance. Having little to do there, it was necessary to make work, and this caused perpetual worry and irritation, the Principal Medical Officer not unnaturally resenting the indignity of being superseded in the social and official supremacy to which he is entitled, by the assumed authority of an official who sometimes is junior in actual rank to himself. It was, he believed, an open secret that a recent Committee had recommended the removal of the discharge dépôt to Portsmouth; and as the right honourable gentleman had abolished the useless captain commandants of naval hospitals, and as Netley was the only military hospital provided with this unnecessary appendage, he would appeal to him with confidence to remove this long-standing grievance from the Army Medical Department.—Mr. CHILDERS replied, that all he could at present say was that the commandant at Netley would shortly receive careful consideration.

MILITARY AND NAVAL MEDICAL SERVICES.

THE sudden death at Torquay of Staff-Surgeon Peter Comrie, R.N., is announced.

STR.—Would you kindly continue to advocate the adoption in the Navy of a white tropical uniform for officers? The men, both marines and sailors, have it. Even the ships are ordered to be painted white; yet the Admiralty oppose the white tunic. It is only by frequent applications to the press that any good can be got from the Admiralty in a sanitary point of view; and you have always lent a very willing hand to help us.—Your obedient servant, R.N.

* * * Our correspondent has perhaps yet scarcely done all that is legitimate in his effort to effect the reform which he advocates. When any special want is felt, it should be represented by those concerned to the proper authorities. Working men are quite in a different position from that of officers, especially in the Naval Service; and it is only natural that their case should have first received attention from the Admiralty. Moreover, the captains of Her Majesty's ships on tropical stations are usually permitted to exercise their own judgment in this very matter, apart from the knotty question of prescribing, which means enforcing, additions to an already long list of clothing. The "white cap covers" or white drill or duck covers worn over the ordinary uniform cap have been demonstrated to be quite useless; transpiration being diminished just so much as to counteract the benefit that would otherwise be derivable from the white surface. It is clear, therefore, that an uniform cap should be planned for tropical conditions. The above hygienic fact was pointed out by Dr. E. Payne, of the United States Navy. A white tunic to supersede the "blue frock coat" on tropical stations would, no doubt, be a great boon to officers; and, if it were double-breasted, would also do away with the waistcoat usually worn with the frock coat. A flannel, merino, or silk inner vest and white shirt, with white trousers, as at present, would complete the suit; while canvas shoes not only look well, but are cool and comfortable to the feet.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE NETHERFIELD INSTITUTION FOR INFECTIOUS DISEASES.

THE annual report of this institution for the year 1881 is a document of no little interest. The hospital contains on an average 22 patients, so that it may be fairly said to be a small hospital; and, in accordance with the imaginations of some theorists, we should expect to find a smaller mortality than in the large metropolitan hospitals, for instance. Let us now see if this were so. In the year 1881, 17 cases of enteric fever were admitted into the Netherfield Hospital, of which four died, a mortality of 23.5 per cent. In the London Fever Hospitals the mortality from enteric fever for the ten years, 1871-80, as shown by statistics prepared by Dr. Fraser of the Homerton Fever Hospital, was as follows:—the London Fever Hospital, 17.61 per cent.; the Stockwell Fever Hospital, 22.90 per cent., and the Homerton Fever Hospital, 17.83 per cent. Allowance has to be made, however, for different principles of diagnosis. Thus, for instance, if one hospital placed under the head of simple continued fever all but well-marked cases, its proportion of cases of simple continued fever, in which death never occurs, would be increased, and the mortality in enteric and typhus fever, as a consequence of this, would be increased also. Of typhus there were admitted into Netherfield Hospital 17 cases, of which five died, a mortality of 29 per cent. In the London fever hospitals, during the ten years before mentioned, the mortality of typhus was as follows:—the London Fever Hospital, 18.61 per cent.; the Stockwell Fever Hospital, 22.47 per cent.; and the Homerton Fever Hospital, 19.69 per cent. Of patients with other diseases admitted into Netherfield Hospital, there were 13, of whom 5 died, a mortality of 38 per cent. In the London hospitals, for the ten years mentioned, the mortality of the other diseases was as follows:—the London Fever Hospital 22.39; the Stockwell Fever Hospital, 28.66; and the Homerton Fever Hospital, 32.90. In

this comparison, one must again allow for principles of diagnosis. The tendency to confound meningitis, pneumonia, peritonitis, and above all acute military tuberculosis, with enteric fever, is considerable; and in a hospital where it was the practice to make *post mortem* examinations in all cases of enteric fever so as to make the diagnosis certain, one would expect to find a lower mortality in its enteric fever cases and a higher in its other diseases. It is probable that the difference in the mortality of the other diseases just given will be to some extent explained in this way. Of course other things have to be considered, such as the practices of the various fever hospitals as to admitting or declining the other diseases. A hospital in the habit of taking in all the other diseases would naturally have a higher mortality in this class, because the great majority of the cases mistaken for specific fever are the most severe cases of acute disease, other than specific fever, and the mortality is necessarily high; so that a hospital which declined say all the cases of acute pneumonia sent to it, cases mostly involving nearly the whole of a lung, and sometimes both lungs, and not unfrequently complicated with pericarditis, would necessarily have a comparatively small mortality in this class of cases. The mortality for small-pox is comparatively equally high in the Netherfield Hospital, as a consideration of the following totals, for which we are indebted to Dr. McCombie of the Deptford Small-pox Hospital, will show.

Small-pox Cases treated in the London Small-pox Hospitals during the year 1871 to April 1872.

	Total Vaccinated.	Total Unvacc.	Percentage Unvacc. to Vacc. Cases.	Mortality per cent. Unvacc.	Mortality per cent. Vacc.	Mortality per cent. Vacc. and Unvacc.
Homerton Small-pox Hospital.	1,520	1,005	39.7	37.4	8.6	20
Hampstead Small-pox Hospital.	5,539	1,328	19.3	52.7	11.2	19.3
Stockwell Small-pox Hospital..	2,081	373	15.1	56.5	11.7	18.5
Stockwell Fever Hospital	1,317	524	28.3	39.1	7.3	16.3
Homerton Fever Hospital	717	404	36.	33.6	5.16	15.8
TOTALS	11,174	3,634	24.5	44.8	10.15	18.66

When one remembers that the period over which these statistics refer to was one during which the severest epidemic known to this generation raged, a mortality of 18.66 will compare favourably with one of 17.6. It has also to be pointed out that the mortality of the cases in the Homerton Fever Hospital, where the average daily number of patients during the epidemic of 1871 was about 250, was only 15.8, and in the Stockwell Fever Hospital, where the average daily number was over 200, the mortality was only 16.3. Facts, therefore, when we can get them, give no support to the advocates of the small hospitals. That the Netherfield Hospital is doing good and useful work, may be gathered from the fact that patients may be attended by their own physicians, and friends may nurse or stay with patients in the hospital. What a boon this is, will be appreciated only by the anxious parent who may send his child into this institution, and go there and nurse it himself. To an anxious mother, a place of this sort must be invaluable. The report concludes as follows. The total number of patients treated in the hospital from its foundation is 3,237, viz:—Scarlatina, 653; measles, 146; typhoid, 295; typhus, 946; variola, 906; miscellaneous, 291. Total, 3,237.

With regard to small-pox, a consideration of the last 312 cases shows that the protection afforded by vaccination against that disease entirely depends upon the efficiency with which the vaccination is performed. In most of the cases referred to, vaccination had been more or less imperfectly performed. The subjoined table shows the effect of this vaccination in modifying the mortality. It must however be borne in mind, that amongst the non-vaccinated the illness was in every instance long and severe, and recovery was accompanied with great permanent disfigurement; but amongst the imperfectly vaccinated the severity of the disease diminished in proportion to the efficiency, as evidenced by the scars, with which the vaccination had been done.

	Number of Cases.	Died.	Mortality per Cent.
1. Not vaccinated at all	58	28	48.2
2. Having one imperfect scar	57	9	15.8
3. " two " " scars	120	9	7.5
4. " three " " "	64	1	1.5
5. " four " " "	13	0	—

Almost all the fatal cases amongst the vaccinated occurred in adults, showing the necessity for re-vaccination as adult life is approached.

richness and quality, and to ensure freedom from either the abstraction of cream or the addition of water. Finally, the milk should be sent out in sealed cans, and the milk-carriers and persons employed about the dairy submitted to frequent inspection and medical supervision. It has now long been shown that such a system of protection is efficient, and may be carried out successfully.

The last addition to the sanitation of milk in the metropolis is announced to have been made this week, and others are promised. What is required, above all, is that the precautions taken should be complete. The sanitation of milk under such circumstances, and the prevention of the access of diseased persons, although carried out on a large scale, partakes, it must be remembered, of the nature of a scientific experiment, and any one weak point in the link of precautions may at once become a source of danger to the whole system. Above all things, therefore, such a system requires conscientious and exact care on the part of those planning and superintending it, and full powers, irrespective of pecuniary considerations, given to the scientific or medical superintendents; and this is a condition on which any professional sanitarian undertaking such a post should insist as of primary importance.

WORKHOUSE MEDICAL OFFICERS AND CERTIFYING CHILDREN FOR INDUSTRIAL TRAINING.

A CIRCUMSTANCE has recently occurred at St. George's (Mount Street) Workhouse which merits something more than a passing notice. It would appear that a young girl, named Charlotte Case, was charged, under the fourteenth section of the Industrial Schools Act, with wandering in the streets, and not being under proper guardianship. The case was simple enough, the girl's mother being shown to be a confirmed drunkard and prostitute. She had been sent to the workhouse for the purpose of obtaining a medical certificate previously to her removal to an industrial school. When she was taken before the magistrate again, it was stated that the workhouse medical officer, who had been recently appointed at Mount Street, had refused to fill in the certificate unless his fee of 2s. 6d. was paid. Since then, a correspondence had been going on between the Local Government Board, the School Board for London, and the Board of Guardians, as to whose duty it was to pay the fee week by week. The girl had been taken before the magistrate, and again remanded. At the sixth appearance, Mr. D'Eyncourt grew tired of what the police report described as a disgraceful proceeding, and announced that he would pay the fee out of the poor-box; whereupon the signature of a neighbouring medical gentleman was secured, and the girl was sent to the school at Hampstead. The refusal of Mr. S. Benton, the medical officer at Mount Street Workhouse, to make the examination, and give a certificate gratuitously, appears, from the account which appeared in the police reports of some of our contemporaries, to have elicited a considerable amount of unjustifiable indignation; and the doctor's conduct has been severely censured for refusing to perform that which it was no part of his contract with the guardians to do. It is true, as was stated by the School Board officer, that medical officers of metropolitan workhouses have almost universally examined and certified their children gratuitously; but this obligation has been imposed on them unjustly; for, if it be necessary that certificates of their healthiness should be furnished, it is only fair that these gentlemen should be remunerated for their trouble, in the same way as medical gentlemen outside the workhouse. It should be remembered that this requirement of the School Board is an additional requirement thrust upon workhouse medical officers most unfairly, for it is an obligation which it was no part of their original contract to perform.

For our part, we are pleased to find a workhouse medical officer sufficiently public spirited to resist this imposition. If workhouse medical officers were sufficiently united to send in a joint remonstrance, we feel pretty sure that the School Board would be compelled to give way.

The discredit of such a procedure rests, not with the medical officer who objected to examine dirty children for nothing, but with those who attempt to compel him; and this opinion we shall continue to hold, despite the comments of magistrates and newspaper reporters to the contrary.

DISTRICT MEDICAL OFFICERS AS MEDICAL OFFICERS OF HEALTH.

THE Local Government Board do not seem able to make up their minds about the appointment of district medical officers as medical officers of health. Formerly, they were strongly in favour of such appointments; but the undoubtedly imperfect way in which sanitary duties have been performed in certain cases by Poor-law medical officers,

acting *ex officio* as health-officers for their several districts, has apparently induced the board to take up an equally untenable position, in direct opposition to their former view. They appear now to be making it a condition of a health-officer's appointment that he shall not be a Poor-law medical officer, though the two duties can often be profitably combined, and in many cases the Poor-law medical officer is the only really eligible candidate.

The Local Government Board have been for some time at issue with the St. German's Rural Sanitary Authority about their health-appointments. The five Poor-law medical officers have for some years acted as health-officers for their respective districts, receiving as remuneration a percentage of their Poor-law salaries. Probably they did their duties no better and no worse than others similarly circumstanced; but the Local Government Board determined to upset the arrangement in favour of their favourite plan of one officer.

The guardians declined to fall in with these views until threatened from Whitehall with refusal to sanction the present arrangements any longer. A compromise was, however, squeezed out of the Local Government Board, to the extent of allowing one of the Poor-law medical officers to be appointed, "provided he relinquished his present office". Accordingly, an election of a medical officer of health, at a salary of £100, took place the other day the appointment being for one year; and to this post one of the two district medical officers who applied was appointed, the other having very properly declined to give up his Poor-law appointment. That a man should be invited to give up a post that he might have held all his life, for one that brings him but barren honour, and is subject to yearly reconsideration and perhaps upsettal, is a curious specimen of the progress that we have recently made in health matters.

Theoretically, of course, a health-officer should be independent of private practice, and should act over a district sufficiently large to monopolise his entire time. But the incredibly petty jealousies of local authorities make combinations under our existing sanitary system now almost impossible; and authorities manifest an increasing disposition to appoint men who are their servants, and those of no one else. The choice of candidates thus becomes extremely limited; and, in debarring the Poor-law medical officer from the competition, the Local Government Board are often excluding the best man. Instances are getting common enough of appointments made under these conditions turning out infinitely less satisfactory than those which they displaced, often against the will of the local authority; and it is small wonder, therefore, if such authorities are beginning to distrust the imperious advice that is offered from Whitehall, either through the medium of official letters or the so-called "general" inspectors. It is an open secret that the medical department of the Local Government Board has nothing whatever to do with the health-officering of the country, this being administered in the approved red-tape fashion by whilom Poor-law Board officials, and the inspectors who supervise workhouses, and the like. It is much to be hoped that the new County Boards Bill will appoint some more effective machinery than that which has now become a laughing-stock by its unreasonable prohibitions, vacillating policy, and inconsequential decisions. Nothing could well be worse than the present hotch-potch of public health organisation; and the County Boards Bill, if it succeeds in giving even a semblance of uniformity to it, deserves the support of all who are concerned for the sanitary improvement of the country.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

DERBY.—While reporting a favourably low death-rate (18.3 per 1,000) for the last quarter of 1881, Dr. Iliffe has to announce an extension of the small-pox outbreak, and a large increase in the cases of scarlet fever. The cause of the extension of both these attacks was readily traced to the lack of hospital accommodation for the immediate isolation of the cases as they arose. One hundred and thirty-nine cases of scarlet fever happened during the quarter, ten of which were fatal. Of the total deaths registered during the period under notice (373) 21 were due to zymotic causes, and 72 to diseases of the respiratory organs; 152 deaths were those of children under five years of age.

BETHNAL GREEN.—Dr. Bate's report for 1880 is admirable, not only in matter, but methodical arrangement. It is, in fact, quite one of the best health reports that have recently come under our notice. It is written in an easy flowing style, and gives a vast amount of information (general as well as local) in a small compass. Basing his calculations upon a population of 127,000, Dr. Bate reports birth-and-death-rates of 40.9 and 23.0 per 1,000 respectively. Of the total deaths (2,883) no less than 1,468, or 50.3 per cent., were those of children under the age of five years, 852 never attaining the age of twelve

tract will always be a thorn in the side of Exmouth by keeping up a high death rate, and thus making the place compare unfavourably with other health resorts.

DURHAM.—Mr. Stoker's report consists of a series of quarterly statements of mortality, which he has at different periods of the year prepared and presented to his authority. No mention whatever is made of the sanitary condition of the district, but this would seem to be explained by the fact that the health-officer has been confined to his bed through sickness for the last two years, and that no deputy has been appointed, a resolution proposed in the Town Council in July, 1880, that such an appointment be made having been lost. The death-rate for 1881 is returned at 17.46, or 6 per 1,000 lower than that recorded for the previous year, a result which may be due to the decline of the scarlet fever epidemic. In the first quarter of the year three deaths were attributed to this disease, in the second quarter two, in the third one, and in the last quarter one death. In view of the state of things revealed by Mr. Spear's recent inspection of the town on behalf of the Local Government Board, it is high time that the arrangements for the discharge of the duties of health-officer should be put on a more satisfactory footing.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Fellows on the 23rd instant.

Bowles, Robert Leamon, M.D. St. Andrew's, Folkestone.
Chamneys, Francis Henry, M.B. Oxford, 60, Great Cumberland Place, W.
Duncan, James Matthews, M.D. Aberdeen, 71, Brook Street, W.
Glynn, Thomas Robinson, M.D. London, Liverpool.
Leech, Daniel John, M.D. London, Manchester.
Ross, James, M.D. Aberdeen, Manchester.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 18th instant.

Messrs. Joseph W. Hodgson, M.B. Aber., Leighton, Beds; William D. J. Morris, L.R.C.P. Ed., Fishguard, Pembrokeshire; Yorke T. G. Moore, Hackney; William R. Scroggie, Bombay; James C. Pincott, Brixton Hill; Alfred Robinson, L.S.A., West Cross, Swansea; Edward R. P. Faddy, Lower Norwood; John A. Gray, Essex Road, N.; Walter T. Brooks, L.S.A., Stoke Newington; John R. Day, L.S.A., Camden Road, N.W.; and John C. Davies, L.S.A., Malmesbury Road, E.

Eight candidates were rejected.

The following Members of the College passed their primary examinations in Anatomy and Physiology for the Fellowship of the College, at the half-yearly meeting of the Board of Examiners, on the 22nd instant, and when eligible will be admitted to the pass examination.

Messrs. Charles Gross, of Guy's Hospital, diploma of membership of the College dated July 31st, 1876; Frank Marsh, of King's College, April 24th, 1877; and William Henry Elam, of the Leeds School of Medicine, November 13th, 1877.

The following gentlemen who have passed the primary membership.

Messrs. Thomas Pugh Beddoes, B.A. Cantab., of the Cambridge School; William Owen Travis, of the Liverpool School; Charles John Evers, of the Birmingham School; and James Edward Blomfield, of University College.

Thirteen candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for six months.

The following gentlemen passed on the 23rd instant.

Messrs. Gerald George Hodgson and Thomas Sydney Short, of King's College; Arthur William Scott, of the Birmingham School; Arthur Ernest Larking, of Guy's Hospital; John Hedley Crocker, of the Charing Cross Hospital; Herbert Child, of the Leeds School; Sidney Plowman, of St. Thomas's Hospital; Henry Robert Woolbert, of University College; and Alfred Ernest Hind, of St. Bartholomew's Hospital.

Eleven candidates were rejected.

The following gentlemen passed on the 24th instant.

Messrs. John Francis Steedman, of St. Bartholomew's Hospital; Herbert William Allingham, of St. George's Hospital; Arthur John Drew, of University College; Walter Hurst, of the Manchester School; Henry Boynton Lee, of the Leeds School; Yasuzumi Sancyoshi, of St. Thomas's Hospital; Sydney Sargent Merrifield, of King's College; Charles Drummond Muspratt, of Guy's Hospital; and William Johnston, M.D. Queen's University, Ireland, of the Belfast School.

Eleven candidates were rejected.

APOTHECARIES' HALL.—The following gentleman passed the Examination in the Science and Practice of Medicine, and received a certificate to practise, on Thursday, May 18th, 1882.

Eugene John Kauffmann, Detroit, Michigan, U.S.A.

MEDICAL VACANCIES.

The following vacancies are announced:—

- ADDENBROOKE'S HOSPITAL, Cambridge.**—House-Physician. Salary, £65 per annum. Applications by June 6th.
- BOLTON UNION.**—Resident Assistant Medical Officer. Salary, £150 per annum. Applications by May 29th.
- BRISTOL FORESTERS' DISPENSARY.**—Qualified Medical Practitioner. Salary, £120 per annum. Applications to E. L. Burgess, 34, Horfield Road, Kingsdown, Bristol, by the 20th instant.
- BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.**—Resident Surgeon and Apothecary. Salary, £80 per annum. Applications to Mr. George Fell, Solicitor, Aylesbury.
- CHELSEA HOSPITAL FOR WOMEN.**—Assistant-Physician. Applications by June 1st.
- CHELSEA HOSPITAL FOR WOMEN.**—Two Physicians. Applications by June 1st.
- CROYDON GENERAL HOSPITAL.**—House-Surgeon. Salary, £100 per annum. Applications by June 6th.
- DUNSHAUGHLIN UNION.**—Medical Officer for Dunboyne Dispensary District. Salary, £110 per annum, with £15 yearly as Medical Officer of Health, registration and vaccination fees. Election on June 2nd.
- EAGLESHAM.**—Medical Officer under the Public Health (Scotland) Act to attend the Poor. Salary, £40 per annum. Applications to J. Hutchison, Inspector of Poor, Mearns, by Glasgow, by the 27th instant.
- EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell.**—Clinical Assistant. Applications to 28, Welbeck Street, Cavendish Square, W.
- FLINTSHIRE DISPENSARY.**—House-Surgeon. Salary, £100 per annum. Applications by the 20th instant.
- GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff.**—House-Surgeon. Salary, £100 per annum. Applications by June 12th.
- GUEST HOSPITAL, Dudley.**—Resident Medical Officer. Salary, £120 per annum. Applications by June 9th.
- HALLSIDE, NEWTON, N.B.**—Medical Officer for the Sick Society in connection with the Steel Company of Scotland's Works. Applications to Mr. McFarlane, 20, Hallside Cottages, Newton.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.**—Resident Clinical Assistant. Applications by June 3rd.
- KINGTON UNION.**—Medical Officer. Salary, £30 per annum. Applications by June 5th.
- LANCASTER INFIRMARY AND DISPENSARY.**—House-Surgeon. Salary, £120 per annum. Applications by May 29th.
- LIVERPOOL NORTHERN HOSPITAL.**—Assistant House-Surgeon. Salary, £70 per annum. Applications by June 3rd.
- MID AND SOUTH YELL AND FETLAR AND NORTH YELL.**—Medical Officer. Salary, £70 per annum. Applications to Inspector of Poor, Mid Yell, Shetland.
- NATIONAL HOSPITAL FOR THE DEFORMED, 234, Great Portland Street.**—Surgeon. Applications by May 29th.
- NEW ZEALAND.**—Inspector of Lunatic Asylums. Salary, £800 per annum. Applications by June 20th.
- PARISH OF ST. MARY, Islington.**—Medical Officer for the Ninth District (St. Peter's West). Salary, £100 per annum. Applications by May 30th.
- RATHKEALE UNION.**—Medical Officer for Pallaskerry Dispensary District. Salary, £100 per annum, with £15 per annum as Medical Officer of Health, registration and vaccination fees. Election on June 8th.
- RICCARTON ASYLUM, Paisley.**—Assistant Resident Medical Officer. Salary, £60 per annum. Applications to R. Rowand, Inspector of Poor, Paisley, by June 5th.
- ROYAL HANTS COUNTY HOSPITAL, Winchester.**—House-Surgeon. Salary, £100 per annum. Applications by June 10th.
- ROYAL PIMLICO DISPENSARY, 104, Buckingham Palace Road, S.W.**—Resident Medical Officer. Applications by June 5th.
- ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL, St. George's Circus, S.E.**—Clinical Assistant. Salary, £25 per annum. Applications by the 27th instant.
- ST. PANCRAS AND NORTHERN DISPENSARY.**—Physician-Accoucheur. Applications to the Committee at the Dispensary by June 1st.
- TAVISTOCK UNION.**—Medical Officer of Health for the Rural Sanitary District. Applications by June 9th.
- THE INFIRMARY, Halifax.**—Assistant House-Surgeon. Salary, £50 per annum. Applications to the Senior Physician of the Medical Staff by June 20th.
- TOWCESTER UNION.**—Medical Officer for the Blisworth District. Salary, £50 per annum. Applications by the 29th instant.
- TUNBRIDGE WELLS BENEFIT SOCIETIES' MEDICAL ASSOCIATION.**—Resident Medical Officer. Salary, £200 per annum. Applications by May 29th.
- WEST BROMWICH DISTRICT HOSPITAL.**—House-Surgeon. Salary, £80 per annum. Applications by June 6th.
- WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.**—Junior House-Physician. Applications by June 1st.
- YORK COUNTY HOSPITAL.**—Honorary Physician. Applications by June 24th.

MEDICAL APPOINTMENTS.

BAILEY, William E., M.B. and C.M., appointed Assistant Resident Medical Officer to the Manchester Workhouse Hospital, Crumpsall.
COANE, J., L.R.C.P.E., appointed Medical Officer for Scotstown Dispensary District of the Monaghan Union, *vice* R. C. George, M.B.

FLYNN, E. F., L.R.C.S.I., appointed Junior House-Surgeon to the Sunderland Infirmary, *vice* C. H. Welford, M.B., resigned.

HACKMAN, L. K. H., L.R.C.P., appointed Medical Officer to the Provident Dispensary of the Royal Portsmouth, Portsea, and Gosport Hospital.

KEIR, W. J., L.R.C.P., appointed Medical Officer of Health to the Melksham Urban District.

MALET, Henry, M.B., appointed Physician to Out-Patients to the Wolverhampton and Staffordshire General Hospital.

MIVART, F. St. George, M.R.C.S., appointed Surgeon to the City Dispensary, 46, Wapping Street, *vice* A. Newsholme, M.D.

NEWSHOLME, A., M.D., appointed Registrar and Chloroformist to the Evelina Hospital for Sick Children.

PHILLIPS, John, M.B., appointed Honorary Physician to the British Lying-in Hospital.

UNDERHILL, T. Edgar, M.B., F.R.C.S.Ed., appointed Honorary Surgeon to the Guest Hospital, Dudley, *vice* Alfred Jones, M.R.C.S., deceased.

VANCEY, C. B., M.R.C.S., L.S.A., appointed Assistant Resident Medical Officer to the Manchester Workhouse Hospital.

WHITEHOUSE, J., M.R.C.S., appointed Senior House-Surgeon to the Sunderland Infirmary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

BROWN.—On May 10th, at the Willows, Tredegar, Monmouthshire, the wife of George Arthur Brown, M.R.C.S., of a daughter.

JULER.—On the 24th instant, at 77, Wimpole Street, Cavendish Square, the wife of Henry Juler, F.R.C.S., of a daughter.

THE LATE PROFESSOR ROLLESTON.—It is proposed to hold a meeting of the subscribers to the proposed memorial in honour of the late Professor Rolleston on Thursday, June 1st, in the Library of the Royal College of Physicians. This meeting will be for the purpose of deciding upon the nature of the memorial.

UNIVERSITY OF CAMBRIDGE.—The election of a Professor of Animal Morphology will take place on Wednesday, May 31st. This new professorship was founded by grace of the Senate on the 11th inst. The stipend of the professor is £300 per annum. The electors are the members of the Senate on the electoral roll. The Vice-Chancellor and Proctors will receive the votes from 12.15 to 1.15. It is understood that Mr. F. M. Balfour, M.A., F.R.S., Fellow of Trinity College, will be elected without opposition.

CONSIDERABLE excitement has been raised in Grand Rapids, Michigan, over the death of a lady from Battey's operation. The coroner's jury rendered a verdict to the effect that the deceased came to her death from the operation performed. There is talk of criminal prosecution; but the case will probably be dropped. The physicians claim that the operation was perfectly justifiable. They should publish a full report of the case in some medical journal.

OPEN SPACES IN SOUTH LONDON.—The parish churchyard of St. George-the-Martyr, Southwark, which has been planted and laid out as a public garden, has been opened by the rector, the Rev. Burman Cassin, and dedicated to the public. The churchyard overlooks the High Street, Borough, and is the centre of one of the most densely populated parts of the metropolis. Another churchyard, that attached to the parish church, Horsleydown, close to Tooley Street, has also been laid out in a similar manner, and will be opened to the public in the course of a few days. This garden is nearly twice the size of that of St. George's. The parish churchyard of Bermondsey is also undergoing a similar transformation, and will shortly be dedicated to the public for all time as a recreation ground. The Metropolitan Board of Works bears one-half the cost of converting these churchyards into gardens, the other half being borne by the parish in which they are situated.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the pass examination for the diploma of membership of the college, which was brought to a close on the 18th inst., there were ninety-six candidates examined, against ninety-three the corresponding period last year, when forty-six were rejected. Of the ninety-six just examined, forty-three having failed to acquit themselves to the satisfaction of the court of examiners, were referred to their professional studies for six months. Twelve were approved in surgery; and, when qualified in medicine, will be admitted members of the college. Of the candidates who possessed recognised medical licences, there were the following: *viz.* "M.D. Toronto," one; "M.B. Aberdeen, Edinburgh, and Durham," of each one; "L.R.C.S. Edinburgh," one; "L.K. & Q.C.P. Ireland," two; and "L.S.A.," twenty. With this meeting, the examinations for membership for the present session were brought to a close.

GUILD OF ST. LUKE.—We understand that Mr. T. G. Vaudrey has been appointed by the Guild of St. Luke medical missionary to the Central African Mission, under Bishop Steere; the guild, assisted by a lady, providing a salary of £200 a year. Mr. Vaudrey has been in practice at Handsworth, Birmingham, for several years, but is giving it up to devote himself to the medical care of the natives of Central Africa. This is a piece of self-sacrifice deserving the highest praise. Mr. Vaudrey has been a member of the guild since 1871, is still young, healthy, abstemious, and unmarried, and we would venture to prophesy, has a brilliant and useful future before him.

ARTISANS' AND LABOURERS' DWELLINGS.—The Select Committee of the House of Commons upon the subject of artisans' and labourers' dwellings have met in private for the consideration of their report. The committee was appointed to consider the working of the Artisans' and Labourers' Dwellings Act of 1879, with a view to suggesting how the expense, delay, and difficulty in carrying out these Acts may be reduced, and also to inquire into any causes which may have prevented the reconstruction of dwellings for the artisan classes and authorised by Parliament. On account of the subject being a complex one, the committee were only able to prepare about the half of their report, but they expect to complete it at their next meeting on Thursday, although it may not be presented to the House of Commons until after Whitsuntide. The committee will report in favour of relaxing those provisions which require that the whole of the cleared areas should be devoted to cheap dwellings for artisans—a consideration involving enormous cost, and which has hitherto deterred action by public bodies, especially on the part of the Metropolitan Board of Works. It will probably be proposed that only from a half to two-thirds of the cleared areas should be built upon with artisans dwellings, the remaining half or third being left available for purposes more calculated to repay the cost.

HEALTH OF FOREIGN CITIES.—A table in the Registrar-General's last weekly return supplies the following facts and figures, which afford trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities. According to the most recent official weekly returns, the annual death-rate averaged 30.0 in the three principal Indian cities, and was equal to 35.1 in Calcutta, 33.8 in Madras, and 25.4 in Bombay; cholera caused 76 deaths in Calcutta and 31 in Madras, while measles caused 30 deaths in Bombay, and small-pox 19 in Madras. The death-rate in Alexandria was equal to 30.0, and the deaths included 10 fatal cases of whooping-cough and 2 of small-pox. In twenty-three European cities, the death-rate averaged 29.0, and exceeded by no less than 9.3 the average rate prevailing last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 54.1, but showed a further decline from still higher rates in previous weeks; the 695 deaths included 41 from typhus and typhoid fevers, and 30 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 24.9; the highest rate being 25.9 in Copenhagen, where 4 fatal cases of measles were recorded; one death from small-pox occurred in Christiania. The death-rate in Paris further declined to 24.7; the 611 deaths included 51 from diphtheria and croup, 33 from typhoid fever, and 19 from small-pox. The death-rate in Brussels was 24.7, and 2 fatal cases of small-pox were recorded. In Geneva, the death-rate was so low as 14.3. In the three principal Dutch cities, the death-rate averaged 23.6, the highest rate being 25.4 in Rotterdam; measles caused 11 more deaths in Amsterdam. The Registrar-General's table includes returns from nine German and Austrian cities, in which the death-rate averaged no less than 30.0, and ranged from 24.8 and 25.4 in Berlin and Dresden, to 37.2 in Buda-Pesth and 36.7 in Prague. Small-pox caused 26 more deaths in Vienna and 8 in Buda-Pesth; diphtheria again showed fatal prevalence in Berlin and Dresden. The death-rate averaged 33.0 in the four Italian cities, and ranged from 27.1 in Turin, to 39.7 in Rome. Typhoid fever caused 10 deaths in Turin and 5 in Naples, and 18 fatal cases of measles were recorded in Rome. The annual death-rate in four of the largest American cities averaged 27.4, and ranged from 20.4 in Baltimore to 34.2 in New York. Scarlet fever and diphtheria again showed fatal prevalence in New York and Brooklyn, and typhoid fever caused 10 more deaths in Philadelphia.

BEQUESTS AND DONATIONS.—Mr. Charles Fort of Piccadilly Square has bequeathed £1,000 to the Royal Medical Benevolent College, Epsom, and £500 each to the Middlesex Hospital, the Hospital for Consumption and Diseases of the Chest, the Cancer Hospital, King's College Hospital, University College Hospital, Queen Charlotte's Lying-in Hospital, and the Royal Free Hospital. The Royal Hospital for Women and Children has received £1,000 under the will of Mr. Charles Pearce. Mr. Robert H. C. Harris has given £500 to St. George's Hospital, in addition to a subscription of £50 per annum.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.
FRIDAY.....	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.
GUY'S.	Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.
KING'S COLLEGE.	Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.
LONDON.	Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental Tu., 9.
MIDDLESEX.	Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.
ST. BARTHOLOMEW'S.	Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.
ST. GEORGE'S.	Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.
ST. MARY'S.	Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F., 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.
ST. THOMAS'S.	Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.
UNIVERSITY COLLEGE.	Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. T. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15 Throat, Th., 2.30; Dental, W., 10.3.
WESTMINSTER.	Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Royal College of Surgeons of England, 4 P.M. Dr. Gerald Francis Yeo: On the Relations of Experimental Physiology to Practical Medicine.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

A FATAL CASE OF POISONING BY GERMAN ACONITINE.

DR. FERDINAND SPRINGMÜHL, M.A., related, in a lecture delivered before the Balloon Society of Great Britain, on the 5th instant, the following case of suicidal poisoning of an analytical chemist at Breslau, by eight grains of German (Merck's) aconitine.

The alkaloid was swallowed after dinner. Half an hour later, the first violent symptoms appeared. These were a burning sensation in the throat and mouth, which increased in intensity; intense pains in the stomach, which, in a few seconds, became so violent that the patient writhed shrieking in convulsions, and trying to strike the wall with his head. He was held with difficulty, and emulsive drinks were given to him. Very soon, he became incapable of swallowing, was seized with spasmodic coughing, and desire to vomit. In spite of emetics, no vomiting could be induced till an hour after the poison was taken, and then, with great exertion, a dark greenish fluid was ejected; but this afforded no relief to the abdominal pain, nor to the burning of the throat, which rendered swallowing and the administration of antidotes very difficult. Neither did the stomach-pump, used immediately (*sic*), give any relief; and, although exhaustion ensued after violent convulsions, the symptoms reappeared with renewed force, in spite of all the remedies applied. In three hours, the pains and convulsions attained such violence that death was expected every instant. In the fourth hour, after repeated injections of morphia, the patient seemed somewhat better. Previous to this, he intimated that his skin was greatly irritated (formication); this continued throughout the course of the intoxication; and he scratched his skin in a convulsive manner. He glared wildly, sometimes with a fixed stare. The convulsions were repeated at almost regular intervals, and the inclination to vomit remained, although vomiting did not continue after the second hour. At intervals of about forty minutes, the patient seemed to lose consciousness, but only for a few minutes; after which, the convulsions and other symptoms returned with undiminished violence. Three hours after the first appearance of symptoms, he became incapable of uttering intelligible words, but gave those about him to understand that he felt giddy, and, a little later, vision appeared to be lost. He threw himself about on the couch, and screamed and groaned frightfully. Exhaustion and apparent coma supervened, and then renewed attacks of the most violent description; next, a difficulty in breathing, and he appeared to be suffocating. At intervals, he was conscious; and, when asked where he felt pain, he made rapid motions to his head and stomach alternately. He wanted to drink, but could not swallow. The pulse and temperature fell considerably; and before death he became exhausted, unconscious, his body was bathed in cold perspiration, and he became deathly pallid. Although death from asphyxia was anticipated, he died in syncope, twelve hours after taking the poison.

On *post mortem* examination, the pupils were found dilated. The mucous membrane of the mouth was very pale. The brain was congested; the lungs congested. The cardiac valves were very flaccid. Inflammation of the stomach was apparent, and the mucous membrane was congested (*sic*). The liver and kidneys were congested. The alkaloid was found, by chemical analysis, in the contents of the stomach, but not in the urine of the deceased. It is not stated what means were resorted to for the detection of aconitine. It is stated that death occurred in spite of the application of every possible remedy. The nature of this is not mentioned, beyond the fact that emetics and demulcents were given, the stomach-pump applied either immediately or after the use of emetics, and that morphia was repeatedly injected. No mention is made of the use of digitalis or other physiological contraposition.

So far as the printed report of Dr. Springmühl's lecture enables us to judge, the fatal symptoms resulting from the administration of eight grains of German aconitine did not differ greatly in character from those observed in the two previously reported fatal cases of aconitine poisoning. We refer to that of Dr. M., in 1880, in Holland, from probably one-sixteenth of a grain of French nitrate of aconitine; and the case of Percy John from an unknown dose—probably two grains—of English aconitine. Unfortunately in Dr. Springmühl's case, the state of the pupils and of the heart are not recorded, beyond it being stated that the pulse fell considerably; but whether in force, in frequency, or in both respects, is not mentioned. Dr. Springmühl properly draws attention to the dangers attending the administration of English for German aconitine—the safe doses of these substances differing greatly. So far as we know, no accident has occurred in this country from confounding the two substances. A few accidents have, however, occurred on the continent in consequence of the substitution of crystallised French or English aconitine for the German preparation. Dr. Springmühl says "we do not know how many cases of death may have been caused by such mistakes" (the administration of English for German aconitine), "for it but seldom comes to light when a doctor accidentally poisons his client. Thousands, without doubt, found their deaths in this manner." We believe this to be altogether a misstatement as regards the members of our profession.

NEW METHOD OF EXAMINING THE LEAVES OF VEGETABLES.

MR. A. W. BLYTH, the author of the recent book on *Food*, claims to have discovered an easy means of rendering leaves, such as the tea-leaf, so transparent as to permit the demonstration of their structure under the microscope, thus affording an extra process for the detection of adulterations. A portion of the leaf to be examined is sandwiched between two ordinary microscopical cover-slips, and held in place by means of a weight on the upper glass. The enclosed leaf is then oxidised by aid of a strongly alkaline solution of permanganate of potash; this salt attacks the colouring matters, first of the contents of the cell, and then of the cell-wall. When the leaf has been sufficiently oxidised, it is removed, washed in water, and treated with a little strong hydrochloric acid, which at once clears up the oxide of manganese. A tea-leaf thus prepared looks like a translucent white membrane, and the microscope shows the details of its histology. Another method is to place the leaf between two circles of glass as just described, weight the upper one with a silver coin, and burn the prepared leaf on a layer of platinum. The ash cannot be disarranged, and so a complete skeleton of siliceous ash remains—"the skeleton ash" of the author.

PRURITUS VULVÆ.

A MEMBER writes: If "H. H. O." will swab the parts twice weekly with solution of nitrate of silver (5ss to ʒi), and give his patient a lotion for ordinary constant use containing two or three drachms of liquor carbonis detergens to a pint of water, he will find her much benefited. A pill of reduced iron and strychnine twice or thrice daily (such as Kirby's Formula No. 85) will help the diabetic state.

TRANSACTIONS OF THE INTERNATIONAL MEDICAL CONGRESS.

SIR.—In the report of my address at the International Medical Congress on the Etiology of Enteric Fever, given in the second volume of the *Transactions*, on page 536, line 14, for "Surgeon-General Jones, C.B." read "Surgeon-General Innes, C.B." I would be much obliged if each member will make this correction in his own copy in ink.—Yours faithfully,
JOHN MARTIN, Surgeon A.M.D.
2, Audley Place, Cork, May 22nd, 1882.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to advertisements, changes of address, and other business matters, should be addressed to the Manager, at the Journal Office, 161A, Strand, London, and not to the Editor.

TRICYCLES FOR COUNTRY PRACTICE.

We have received several letters on this subject, of which the exigencies of space compel us to give only the substance.

MR. J. P. GORDON (Malvern Wells) thinks that the tricycle has made less progress among country practitioners than the bicycle would have made if it had been adopted. The bicycle, however, has advantages which render it unfit for the use of the medical man. The tricycle, therefore, became the adopted machine, and certainly very great improvements have been made in its construction; yet its introduction is remarkably slow, considering the advantage which may be gained from it. This is because the machine has not arrived at that degree of perfection of which it is susceptible, and great improvements have still to be made before it can meet the requirements of "the country doctor" as regards simplicity of construction, weight, "go", and price.

MR. F. H. THOMPSON (Clebury Mortimer), who uses a single "Devon" tricycle, writes that his practice lies in a very hilly part of Shropshire, and he is obliged to keep a horse. It is very tedious pushing the tricycle up the hills; and in wet and stormy weather is very heavy going. It would suit where the country is slightly undulating or flat, or where the hills are few. He prefers to use one at night, when the roads are dry and good. He considers that, instead of being a source of saving, it has been one of loss. He advises not to buy a machine without previous careful trial in a hilly country and in all weathers. In a hilly district, one horse must be kept; and if any country practitioner did want a tricycle, he must get a double one, so that his groom could go out with him.

MR. P. GORDON BELL (Etwell) writes that his experience of the Salvo tricycle is very favourable. He has had one in constant use during the past seven months on every kind of road and country lane, and is perfectly satisfied with its performance. It will turn in its own length, and has very conveniently placed footrest and lamp holders, as well as a thoroughly reliable brake. He generally takes the tricycle on night-journeys, as it is always ready, and he can be fairly a mile on the road before the horse could be got out. He rides up all the hills in his district, with the exception of three, which are very long and steepest at the upper part; but the machine can be pushed up as easily as a perambulator. His average speed is seven miles an hour, but this can be exceeded when speed is required. In general, however, anyone who has to make long journeys should be content with an average speed of seven miles. When the roads are at their worst, with sticky mud, he can only go comfortably about six miles an hour. The tricycle is capital for exercise, is easily learned, perfectly safe, and will take the place of a second horse. A saddle is by far the best to ride on.

DR. J. B. EMMERSON writes that a tricycle is practically useless during the time in which the work of a country surgeon is the hardest. Even on very good roads, a very little mud makes the propulsion very hard work. In the summer, however, a tricycle affords most agreeable exercise. At night, for a short journey of two or three miles, the distance may be done on one, in the time required to rouse a sleepy groom and to have a horse harnessed; out in the daytime, the practitioner will probably have some patients before whom he would not care to appear dusty and perspiring. If he wish to ride in comfort, he must wear knickerbockers. The tricycle is an useful adjunct to the stable; but probably the millennium, of the abolition of horse-keeping, will not yet be reached.

EQUESTRIAN says that his practice lies in a country where badly kept by-roads are the rule, and good turnpike roads the exception; and, in addition, one never meets with more than a quarter of a mile of level road, and most of the hills are very steep. Much as he would like to exchange his horse for a tricycle, he can hardly think it would be a profitable transaction, judging from the frequent dismountings, voluntary and involuntary, of bicyclists when travelling through the district. He would also like to hear how tricycles answer when the ground is thickly covered with snow.

A SCOTCH DOCTOR asks respecting tricycles: 1. Are they available for hilly roads? 2. Can they be used in rough mountainous, but not left in very good repair, i.e., side roads? 3. How does, say, six inches of snow affect them? 4. Is it possible for a fairly average man to do something like fifteen or twenty miles daily on an average?

IRON HORSE asks if some who have tried the "Otto" safety bicycle would give their experience of it, and of tricycles in general; particularly stating if they require much muscular effort to drive them.

M.D. writes that his tricycle is a "special Salvo", and he thinks it a very good, as well as safe, machine; but for those living in very hilly districts, he would recommend the "omnicycle", as it has a special contrivance whereby the power can be greatly increased at will, the speed being, of course, at the same time diminished.

MR. W. W. HARDWICKE (Rotherham) fails to see that tricycles can come into very general use for purposes of visiting, on account of their inadaptability in wet weather. As regards hills, a great deal depends upon the kind of machine used. He has been the possessor of three different makes, and lives in a town half in itself and surrounded by hills. He uses his present machine, the "Humber", principally for amusement and touring; but were it not that the streets of the town are paved considerably with granite sets, he might do all his work in the town in fine weather on his tricycle in very much less time than he could do so, and with greater ease. He uses it a good deal now for country work. A difficulty in a hilly country is not so much in having the tricycle standing at a dead end on the road, as in the necessity of the rider being able to get the machine about. This may be due to its present novelty. The "Humber" is the nearest approach to the bicycle he knows, having the advantage of nearly the same speed, but without the danger which necessarily accompanies the latter. It has, instead of one large front wheel, over which the rider sits, two front wheels between which the rider sits, across a "back bone" connected in front with the axle and behind with a small hind wheel. He can go twelve to fourteen miles an hour on the best miles an hour with comfort. Mr. Hardwicke considers the "Humber" the best machine for a light weight and speed; for a heavy man, he would recommend the "Coventry Rotary". The "Cheylesmore" is a good hill-climber, well made, but wants some practice before the rider will be master of it. It is well suited for a lady, but it cannot do the pace of the "Humber" on the level. The "Cheylesmore" has a back steering-wheel. In a high wind, when riding with a companion on a "Cheylesmore", the

"Cheylesmore" faces a high wind better than the "Humber"; it also rides long hills better. An advantage of the tricycle, especially on a long journey, is a waterproof cape and a pair of legs of the same material, which wrap up into a very small compass. He finds the best dress, for a long journey, to consist of tightly cut trousers, not too tight to feel irksome about the knee, and of good length, with strap and buckle behind, dunnage, and just lined with dunnage, which must button up the front. It is advisable to carry a waistcoat if the rider intend returning after sunset. The advantages of a tricycle over a horse are immense. When a tricyclist meets with a bit of country he may not care to ride his machine may be put into the van of a train at the nearest railway station at a cost of about 1s. 6d. every twenty miles. Every tricyclist who intends his machine for use should have a "double driver". "Single drivers" are only fit for children. "Sociables", i.e., tricycles having two seats side by side, would probably be useful for medical men, as the manservant could be left in charge at each stoppage. It is recorded that, last Good Friday, a gentleman and lady rode from London to Ipswich, a distance of eighty miles, on a "Sociable", returning next day, the riding time being 9½ hours between the hours of 9 A.M. and 9 P.M. each day.

ANOTHER COUNTRY DOCTOR, in answer to "Hilly Country", says that he cannot go half a mile in any direction without a hill; and in such country he has traversed the whole of the 5,000 miles, as mentioned in his previous letter. Of course, some of the hills cannot be mounted without pushing the tricycle, but ordinary short hills can be got over without alighting. It is this alighting that requires a hard month's practice, and none but first class machines should be purchased.

VANESS VIVIAN writes that his district is certainly a hilly one, which he omitted to state in his former communications. Many of the hills are short—probably 50 or 100 yards long—with gradients of probably 1 in 40, 50, or 60. These he has repeatedly mounted without getting out of the tricycle, and they become easier by practice. Others are more gradual, but slight ascents of four or five miles; and this distance he has often overcome, making an up-hill journey of five or six miles, and continuously without getting out. At a few of the very worst hills he alights, and pushes the machine before him, but this is from choice rather than necessity. The "patent hill-climbing gear", that can be attached to any tricycle, as supplied by Groom of Watson Street, Stoke Newington, London, for £3 5s., will do away with the labour and difficulty ever here, and solve the question of increased taxes upon carriages by having none.

T. H. M. lives in a very uneven country; he does not know of a stretch of level road a mile long anywhere within a radius of eight miles from his house. The country is also very damp, and the roads are extremely heavy. Last winter, he hired a tricycle; and now he finds it such a convenience that he would not be without one on any account. He can do six or eight Irish miles on it without the least fatigue. When he comes to a very steep or long hill, he gets off and pushes it before him, which is quite easy. His ordinary rate of travelling is between five and six Irish miles an hour. One of the greatest benefits from its use is the exercise. He has lately bought a new machine from Messrs. Curson and Son of Dublin. He calls it the "Imperial Club Tricycle", and is made in Coventry. He can drive it up a much better than the one he formerly had, and it is so accurately balanced that the front steering wheel hardly touches the ground, and makes it practically a bicycle. The price is £19 10s., with oil bearings and bright parts included.

SALVO asks if any who have tried the use of tricycles in town practice can give him the results of their experience; and also state which is the best tricycle for the purpose—swift and easy to work.

VIVIAN writes: Assuming that what is needed is a means of locomotion which shall be at once promptly available, expeditious, comfortable, and economical, we may inquire how far a good tricycle complies with these conditions. If, for a way cleared and level, it has the great advantage of it can hardly be called, as an average notice without extraneous help. Expeditions it can be obtained, taking into consideration of about seven miles an hour is all that can be obtained, taking into consideration wind, mud, dust, loose roads, stones, hills, and other vicissitudes. Comfortable it can scarcely claim to be, seeing that it has to be propelled by the rider's muscular exertions, whether he be tired or fresh, indisposed or well, and bearing in mind that he is unprotected from the weather, whilst his sitting accommodation is limited to a portion only of a small seat. No means of locomotion, however, compete with the tricycle on the score of economy. The original outlay is moderate, and the cost of the necessary repairs inconsiderable. Whilst occasional hills may be surmounted in traversing a fairly level country, the physical effort necessary for overcoming decidedly steep hills is so considerable that it cannot be frequently repeated without much fatigue. The conclusion which suggests itself, that whilst the tricycle is not calculated to supersede other vehicles, it may be used advantageously to supplement them in suitable localities. Those who desire to present themselves before their patients calm, unsoiled, and unheated, cannot depend solely upon a means of locomotion propelled by their own exertions.

MINERS' NYSTAGMUS.

SIR,—I answer to the inquiries of a "Junior Member" concerning the etiology and treatment of miners' nystagmus. I beg to refer him to a paper on the subject written by me, which appeared in the *British Medical Journal* for January 1882, p. 104. Also, he will find a further notice of the subject in a paper published by me in *Brain* for July 1882; and, if he desires still more details, a paper on *Miners' Nystagmus* will be read for me by the secretary of one of our London medical societies during the coming month of July.—I am, sir, yours truly, R. P. OGLESEY.

NEW POCKET-CASE.

SIR,—We notice in your issue of the 14th inst., a description of the new pocket-case introduced by Messrs. Arnold and Sons. Will you kindly allow us to state that we prepared a case of a precisely similar character some years ago for Mr. Henry Greenway of Plymouth; and, further, we subsequently modified the size of it to 6 x 4½ at his request. It fitted the breast-pocket without any bulging of the coat, and was impervious to perspiration or other moisture. We believe one of these cases is already in use by one of our leading metropolitan surgeons.—We are, sir, yours faithfully, S. MAW, SON, AND THOMPSON, 7 to 12, Aldersgate Street, London, E.C., May 24th, 1882.

SIR,—I am desirous of eliciting the opinion of the profession whether, in a case of puerperal mania breaking out with increased violence and duration in two consecutive childbeds, it would be justifiable to procure early abortion in case pregnancy should occur again. The patient is a delicate but healthy person, who will probably remain the same all her life.—I am, sir, yours faithfully, AUGUSTUS HESS, M.D. May 13th, 1882.

ABSTRACT REPORT

UPON

HYPERPYREXIA IN ACUTE RHEUMATISM.

BY A COMMITTEE OF THE CLINICAL SOCIETY:

DRS. SOUTHEY, WEBER, ORD, F. TAYLOR, AND COUPLAND.*

Presented to the Society May 26th, 1882.

AFTER a few introductory remarks, pointing out the necessity for limiting the present report to an analysis of cases, sixty-seven in number, collected from various sources and mostly unpublished, the report states that the cases occurred mainly in the ten years ending 1879, and that the following division was made in analysing them.

CLASS I.—Cases of undoubted hyperpyrexia, with an elevation of temperature to 106° , and above. Under this class, 47 cases are included.

CLASS II.—Cases showing a marked tendency to high range of temperature—viz., 104° , continued and persistent. Under this class, 17 cases are included.

CLASS III.—Cases with the symptoms well marked, characterising usually the hyperpyrexial cases, but without marked excess in temperature. Under this class, 3 cases are included.

The Committee have investigated these cases: 1. By comparison with ordinary cases of acute rheumatism, in order to learn if cases which exhibit hyperpyrexia present any other clinical differences; 2. By a more precise analysis of cases of hyperpyrexia and their treatment; and, lastly, they bring forward the general conclusions to which this inquiry led them.

Comparison of Hyperpyrexial Cases with those of Acute Rheumatism generally.—The first point to be considered is, whether, apart from the phenomenon of hyperpyrexia or of symptoms directly related to it, these cases exhibited any notable features of difference from the generality of cases of rheumatic fever; whether, that is, they differed in any way as to their etiology, cause, complication, or issue from the latter. A statistical comparison has, therefore, been made by utilising the returns of 1300 cases of acute and subacute rheumatism contained in the registrars' reports of the Middlesex Hospital, for the years corresponding to those in which the hyperpyrexial cases mainly occurred. This number may be considered to afford a sufficiently wide basis of comparison; it includes 22 cases of hyperpyrexia.

The comparison was made under the following heads: (a) Time of occurrence—Season of year; (b) Sex; (c) Age; (d) Occupation; (e) Existence of family tendency to rheumatism; (f) The number of the attack for which the patient came under treatment; (g) Complications; (h) Mortality.

Time of Occurrence.—Of 65 cases of rheumatic hyperpyrexia, occurring between the years 1869 to 1880, no fewer than 53 cases, or 81.5 per cent., were in the five years 1873 to 1877. During the same period, the annual number of rheumatic fever cases in the Middlesex Hospital was above the estimated average. Hence, apparently, excess in hyperpyrexia corresponded with excess in prevalence of rheumatism, although by no means in proportion. It is also shown that, during the decade 1870-79, the greatest prevalence of rheumatism was in the autumn and winter months—of hyperpyrexia, in the spring and summer.

Sex.—Whilst the proportion of males to females in the series of 1300 case of rheumatic fever was fairly equal, in the cases of hyperpyrexia there was a marked preponderance of males—viz., 64.2 per cent. of the total number collected.

Age.—There is less departure from the general rule with regard to age, for in each series the number was largest in the third decade of life.

Occupation.—No special occupation apparently predisposes to hyperpyrexia, there being in the 67 cases no fewer than thirty-three different occupations represented—some sedentary, others active.

Family History.—There does not appear to be an essential hereditary tendency to rheumatism in those in whom hyperpyrexia appears.

Number of Attack.—So far as the records go, the large majority of the hyperpyrexial cases were instances of primary attack of rheumatism—viz., 67 per cent. In the general series of rheumatic fever, there were 52 per cent. first attacks. It is also shown that hyperpyrexia was not present in any attack after the third.

Complications.—Nine out of the 67 cases were uncomplicated, and 6 of these were fatal. Pericarditis was far more frequent, and endocarditis only a little less frequent, than in rheumatic fever generally. Pleurisy and pneumonia were rather frequent complications of the hyperpyrexial cases. It is pointed out that, according to the statistics of the Middlesex Hospital, the number of cases of rheumatic pericarditis has notably diminished of late years; and, if this be found to be the general experience, it is a most interesting fact, when the similar decrease in cases of hyperpyrexia is also borne in mind.

Mortality.—Almost one-half of the total number of hyperpyrexial cases died—viz., 33. Complications were more frequent in the cases of recovery than in the fatal cases. The death-rate of acute rheumatism (exclusive of cases of hyperpyrexia) was only 1.8 per cent.

The second part of the report deals with the subject of hyperpyrexia in acute rheumatism, as illustrated in the series of 67 cases under consideration. No special determining influence of the hyperpyrexia is to be found in the previous history or habits of the patients. Chorea and scarlet fever were very unfrequent antecedents, and alcoholic intemperance was by no means a marked feature. The next point considered is, whether the attack of acute rheumatism, in which the phenomenon arose, showed any striking departure from the usual type in other respects; and the views currently held, that the onset of this symptom is often preceded by the abrupt subsidence of articular pain, the cessation of sweating, and the appearance of nervous symptoms, were tested by an analysis of these cases.

Joint-Affection.—In 22 cases, or in about one-third, the records dealt with gave no information upon the question whether the articular pains did or did not subside before the onset of the hyperpyrexia. Of the remainder—45 cases—the notes pointed to the persistence of pains, either continued or variable, in no fewer than 20 cases. In 25 cases, the pains subsided before the onset of the hyperpyrexia, to return in 14 of the cases after this condition had passed away.

Condition of Skin.—The notes before us give no information as to the cutaneous condition during the continuance of hyperpyrexia in 14 out of the 67 cases. Of the remainder, sweating is noted in 40 cases, with sudamina in 22; in one case, the skin is noted as "moist", and in only 12 is it distinctly stated to be "dry". These results are not, therefore, in accordance with the general impression that a dry unperspiring skin is an invariable concomitant of rheumatic hyperpyrexia—such a condition of skin being present in not much more than one-fourth of the cases.

Nervous Symptoms.—These are very numerous and varied, although it may not be that the present series of cases has added many to the list of those already known and described. Those that are noticed in this series include, according to their frequency, the following: delirium (in all phases), insomnia, restlessness, muscular tremors, involuntary discharges, subultus tendinum, coma (a late symptom), headache, tremor of tongue, deafness, tonic spasms (in two cases, of tetaniform character), risus sardonius, convulsions, floccitation, tinnitus aurium, giddiness, drowsiness, vomiting, silliness of manner, fearfulness, hesitating speech, chorea, and hyperæsthesia. Many such symptoms—such as those indicated merely by alteration or strangeness in demeanour—may easily have escaped record; and the report deals particularly with the subject of delirium in relation to the hyperpyrexia. Three groups of cases in which delirium was noted may be established, according as the delirium preceded the onset of hyperpyrexia (24 cases), accompanied it (19), or followed upon it (10 cases); and each of these groups is analysed as to the date of appearance and duration of the delirium, the intensity of the associated hyperpyrexia, and the result of the case. In this abstract, it may suffice to point out that, of the cases in which the delirium preceded the hyperpyrexia, 19 died, and 5 recovered; those in which both symptoms arose together, 6 died, and 13 recovered; and of those where delirium appeared after the hyperpyrexia, 3 died, and 7 recovered. Delirium does not appear to mark the undue severity of the disease; for, out of 57 cases, there were 31 deaths and 26 recoveries; in 8 cases in which it was absent, the highest temperature was 107° , and there were 6 recoveries to 2 deaths. Delirium and death, however, marked some cases where the temperature never reached extreme levels.

The Hyperpyrexia.—Bearing in mind the definition of the condition and the subdivision of the cases given at the outset, the present portion of the report is simply a study of thermometry. It will be seen how varied the hyperpyrexia is, not only in its intensity and duration, but in the manner and time of its appearance; and how difficult it is to discover the laws which govern its course. Thermometric curves show at a glance the capriciousness which is its characteristic feature. In some cases, an abnormally high temperature, existing for days or hours, almost suddenly leaps to higher levels; in others, a more gradual ascent takes place; in yet others, there is a far more rapid rise from a com-

* The Committee was appointed in October 1879, to "investigate the causes, consequences, and treatment of hyperpyrexia in rheumatic fever and other acute febrile diseases."

paratively mild and moderate pyrexia. Are we, then, in a position to assert that there is such marked difference in the mode of onset of the hyperpyrexia and in its course as to enable a subdivision into types of hyperpyrexia to be established? To answer this question, it is necessary to critically examine the temperature-curves of a large number of cases. A study of the temperature-charts in 47 cases enables us to discriminate at least five different types of the condition as regards the mode of onset of the hyperpyrexia and the course taken by it. These subdivisions are, of necessity, somewhat arbitrary, and intermediate forms are met with, which it is difficult to classify. However, when marked examples are taken, the division appears to have some reasonable basis in fact.

Type A.—Temperature rises gradually for a few days, and then suddenly culminates in a maximum by an exacerbation of several degrees. Of this there are eleven examples.

Type B.—Temperature, after maintaining for one or more days a moderate level, suddenly rises to excessive heights. Twelve cases fall under this category, which present also transitional curves between this and the preceding type.

Type C.—The pyrexia has a more continuous course, not unlike that of typhoid fever, without violent or excessive exacerbations. Three cases fall under this class.

Type D.—Temperature rises gradually to a maximum, and then is permanently reduced by the cold bath or wet pack. Three cases conform to this type.

Type E.—In some cases of severe character, the tendency to rise to hyperpyrexial heights is very pronounced, so that, to control it, cold baths have to be frequently repeated. Eight cases are included.

There remain nine cases, which cannot be classed under any of these types, and no attempt is made to analyse the very irregular course of temperature exhibited by them.

The intensity of the hyperpyrexia observed in these cases can only be approximately estimated by reference to the maximum temperature attained, and the duration of the hyperpyrexial tendency; since the necessity of treatment by the adoption of antipyretic measures checks the rising temperature, and the thermometer does not mark the limit it might have attained. In several cases, such measures were at once effectual; in many others, even repeated applications had no influence in averting death. The following table shows at a glance the influence on mortality exerted by the degree of temperature attained, as well as the effect of bathing, to which further reference is made under the head of treatment.

Maximum Temperature.	Cases.	Lived.			Died.		
		Under Treatment.	Not Under Treatment.	Total.	Bathed.	Not Bathed.	Total.
111.1 to 112°	3	0	0	0	1	2	3
111.1 to 111°	3	0	0	0	1	0	1
109.1 to 110°	8	1	0	1	4	1	5
108.1 to 109°	7	1	0	1	1	1	2
107.1 to 108°	21	4	0	4	4	1	5
106.1 to 107°	18	7	6	13	2	3	5
105.1 to 106°	8	2	4	6	0	0	0
104.1 to 105°	1	1	0	1	0	1	1
103.1 to 104°	1	0	0	0	0	1	1
Total ..	65	16	10	26	11	11	22

The occurrence of some fatal cases where the temperature was not excessive, shows that death is not invariably due to the hyperpyrexia alone. The fatal cases all terminated in or before the sixth week of the rheumatic attack. No deaths took place in the first week; and 20 out of the 33 occurred in the second and third weeks. Naturally, in some of these cases, the temperature was not high; but only 5 out of the 33 recoveries were within the first six weeks, the rest at various periods up to the twelfth.

An attempt has been made, by comparison of the cases, to ascertain whether any definite relation exists between the date of onset of the maximum temperature and the date of death, or of recovery, of the hyperpyrexia. And great variety was found to exist; for, although in some of the severest cases the outbreak of high temperature took place early in the disease, in others its appearance was much delayed. As temperature, however, as might have been expected, the cases marked by the highest degree of hyperpyrexia reached a fatal termination in a much shorter time than those in which, whilst some of the highest temperatures were attained, the continuation of the hyperpyrexial period was longer, and the recovery was delayed, due to the influence of treatment.

Of marked importance are recorded in 20 out of the 33 fatal cases. In 5 of these, there were no manifest visceral changes; and as to

lesions of recent inflammatory kind, there were meningitis (limited) in 2 cases, pericarditis in 9, endocarditis in 8, pneumonia in 2, pleurisy in 4; and, in several cases, more than one of these lesions occurred in the same subject; so that the proportion of cases in which recent visceral inflammations were absent was very large.

Treatment of Hyperpyrexia.—Amongst the various methods employed for the reduction of temperature by the external application of cold, that of the bath is the one most generally employed. Forty-six of the cases were so treated, in some obviously as a last resort. Hence the mortality is high—viz., 22 to 24 recoveries, the non-bathed giving 11 deaths to 10 recoveries. However, of the latter which recovered, none exceeded a maximum of 106°; and of the former as many as 15, or five-eighths of the total, were cases in which the temperature reached above that level. Again, in 6 out of the 11 fatal cases that were not bathed, the maximum was below 106°, and in only 3 out of the 22 fatal bathed cases. The average maximum temperature in these fatal cases was 107° in the non-bathed, 108.2° in the bathed. Hence it appears that, when the hyperpyrexia is of great severity, this treatment is often of no avail, but that it turns the scale in the direction of recovery when the temperature has not attained that high level; and, further, in many cases recourse is had to it too late. No doubt, differences exist in various cases with respect to the most suitable time for having recourse to the treatment, and the committee emphasise the injunctions laid down by others, that indications for its employment must be sought in the occurrence of the prodromal signs above mentioned, together with a rising temperature. There is much to show that the treatment not only reduces temperature, but allays delirium, reduces the frequency of and gives strength to the pulse, and induces sleep. The fact, however, that a certain number of cases in which the temperature does not reach 106° succumb if not treated by baths, and that only one of the 22 fatal cases which had been so treated had a maximum temperature below 105°, points to the advisability of having recourse to the bath when the temperature reaches 105°. There seems little doubt that if this were systematically done, the mortality in rheumatic hyperpyrexia would be materially diminished. An analysis is given in the report of the 46 cases submitted to this treatment with respect to the number of baths given, the temperature of the body when given, the temperature of the bath, and the extent to which the body-temperature is reduced by the bath and the time taken for it to reach the minimum. It is not possible to give these facts in an abstract; but it is sufficient to say that the results are most variable, and fully bear out the conclusion that it is impossible to predicate what amount of reduction in temperature may be expected from a bath of any given temperature or duration.

CONCLUSIONS.—1. Cases of hyperpyrexia in acute rheumatism appear to prevail at certain periods, having in the last decade been remarkably numerous in the years 1873-76, whereas latterly they appear to have been much less frequent. Such excess corresponds in a certain degree, but not in actual proportion, to a similar excessive prevalence in acute rheumatism generally. The largest number of cases of hyperpyrexia arose in the spring and summer months, whereas rheumatism is relatively more common in the autumn and winter.

2. Whilst very little difference obtains between the two sexes in regard to proclivity to rheumatism, the proportion of males to females exhibiting hyperpyrexial manifestations is 1.8 to 1. But as to age no such marked difference exists; nor as to occupation.

3. The subjects of hyperpyrexia show no undue rheumatic tendency as regards family predisposition.

4. The cases of hyperpyrexia preponderate in first attacks of rheumatic fever.

5. Hyperpyrexia is not necessarily accompanied by any visceral complications, but may itself be fatal. The complications with which it is most frequently associated are pericarditis and pneumonia.

6. The mortality of these cases is very considerable, hyperpyrexia being one of the chief causes of death in acute rheumatism.

7. Although present in a certain number of cases, and these of much value from their prodromal significance, neither the abrupt disappearance of articular affection, nor the similarly abrupt cessation of sweating, is an invariable antecedent of the hyperpyrexial outburst.

8. The supervention of delirium or other symptom of nervous disturbance is very frequently either antecedent to or simultaneous with the hyperpyrexia.

9. There is considerable variability in the date of the occurrence and in the duration of the hyperpyrexial condition, ranging, according to our observations, at least, from the fourth to the thirtieth day.

10. When death results, it has occurred mostly in the second and third weeks of the rheumatic attack.

11. The *post mortem* examinations in a certain proportion elicited no distinct visceral lesions; and when present, the lesions were not necessarily extensive.

12. The prompt and early application of cold to the surface is a most valuable mode of treatment of hyperpyrexia. The chances of its efficacy are greater the earlier it is had recourse to. The temperature cannot safely be allowed to rise above 105°. Failing the most certain measure—viz., the cold bath—cold may be applied in various other ways: by the application of ice, by cold affusions, ice-bags, wet sheets, and iced injections.

The Committee have not thought it advisable in the present report to enter into theoretical considerations; and, limiting the study of hyperpyrexia to the records of 67 cases of acute rheumatism, have deemed it premature to enter into physiological reasonings until the same conditions have been reviewed in other acute febrile diseases.

TRACHELORAPHY.

By EDWARD JOHN TILT, M.D.,

Past President of the Obstetrical Society of London.

It is difficult to exaggerate what gynæcology owes to American surgeons. Their fertility of conception, boldness of execution, and mechanical dexterity is only equalled by the marvellous surgical endurance of American women. There is, however, something too sensational in their mode of introducing surgical novelties. The new operation is introduced with a grand flourish of trumpets; it is supported by an overwhelming array of figures, although detailed cases be few. Nothing is said about difficulties, failures or deaths; then a book is written, and the dazzled Britisher is told to go and do likewise; and, if he do not soon do so, it is attributed to insular conservatism, and even to national jealousy. Soon, however, intelligent American practitioners, unknown to fame, publish cases of failure of the new operation to fulfil its promises, and of the deaths it has caused; and by degrees the operation is ignored, discredited, or abused.

This is the plain statement of what has occurred with regard to Dr. Marion Sims's advocacy of the slitting up the cervix on both sides, up to its union with the body of the womb, as a cure for the generality of uterine diseases. It is in the memory of most men how this strange assertion was supported by the 500 operations that Dr. Marion Sims performed in a short time in one hospital, and by the 200 or 300 women operated on by his pupils, in the same limited space of time, in the same city. It is well known that Dr. M. Sims sought to impress on us the value of his operation, in the work he did us the honour to publish in London, and that some enthusiastic young gynæcologists for a time followed his teaching.

A few years passed, and even American gynæcologists discovered, that there was great exaggeration in the promised value of this extensive slitting of the cervix; that it was highly objectionable in many cases; and Dr. Emmet found himself occupied in sewing up the wombs he had helped to divide. Loss of faith in his teacher was, however, soon followed by the conviction in Dr. Emmet's mind that he himself had made several great discoveries. He discovered that inflammation and ulceration of the cervix was nothing but the rim of the cervical canal, everted by cervical laceration, and that all troublesome cases of enlarged cervix were nothing else but cervical lacerations, injudiciously patched up by nature with cicatricial tissue; and, lastly, he discovered the dangerous properties of this cicatricial tissue, and the urgency of cutting it out, to restore women to health.

This new teaching was supported by the usual dazzling statistics—by hundreds of cases of his own, and of his enthusiastic pupils. Dr. Emmet embodied his teaching in several chapters of a very valuable work, and his school is disappointed that we British gynæcologists have not fallen down upon our knees before this new teaching. This is too bad. Dr. Marion Sims's operation was vouched for in the same way, and was supported by a numerous array of successful cases; now his countrymen own that the operation is well-nigh valueless; and yet they wonder at our being cautious, after having been once bitten. That we should point to Dr. Emmet's having been obliged to sew up the wombs divided by Dr. M. Sims, is called "a facetious argument" by Dr. Playfair, but I doubt how far those who had to pay for both operations saw any fun in the matter. It seems to me rather a grim kind of practical joke, fraught with salutary meaning. That this should have occurred to distinguished American gynæcologists, teaches us to well weigh any new departure of theirs, and to wait till it has been ascertained that the new operation fulfils its promises, and does not tell too heavily on the bills of mortality. Dr. Emmet's book appeared in 1879, so I think we ought to feel indebted to Dr. William

Playfair for having lately called on the Obstetrical Society of London to discuss tracheloraphy. His paper seems to have been partly written to soothe the feelings of our esteemed American brethren, but this was scarcely necessary, as Dr. H. Bennet's paper on the same subject led to its full discussion, at the London meeting of the International Medical Congress.

Dr. Playfair, in his remarks on Dr. Emmet's work, raises no objections to his questionable pathology; he considers tracheloraphy to be the greatest improvement ever introduced into practice, but he thinks the operation only justifiable when laceration has produced ectropion and other signs of uterine disease. Dr. Playfair owns to having "seen several cases of most extensive laceration, in which the surfaces were quite cicatrised; and that, to subject such cases to a difficult and complicated operation, would be a most glaring evil." This is what might have been expected from so sound a practitioner, but the American practice seems to be to operate in all such cases, for fear of future mischief. When Dr. Emmet kindly gave me his book, he asked me to tell him frankly what I thought of his new operation, and I apologise to him for having so long delayed to do so. Now is a fitting time, however, and I propose to give my estimate of tracheloraphy under the following heads.

1. The frequency and import of laceration of the cervix.
2. Cervical ulceration, nothing but cervical ectropion.
3. The part ascribed to cicatricial tissue in uterine pathology.
4. Tracheloraphy, as the only way to cure certain diseases of the cervix.

1. *Frequency of Cervical Lacerations.*—Gynæcologists have been attaching more and more importance to laceration of the cervix, by labour or by abortion, instrumental and otherwise; and Dr. Emmet's assertion, that half the uterine ailments of those who have borne children were caused by laceration, confirms what I have stated in my *Hand-book of Uterine Therapeutics*. As Dr. H. Bennet maintains, laceration is often due to unhealthy uterine tissues being unable to bear the strain of parturition; and it may be taken as settled, that unhealed cervical laceration plays a very important part in the etiology of uterine disease, both acute and chronic. There is, doubtless, some exaggeration in the belief subsequently expressed by Dr. Emmet that women cannot be confined without the womb being lacerated, for this would be to admit its being utterly unfit for the work it was intended to do; neither should I have alluded to this, had not his disciples already settled, that every healed rent requires operation.

2. *Cervical Ulceration is nothing but Cervical Ectropion.*—Dr. Emmet denies the existence of inflammation in uterine pathology. Happy man, he has never seen an acute case of non-puerperal uterine inflammation; he has never had to watch cases of acute internal metritis, than which I have seen none so painful and so difficult to treat; and he does not believe in the possibility of chronic uterine inflammation. Uterine ulceration is said to be a mere illusion; it is only the more or less extensive eversion of the torn mouth of the womb. Approximate the torn fragments by a proper instrument, and the ulceration disappears. Carefully pare the lips, unite their opposing surfaces by sutures, so as to hide and rectify this ectropion, and you cure your patient. I admit this; but, if we look at ectropion in the eye, we find that the everted portion of the conjunctiva becomes inflamed, and inflames the rest of the conjunctiva, which inflammation the surgeon cures by such an operation as may prevent the eversion of the eyelid. In like manner, any considerable everted portion of the cervical mouth is not only unnaturally pressed and rubbed, as Dr. Emmet suggests, but it is offended by the acid fluids of the vagina, because it is accustomed to be lubricated by the alkaline secretions of the womb. As in the eye, so in the womb; inflammation passes from the ectropion to the rest of the mucous membrane, and may be cured by the cure of ectropion. In explaining his operation, Dr. Emmet attaches no importance to the deep drainage of long-congested tissues by that complete division of the cervical walls, which imply considerable loss, first of blood and then of serum, but I consider it a most important part of the treatment. It will be thus seen that I admit that Dr. Emmet has taught us the etiology of some cases of uterine ulceration, and added to our means of curing them; but his theory leaves unexplained the uterine ulceration, often observed in married women who have had neither child nor miscarriage, and in single women. There is no difference between the extensive exfoliation of cervical epithelium in these women, and that resulting from cervical ectropion. There is no difference in the symptoms of endocervicitis in these three classes of women, for it would be a miserable caricature of what has been taught by Dr. H. Bennet and myself, to make us suppose that a rim of cervical exfoliation determines serious uterine symptoms and permanent damage of health. Uterine ulceration is to be taken as the sign of the whole of the lining membrane of the cervix, and sometimes

of the body, being in the same condition, and of its submucous tissues being in a congestive, or otherwise unhealthy condition. These cases of endocervicitis in virgins, of which Dr. Priestley lately spoke as most difficult to cure, are quite out of the pale of Dr. Emmet's theory of uterine disease. It cannot be seriously proposed to cure them and the married women who have never conceived, by tracheloraphy, but any good gynecologist can cure such cases by much milder treatment, therefore I am in a position to say that the same treatment is sufficient to cure most of the cases of uterine ulceration that really originate in laceration and in cervical ectropion, without recurring to a serious operation, that may lead to dangerous loss of blood and to pelvic inflammation. Instead of performing tracheloraphy so frequently as it is proposed in America, I should like to see it reserved for a certain number of well defined cases. To do otherwise would be to lay the operation open to the charge of its being "*une débauche chirurgicale*", as it is called on the other side of the Channel.

3. *Cicatricial Tissue*.—Those who have written on general pathology, never tire of admiring the marvellous manner in which organs and tissues repair their damaged structure; they bid us remark that cicatricial tissue is always analogous to the nature of the repaired tissue, bones being mended by bone, tendons by tendon, the cervix uteri by fibro-cellular tissue. We gynecologists know that this cicatricial tissue can scarcely be distinguished from the original cervical tissue, and that it admirably does its work, softening at the appointed time, to let women be delivered with safety to mother and child. Nevertheless, Dr. Emmet and his followers look on this cicatricial tissue as something most dangerous to health. No matter how well laceration may have been repaired by nature—no matter how quiet may be the condition of the tissues—"if the womb be enlarged, or if there be neuralgia", an operation is necessary, says Dr. Emmet; but his pupils affirm that an operation is necessary whenever traces of laceration can be detected in an otherwise sound womb. They say it is best to remove cicatricial tissue, to prevent the possibility of future mischief, and the development of epithelioma.

No doubt, the presence of too much cicatricial tissue in a womb damaged by labour is to be taken into account in the etiology of long-standing cases of cervical enlargement; but this is not their only cause, as Dr. Emmet seems to imply by alluding to none other. The cervix is not unfrequently found greatly and uniformly enlarged, very hard, sometimes with an angry rim of ulceration dipping into the cervix, and a more or less troublesome set of uterine symptoms, in single women, and in unmarried women who have never conceived. I never did cut into so hard a cervix as when, some years ago, I had to re-establish a cervical canal in a lady aged 25. The cervical tissue in that case would have done famously for cicatricial tissue, for it screeched under the knife. Menstruation had been regular till marriage at twenty-three, and, most wisely, the honeymoon was spent in a riding tour. Riding soon caused great pelvic pain, but it was persisted in nevertheless, and brought on a permanent state of uterine congestion, heat, and tenderness, gradually checked the menstrual flow, and ultimately resulted in the hardness of tissue I have described. In sterile women, as in the case, I have seen similar hardness of tissue caused by what I call subacute or chronic inflammation; but in others the hardness has come out of itself, no one can tell how or why. These cases are described as hypertrophy or hyperplasia; I call them cacoplastic, because all I know about them is, that the cervical tissues are unhealthy, and that they lead to cervicitis, and to a miserable state of health. It is no matter to suppose, that tracheloraphy is now being performed in similar cases in America; and, if so, the operation must be advocated on other grounds than those of cure.

It is a very serious matter to be asked by our American friends to adopt tracheloraphy as the usual mode of treatment in cases that are very troublesome, the consequence of being cured without the slightest risk. Dr. Emmet does not warn the reader, that his operation may be followed by very serious and dangerous results; but one of his pupils gives an idea of the very serious nature of these accidents. Dr. Pallen (Brit. Med. Jour., 10th Jan., 1881) says: "Sometimes we cut very large vessels; and when they are found running in the dense hard cicatricial tissue, the bleeding goes on until the operator finds it impossible to stop it by any means. If the cicatricial tissue be not all cut away, it may interfere with the healing entirely, or may retract after the process of healing has commenced, to set up a secondary hemorrhage; there is a case here happening within a period of forty days of tracheloraphy, in May and June 1878, the first in the service of Dr. Emmet, at the Women's Hospital of New York; the third in the same service, in the service of Dr. Lee; and the second in a private practice of my own, where, on the sixth day after the operation, the patient, in attempting to rise from the room, stretched and ruptured the vessel, which some I showed by such profuse bleeding as to

endanger the life of the lady in question. The hemorrhage was only checked after all of the sutures were removed, the uterus emptied of clots, and nine new and deeper wires placed. Fortunately, her life was saved, and the operation succeeded." Fortunately indeed! And it is also fortunate that we thus get a glimpse of the dangers attending an operation we are asked to perform, if the womb be enlarged, and if there be neuralgia.

4. *Tracheloraphy the only Means of Cure*.—This is Dr. Playfair's argument in the paper he lately read. He has not been able to cure cases of enlarged cacoplastic cervix with ulcerative ectropion which often tell disastrously on women; so he tried tracheloraphy, and has found it to succeed admirably in about twenty cases. As Dr. Playfair mentions having tried all sorts of remedies before resorting to this operation, the first point to ascertain is, what he really did try in such cases. In the only case reported in his paper, he mentions having swabbed the body of the womb with nitric acid to abate flooding, but the only other topic mentioned as having been used is carbolic acid, and, of course, it was not to be expected that he could do much with it in such a case. The question is pertinent: for, in 1869, Dr. Playfair, in some papers which appeared in the BRITISH MEDICAL JOURNAL, mentions that, having extensively tried carbolic acid in cases of chronic uterine catarrh with cervical erosion, he was so well satisfied with its action in such cases, that he "has practically come to limit himself to the use of that alone". Dr. Playfair may have modified his treatment during the last ten years; but it would be really interesting to know what other topical agents he did try in the only case he gave, besides his solution of carbolic acid in glycerine and water, which cured everything ten years ago. I cannot accept tracheloraphy as a *sine qua non* of treatment in the very severe cases under discussion, because I have long been in the habit of curing cacoplastic hardness of the cervix, with or without endocervicitis, in the following way, which I can only give briefly, referring those who may want fuller details to the fourth edition of my *Handbook of Uterine Therapeutics*.

I begin by making an intracervical incision, right and left, with Sims's knife, the incisions being at least an inch long, and about a third of an inch deep at the mouth of the womb; and I seldom interfere with the bleeding, for I want to thoroughly disgorge tissues that have been congested for years. Three days afterwards, if I find that portion of the cervix projecting at the bottom of a large cylindrical speculum to be covered by sound mucous membrane, I rub it well with the solid nitrate of silver, so as to remove the epithelium from about as much of it as could be covered by a shilling, and I freely apply potassa fusca cum calce to this spot on the following day. The morning after this little operation, I apply to the cervix and a large tampon well laden with glycerine, and I repeat this every morning, so long as it causes a copious discharge of serum. Ten days after the operation, if the caustic, I freely swab the whole cervix with tincture of iodine, repeating this every third or fourth day for a month or six weeks; and I then suspend all active surgical treatment, relying on rest and treatment, medicinal and hygienic. When my patients return to me from the country, at the end of from four to six months, I often find them cured; that is, the womb is much smaller and softer, looking healthy, and without signs of endocervicitis. If, instead of being cured, the cervix is only improved, I repeat the successive operations as before. During the course of a long practice, it has repeatedly occurred to me to see no more of a patient, after my best remedy of the treatment; in that case, my well-known modesty has always made me assume that my patient has gone over to some of my distinguished colleagues. I have, however, been sometimes agreeably surprised to hear them return, after five or eight years, for some other ailment, and to learn that they had been recently cured of all uterine disease. It is more easy for me to state that Dr. H. Emmet would cure me, than I have been to see the treatment of the disease in question by patients have been cured. In the discussion which followed the reading of Dr. Playfair's paper, Dr. Matthews has most truly objected to the fact that, as Dr. Playfair stated, he cured his cases by "the potassium iodide" solution. Dr. Playfair Smith made a similar statement; and a staunch opponent of tracheloraphy, Dr. Crooke, has owned to me that, when he was in the largest field of practice of St. Bartholomew's, he had found out the great value of potassium iodide in the case under consideration. It will seem strange in America, where the knife is the extreme resort of worship, to find these men of note and put their faith in iodine in the treatment of cancerous cervix, or leucorrhoea, but so it is; and, with regard to the assertion that cases are cured chiefly by increasing the cervix and by hardening it, I have answered that at a considerable length in the fourth edition of my *Handbook*, and my readers have never been averse to it. I have still to define the cases to which I think tracheloraphy should be limited; but I must leave this for a concluding paper.

ON ESERINE AND PILOCARPINE IN GLAUCOMA,
AND ESERINE IN OCULAR NEURALGIA.

By SIMEON SNELL, L.R.C.P., M.R.C.S.,

Ophthalmic Surgeon to the Sheffield General Infirmary, and to the School for the Blind.

a. Eserine in Glaucoma.—The importance of estimating aright the value, or otherwise, of any remedy in this terrible malady is so great, that no apology is needed for the following practical remarks and relation of cases. I have for several years made use of eserine in the treatment of glaucoma; and much has been written on the subject by ophthalmologists in all parts.

As to the value, in certain cases of acute glaucoma, of eserine, there can be little doubt.* Several such have been recorded. It is, however, difficult to judge beforehand as to the precise case that will benefit by this drug. I apprehend, therefore, that, in this acute affection, its employment will be limited to those cases where, either from unwillingness on the part of the patient to submit to iridectomy, or other reason, the immediate performance of the operation is forbidden. Experience teaches the importance of not placing too strong reliance in the efficiency of the drug to the fatal postponement of the operation; and it seems to me particularly important to urge this, as those, not seeing much of eye-diseases, may be tempted, observing the very satisfactory results occasionally recorded, to resort to the use of eserine when operative measures should have been considered.

The following cases illustrate the good resulting from the employment of eserine.

CASE I.—W. R., aged 49, applied at the Sheffield General Infirmary on January 24th. It appeared that on the evening of the day but one previously (thirty-six hours), he had suddenly experienced severe pain in the left eye, extending into the forehead and temple, with very marked diminution of sight. When seen, he was still suffering acute pain. The cornea was "faceted"-looking, and the refractive media turbid. Tension = T_0 . He could see little more than shadows. His condition was unmistakably that of acute glaucoma. For, about three weeks previously, he had noticed "colours" round a flame, and thought his sight was not so good as formerly. He was taken into the operating theatre, with the object of performing iridectomy; but, I believe in consequence of his declining to remain as an in-patient, it was not done; and he was allowed to go home, with a one per cent. solution of eserine to be dropped into the eye four times daily. Three days later, he appeared with a cheerful face, stating that the intense pain subsided the same night that he commenced the instillation of the drops, and that vision had returned. He could now read Jäger 1; Tension, T_7 . February 3rd. Vision was = $\frac{20}{x1}$, the eye still being under the influence of eserine. February 10th. He was allowed to discontinue the drops. February 17th. His condition was quite satisfactory.

It should be added that, three or four months before the onset of this glaucomatous attack, he had been struck over the eyeball with a large piece of metal; the case may possibly, therefore, be considered "traumatic".

The result in the foregoing case is similar to what has happened before in my own experience, and in that of others; and some, at all events, would seem to have received permanent benefit.

In chronic glaucoma, the effect of eserine is more uncertain and less beneficial than in the class of case to which I have here just referred, and one will be very often disappointed in its use. On the other hand, the cases which I record further on show that it not uncommonly is of value, in some in material visual improvement, and in others in apparent arrest of the progressive character of the disease. I have noticed, also, an enlargement of the field of vision in a case otherwise benefited by its use. Here, also, there seems to me no very definite guide as to the cases it is likely to benefit, beyond that it appears essential that its myotic effect be well produced; but it does not, on the other hand, improve anything like the number of cases in which this indication is fulfilled.

CASE II.—E. H., aged 53, was admitted an out-patient, at the Sheffield General Infirmary, August 15th, 1879. The right eye commenced to fail in the previous January. There was no pain. His sight was much worse lately. Iridescence had existed three or four weeks. When seen, he read Jäger 10. Tension = $+T_2$. There was cupping of the discs.

* An acute case of glaucoma quite recently under treatment, where the exciting cause was atropine used for purposes of refraction, markedly exemplified the value of eserine in reducing the glaucomatous symptoms.

In the left eye, there were merely perception of light and marked cupping of the disc. Eserine drops were ordered. On August 26th, he read Jäger 2; tension was reduced. On September 16th, he read a good deal of Jäger No. 1. On October 14th, the drops were omitted. On the 28th, eserine was again ordered; he read Jäger 4. On November 5th, he read Jäger 2; tension was noted as normal; the drops were omitted. On the 25th, he read Jäger 2, easily. Several months later, his condition was equally good.

CASE III.—Mary E. S., aged 39, widow, was admitted as an out-patient at the Infirmary on September 26th, 1879. Inflammatory attacks commenced in the right eye, which was now blind, two years ago. The left eye began in a similar manner, somewhat later. At the time of her coming to the Infirmary, the tension of the left eye was increased ($+T_1?$); sight was impaired, though the exact visual acuity was not recorded. She had complained of pain at times, and had observed "coloured rings". The right eye possessed merely perception of light, and was occasionally painful. No operation on either eye was performed. On November 14th, eserine was prescribed. The vision in the left eye had become more affected (Jäger 16). The drops were prescribed at first for both eyes; but, in consequence of the pain in the head which they produced, their use was restricted afterwards to the left, then to the right, and lastly to the left again. The improvement of vision in the left eye is thus shown. On November 18th, she read Jäger 18; on November 21st, Jäger 4; on December 6th, Jäger No. 1; on March 26th, 1880, Jäger 2. Tension was normal. At this date, the eserine was entirely discontinued. On April 9th and July 9th, her condition was the same. On August 16th, she read Jäger 2 easily, or a newspaper. Twelve months later, she again came under my care for recurrence of pain, etc., in the right eye, which eserine had previously relieved. The condition of the left eye remained quite satisfactory.

The cases just related are evidence of the value of eserine in chronic glaucoma. They are recorded, not only because the results are excellent, but because the length of interval subsequently was enough to testify to the lasting effect. In both cases, moreover, I have reason to believe that, had any relapse occurred, the patients would have presented themselves at my clinique. I can recall several other cases, in which benefit has also accrued. I am aware that other observers have questioned the utility of this drug at all in chronic glaucoma; and, whilst my experience would lead me to differ from such an opinion, it compels me to admit that, in very many cases, its use is unattended with any benefit whatever. Here, however, operative procedures—sclerotomy or iridectomy—do not produce such happy and brilliant results, as the latter operation so frequently does in acute glaucoma; and a little delay for a trial of this drug is not fraught with such terrible risks as in cases belonging to the acute class.

The following is an example, though not with such good visual results as the preceding ones, of the efficacy of the drug in permanently arresting the glaucomatous process.

CASE IV.—John W., aged 58, came under my observation on July 6th, 1877. Vision in both eyes was seriously impaired. The right had gradually become so for a considerable time; while the left had been somewhat affected for twelve months, and was now becoming much worse. There had been no inflammatory attacks. With the right eye he saw fingers indistinctly; with the left he read Jäger 14. The tension of the right was $+T_2$; of the left $+T_2$. Both discs were cupped. On July 9th, the right eye was iridectomised. On July 31st, he read Jäger 20 with the right eye. On August 17th, the left read Jäger 16. Eserine drops were prescribed; the right eye read Jäger 18. On the 21st, the left eye read Jäger 10; tension was less. On the 24th, he made out some of Jäger 8. He said he had not noticed "coloured rings" so distinctly since he used the drops. November 20th. He still read Jäger 8. The eserine had been continued, except for an interval of a fortnight, until now; it was discontinued to-day on account of the conjunctival trouble it had occasioned. On March 5th, 1878, he had not used eserine since the last entry; vision was the same. On February 12th, 1882, I found the patient suffering from phthisis, and too ill to be examined; but he assured me that he did not think his eyes had become worse than when I saw him last, nearly four years ago.

b. Pilocarpine in Glaucoma.—In September 1880, I was desired, one Sunday afternoon, to visit a lady aged about 70. I found her suffering from all the symptoms of acute glaucoma, which had apparently commenced the day before. Vision was reduced to little more than shadows. Tension = $+T_2$. There was violent pain. Iridectomy was declined. No eserine was easily procurable, and I therefore ordered the use of pilocarpine in the form of "discs" (Savory and Moore). In the evening, after the employment of the drug twice, she expressed herself as much relieved. A few days later, the attack had passed off, and vision was completely restored. This good result continued until the middle of January this year (1882), when she again came to me with another acute attack.

tion, on the outer aspect of the eye, in my nearly 1,500 cases. I have seen but one case of variola on the central part of the cornea, in my student days in Bombay. This conjunctivitis, unlike the ordinary phlyctenular form, is found more frequently in one than in both eyes. In some severe cases of confluent variety, the inflammation is diffused, and assumes the type of catarrhal conjunctivitis. Chemosis occurs in about 1 per cent. of the cases. It is more liable to occur in variola hæmorrhagica, associated with hæmorrhagic blotches and petechiæ on other parts of the body, and then it is due to the exudation of the colouring matter of the blood in the tissues of the conjunctiva and the subconjunctival layer, and not to inflammation. Sometimes it takes months and months for the colouring matter to be absorbed and the disfigurement to disappear. The granular lids are formed usually in scrofulous children, and in two of these cases, where the ulcers were detected on the palpebral layer, I thought they might be due to the remnants of the variolæ. When the eyelids are swollen, acute variolous conjunctivitis is known by the patient complaining of the pain in the eyeball, increased on attempting to move the eye or to open it; a feeling of grittiness and running of hot tears. I have seen but one case of a purulent ophthalmia in my practice. I have here sufficiently drawn the peculiarities of the affections of the conjunctiva, and I need not describe their subjective and objective symptoms, as they are fully treated in the descriptions of the ordinary cases in works on ophthalmic medicine and surgery.

Treatment.—In mild cases, dropping a few drops of sulphate of zinc lotion (three grains to an ounce), three or four times a day, is all that is needed. In other cases nitrate of silver lotion (one grain to an ounce) answers well. I some cases, where the phlyctenular vascularity is small, circumscribed, deeper, and formed of larger vessels, I dust in the eye a few grains of powdered calomel. When it is associated with inflammatory redness and thickening of the lids, I smear unguentum hydrargyri subflavum between the eyelids; it is readily absorbed by the conjunctiva, and prevents them from sticking together. In severe cases with a good deal of muco-purulent discharge, I drop solution of nitrate of silver (10 to 20 grains to an ounce), after evertting the eyelids, followed, soon after, by the solution of chloride of sodium, to neutralise the excess of the silver salt, once a day, and followed during the rest of the day with cold water lint on the eye, and drops of the weak solution of sulphate of zinc. When the inflammation is chronic, solution of sulphate of copper (3 to 5 grains to an ounce); or vinum opii might be used with advantage in some cases, especially in those where there is turgidity of the circumcorneal zone, threatening cyclitis and inflammation of the deeper structures of the eye. In a few obstinate cases I have used blisters behind the ears with good results. In cases of granular lids, lapis divinus and dilute nitrate of silver points have been used. Iodide of potassium solution (3 grains to an ounce) might be used to promote absorption of the colouring matter of the blood exuded in the subconjunctival tissue in hæmorrhagic cases. Fomentation of poppy and belladonna is useful when there is pain over the eyebrows and supra-orbital headache; in these cases, smearing with belladonna and glycerine might be used with advantage. Internally I do not drug my patients much. Weak, anæmic, and scrofulous children require ferruginous tonics, as syrup of phosphate of iodide of iron, with or without cod-liver oil, chemical food, etc. In grown-up persons, tincture of perchloride of iron with glycerine and quassia, or citrate of iron and ammonia, with a vegetable tonic, are indicated. Cleanliness, fresh air, nutritious diet, form the very backbone of treatment in these affections, as in all the maladies human flesh is heir to.

Variolous Corneitis.—It has been appropriately remarked that cornea serves as an indicator of disease and malnutrition. Whatever cause induces the poverty of the blood, disease, starvation, or age, also tends to the malnutrition of the cornea, resulting in inflammation, opacity, or degeneration. It is one of the most sensitive organs of the body and is most readily affected by the slight derangements of circulation. The glow of life and intelligence of a healthy person is read in its brightness, whilst the painful anxiety and vacant stare of another depict his misery on its lifeless surface. Consequently, that acute exanthematous diseases like variola should tell on its nutrition and induce inflammation in its structure, is only natural as cause and effect, in cases where there are anæmia and exhaustion. The nutrition of the cornea is performed by dialytic action, and is dependent on the vessels of the conjunctiva and circumcorneal zone, and it is for this reason that in cases of chronic conjunctivitis opacity of the cornea is the result. The cornea is also affected in scrofulous subjects, in whom chronic conjunctivitis is of frequent occurrence. To these constitutional causes, may be added the vitiated secretions of the Meibomian glands and conjunctival tissue and granular lids as the local causes. It is an inflammatory affection, and I think it can be appropriately designated "variolous corneitis". In severe and neglected cases it is associated

with iritis, choro-iritis, abscesses, suppuration of the eyeball, and its disorganisation. It is still described by some as "corneal ulcer", from want of correct understanding of its pathology. I cannot do here better than quote Mr. Macnamara's remarks on the general pathology of corneitis:—"The cornea we know to be a non-vascular structure; and formerly, when hyperæmia was regarded as the first and most essential step in inflammation, it was difficult to see how the cornea could be the seat of it. But now that we have learnt to look rather to the elements of a tissue, as the point of departure for inflammatory changes, and to regard vascularity and hyperæmia, however important, as accessory phenomena, the cornea becomes one of the most appropriate tissues for the study and illustration of the modern doctrine of vascular pathology."

The frequency of this affection in my cases, as well as in those of Mr. Marson, is nearly the same—viz., 1.7 per cent. It more frequently occurs in one eye than in both. It is of much more frequent occurrence during the stage of scabbing, from the twelfth to the fourteenth day of eruption, when the patient is getting over the secondary fever, and is associated with the formation of furunculæ and abscesses in other parts of the body, in severe and confluent cases. It is for this reason that Dr. W. Mackenzie describes it as "corneitis postvariola", or "secondary variolous ophthalmia". But we do come across cases, especially those of scrofulous children and others, in whom the disease has been mild and of discrete variety, where it makes itself manifest during the course of the first week, and in whom the secondary fever and subsequent exhaustion is *nil*; and the only complication is the eye affection. It generally begins at the margin of the cornea, and then extends to the centre. In rare cases, it is developed in more than one point at the same time, or is central; these cases must be looked upon with grave apprehension. It comes on very insidiously, and often without any pain or knowledge of the patient; and it requires a careful watch on the eyes of the patients to discover it early, and nip the malady in its budding stage. Occasionally, it runs on a very rapid course, involving the cornea and deeper structures within forty-eight hours. As Marson remarks, an experienced eye can sometimes prognosticate its approach, from the dull and lifeless surface of the cornea after exhaustion from secondary fever. But it is impossible to do so in mild and discrete cases of scrofulous subjects.

When the variolous corneitis commences, the surface of the cornea looks dull, dry, and, at the seat of lesion, uneven. Sometimes, the superficial or epithelial layer is raised so much, by the rapid cell-proliferation, that I was once inclined to believe that these elevations were due to the formation of vesicles; but such is not the fact. Within a few hours, this spot is rendered hazy and a white point appears, which becomes more and more extensive and nebulous. In some cases, it is attended with severe pain, and much photophobia; but these symptoms are not so frequent in this variety of corneitis as in the others. By proper care and treatment, the mischief ends here; the inflammatory exudation is absorbed, and no traces of the disease are left. But when it extends a stage further, the inflammation attacks the laminae of the cornea proper, the corneal corpuscles swell, are rendered more opaque by granular deposits in them, and are increased in number. The inflammatory exudation takes place between the laminae of the cornea proper, I believe, through the system of canals in which the processes of these corpuscles lodge. A stage further, and an abscess in the cornea is formed. This abscess is more frequently opened on the surface than in the anterior chamber, giving rise to partial staphyloma and prolapse of the iris. It is only in rare neglected and insidious cases, running on to rapid disorganisation, that total staphyloma, acute glaucoma, and suppuration of the eyeball, take place. In two of the microscopical slides prepared for me by Dr. Klein, I have seen micrococci in the anterior epithelial layer, at the seat of the inflammation. Although I am inclined to the parasitic theory of the infectious diseases, I am not prepared to class these micro-organisms in their etiology. They have been sufficiently demonstrated in all of them, but as yet as their concomitants and in their advanced stages, and not as their causation. The loss of sight in this affection is frequently due to leucoma, sometimes to partial staphyloma, and rarely to total staphyloma. When the lesion is situated in the centre, and associated with granular lids, it is in the form of a "pannus". In severe cases, it is more or less associated with iritis, and rarely with cataract. In the latter complication, I have frequently seen the lens escape; and, in one case, I have performed iridectomy, and removed the lens, through the opening of the abscess, with good result.

Treatment.—Constitutional treatment plays a prominent part in this affection. Nutritious and generous diet, that can be readily assimilated by convalescents; wines to stimulate circulation and increase the appetite; and tonics—are necessary. Locally, in all these cases, it has been my plan to use lotion of belladonna with sulphate of copper, with

tepid water, placed over the eye with a piece of lint soaked in it. I have invariably found it to answer its purpose. When it is associated with iritis, drops of liquor atropiæ sulphatis are used as usual. When an abscess forms in the cornea, it is best to open it. In one case of acute glaucoma and disorganisation of the eyeball, I performed the operation of enucleation. In cases of partial staphyloma and leucoma, it is better to wait, and leave the patients in the hands of the ophthalmic surgeons for proper treatment. In children, and in some patients, I have found it exceedingly difficult to keep their eyes at rest—an important factor in the success of their treatment—and prevent them from scratching. In these cases, I have used the Cellini eye-protectors, of which Dr. L. Herbert of Paris speaks highly. They are made of zinc, and are of two varieties, perforated and non-perforated. I prefer the latter, as they keep the eyes cool. They are of the size and shape of the eyelids, over which they are fixed by an elastic band, that goes round the head. They keep the eyelids at perfect rest, and prevent them from scratching. When worn once or twice, they are of no more trouble to the patients than spectacles are. I am not prepared to vouchsafe the physical and chemical properties claimed for them.

THIRTY-THREE CASES OF CONCURRENT VARIOLA AND VACCINIA, WITH ANALYSIS AND REMARKS.

By R. D. R. SWEETING, M.R.C.S. Eng., etc.,
Medical Superintendent of the Fulham Small-pox Hospital.

THE presence on the same subject, at the same time, of the eruptions of two febrile disorders, which are variously regarded as either essentially the same, or as allied members of the same group, is in itself of sufficient interest to be noted, were it not for the wider and deeper significance of the condition variola-vaccinia, as affording us some appreciable criterion of the modifying influence of vaccination performed during the incubation-period of small-pox. The numerous letters bearing on this subject that have appeared in the medical journals from time to time sufficiently show the widespread interest taken in the subject; and hence I have been induced to tabulate the following consecutive cases, noticed by me at the Fulham Hospital during the epidemic of the past year, and to attempt to formulate some conclusions from the data afforded.

TABLE A.—Primary Vaccination.

Age.	Day of Incubation-period* on which Vaccination was Performed.	Character of Vaccination.	Variety of small-pox.	Result as to Recovery and Complications.
1. F. 10 years.	Tenth	4 recent vesicles	Confluent	Prolonged recovery, and dis-
2. M. 4	Probably tenth	1 recent pustule	Discrete	Rapid recovery.
3. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
4. M. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
5. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
6. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
7. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
8. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
9. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
10. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
11. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
12. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
13. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
14. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
15. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
16. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
17. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
18. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
19. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
20. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
21. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
22. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
23. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
24. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
25. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
26. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
27. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
28. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
29. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
30. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
31. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
32. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.
33. F. 4	Probably ninth	1 recent pustule	Discrete	Rapid recovery.

from this, it being probably only a coincidence. The ages range between two months and thirty years, the majority being under five years. Most were vaccinated on the third and on the eighth days of the incubation-period, the times ranging through almost all the twelve days of that period. The vaccination observed on admission consisted usually of pustules, which were mostly three in number. The variety of small-pox in most of the cases was confluent; only one death occurred, and recovery was noted as prolonged and attended with complications in seven, rapid in two.

Remarks.—In order to gauge the amount and degree of protection afforded by vaccination in these several cases, we must compare the variety of disease and result of attack, first with the day on which the operation was performed, and then with the number of pocks produced. We thus notice that the majority of the confluent and coherent cases were vaccinated from the eighth to the twelfth day of the incubation-period, and that, in the discrete, this took place within the first three days. The fatal case was vaccinated at the end of the period, the majority of the prolonged and complicated recoveries during its latter half; whilst both the rapid recoveries were early vaccinated: one on the third day definitely, and the other, from the character of the pustules, probably also about that time. On comparing the variety of disease with the number of resulting pocks, we find most of the confluent and coherent cases vaccinated in three places, whilst the discrete are not vaccinated in less than four. The fatal case showed only three vesicles; three only of the seven protracted recoveries were vaccinated in four places, whilst the rapid ones showed four and five pocks respectively.

TABLE B.—Revaccination.

Age.	Day of Incubation-period* on which Vaccination was Performed.	Character of Revaccination.	Character of Primary Vaccination.	Variety of Small-pox.	Result.
1. F. 10 years.	Fifth	4 recent vesicles	1 fair mark	Confluent	Rapid recovery.
2. F. 10	Third	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
3. F. 10	Twelfth	3 recent vesicles	2 fair marks	Confluent	Rapid recovery.
4. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
5. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
6. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
7. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
8. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
9. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
10. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
11. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
12. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
13. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
14. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
15. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
16. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
17. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
18. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
19. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
20. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
21. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
22. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
23. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
24. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
25. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
26. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
27. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
28. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
29. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
30. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
31. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
32. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.
33. F. 10	Fifth	2 recent pustules	1 fair mark	Discrete	Rapid recovery.

* reckoned as twelve days.
† surrounded by a crop of small vesicles.

Analysis.—Females here also predominate; the ages range from three to twenty-nine, the majority being between fifteen and twenty. More were revaccinated on the fifth and sixth days of the incubation-period than any other, the times ranging between the third and twelfth days; the revaccination consisted mostly of pustules, and generally to the number of three. The primary vaccination was important in all, in most of them of a very meagre description, both in number and quality. The variety of the disease assumed in most of the cases was the discrete form; two deaths occurred, and recovery was noted as protracted in one case.

Remarks.—Though hardly bearing on the subject of this paper, yet I would draw attention to the fact that not one of these cases was well vaccinated primarily. All the discrete cases were revaccinated within the first five days of incubation, the majority on the fifth day; in the coherent and confluent, on the other hand, the operation took place from the sixth to the twelfth day. The fatal cases were revaccinated on the seventh and twelfth days respectively, and the protracted recovery on the eighth. In most of the confluent and coherent cases, three pocks were noted; in most of the discrete, only two. Of the deaths, one showed five pustules; the other three vesicles, which were of an abortive character.

Conclusions.—1. Primary vaccination, after definite exposure to the disease of small-pox, should be performed within three days and in four places, in order to ensure a rapid unobscured attack, and a rapid recovery. 2. Revaccination should not be delayed beyond the fifth day after such exposure, in order to ensure a discrete attack and recovery.

ELEVEN ANTISEPTIC OVARIOTOMIES.

By J. GREIG SMITH, M.A.,

Surgeon to the Bristol Royal Infirmary.

NINE of these operations were performed in the Bristol Royal Infirmary, two in private. The first two of the infirm cases were done in a small ward set apart for special cases; the rest were done in the general operating room, and no restrictions were placed on the admission of students or visitors. All the cases were successful.

Of the individual cases, no special account need be given. In all except two, adhesions were present. One was a case of double Fallopian cyst; one of the cysts being full of pus, and as large as the head of a newly born child. In this case also, both ovaries, being enlarged and cystic, were removed. In one case, the tumour, large and composed of many cysts, was strangulated from rotation of the pedicle, and adherent by every part of its surface to omentum, uterus, bowel, or bladder. In another case, the cyst-wall had to be peeled off the under surface of the liver.

Two of the cases might be described as peculiarly unpromising. The tumour in the first had grown for the most part during a pregnancy, and was removed seven weeks after confinement. It was composed of a great number of small cysts, containing a thick, ropy, brownish-coloured material. On the surface, the cysts were very numerous and thin-walled. Tough, short adhesions attached chiefly to the numerous sulci between the cysts existed everywhere, but were particularly numerous and strong on its posterior surface deep down in the pelvis. During the necessary manipulations, many of the cysts were ruptured, and their contents escaped into the abdominal cavity. So thick was the material which escaped, that sponges did not absorb it, and it was scooped out with the hand. In this case, troublesome attacks of diarrhoea, without pyrexia, retarded the recovery.

In the other unpromising case, the difficulties arose chiefly from adhesions. The uterus, much enlarged and flattened out, appeared to be incorporated with the tumour. It was only by the introduction of an uterine sound during the operation, that certainty as to a vaguely defined boggy portion of the tumour being the uterus was arrived at. There was no pedicle, but, after some dissection, the fundus uteri was separated from the tumour, and a piece of broad ligament which contained several large vessels was freed, ligatured, and divided. The cyst was practically dissected out of the pelvis. The bleeding was profuse, particularly from the whole of the posterior surface of the uterus, and the actual cautery was freely used. The uterine tissue was lacerated in two places; and at one spot, where the blood continued to well out in spite of the cautery, a bunch of fibre was included in a catgut ligature. The patient made an excellent recovery.

The following are brief notes of the mode of operation pursued throughout.

Antisepsism.—I can conceive that the best possible results might be got in a new hospital with plenty of cubic space and the observance of scrupulous cleanliness—that is to say, cleanliness which involves the use of antiseptics for fingers, sponges, and instruments. And, on the other hand, it is easy to see how an injudicious application of Listerism might do much harm. The objections against the use of the spray in general may be urged with peculiar emphasis in the case of ovariectomy. The operation is a long one; and the opportunities for causing carbolic poisoning, either by absorption through the lungs (which I believe to be the most likely) or by the peritoneum, are thereby increased. Under the most judicious use of antiseptics, these risks must be run; but these risks are, I believe, sometimes needlessly increased. A good deal of harm may be done by carrying the lotion bodily into the wound by sponges, hands, or instruments; but I think it likely that more harm may be done by the spray—using it in too large or too dense a cloud. The lower portions of a very large cloud of spray form into drops of considerable size, which fall in a shower into the abdominal cavity, and must represent a considerable amount of lotion before the end of a prolonged operation.

Then, on the other side, it seems to me that ovariectomy is an operation in which septicism is more likely to be introduced by actual contact with instruments or fingers than by impure air; and surgeons who use antiseptics on fingers and instruments only, thereby avoid the chief source of septicism; while, at the same time, by avoiding the spray, they escape the dangers which may arise therefrom.

But I think we may use Listerism in ovariectomy so as to get all the good it can give, and at the same time shun all the harm it can do. A very fine spray from one nozzle, carefully graduated to a strength of one in forty, will be safe enough, provided currents of air be not produced in the operating room. And, if we keep a watchful eye on all the other means (and they are numerous enough) whereby carbolic

lotion may be introduced into the abdominal cavity, I think we need not dread the dangers of Listerism. In such an infirm case as ours—old, over-crowded, and badly situated—I should not hesitate for a moment in choosing between the dangers of spray and no spray; then the dangers of septicism are much greater than those of antisepticism. And even with the surroundings favourable, I think it probable that a better series of results would be got under carefully applied Listerian *asepticism* than under the form of *antisepticism* employed by ovariectomists who do not use the spray.

The antiseptic dressing is not disturbed for a week or ten days, when it is removed and the stitches taken out. A gauze binder keeps the dressing in place; and this may be released on the second or third day, should there be much tympanites. The wound is healed throughout when first seen.

Drainage I have not used. In one case I re-opened the abdomen at the end of a week and washed out the cavity with 1 in 40 carbolic lotion, because a rise of temperature and some tenderness made me fear that peritonitis was coming on. These symptoms at once improved after this.

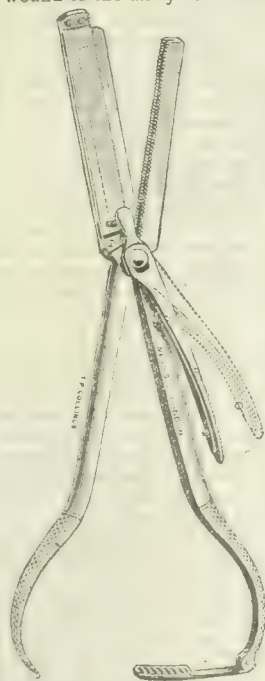
Incision.—Statistics have been given to prove that the length of the incision has an influence on the mortality. But I think this influence must be infinitesimal. It is not the incision that kills, but the sort of work which has to be done behind the incision; and a long incision usually accompanies a difficult case. Looking at the extreme importance of gentleness, and the avoidance of bruising, during the necessary manipulations, I believe that less harm would be done by making an opening an inch too long than a quarter of an inch too short. More than this: if I thought that a few minutes could be saved in the delivery of a multilocular cyst, by prolonging the incision for an inch or two, I would rather do this than spend time in tapping secondary cysts, and running the risk of letting their contents escape into the abdominal cavity. On these grounds, I do not seek to curtail the length of the incision; in nearly every case, I have exceeded the limits usually prescribed.

The abdominal wound has been closed in the following manner. Two thick silver button sutures are carried through the substance of the recti muscles, and these are made to traverse the peritoneum. Three or more deep silk sutures, alternating with the former, include skin, fat, and muscle; and the closure is completed by interpolated horsehair sutures, passing through skin and fat. To include peritoneum, muscle, and skin in each suture, seems to me to be practically unnecessary, and at the same time to involve a serious delay. The deep and strong silver sutures fix the muscles, and transfer intra-abdominal strain from the wound to the uninjured tissues beyond; and the gentle apposing influence of the other sutures fulfils the further requisites for permitting of primary union.

Pedicle.—In all humility, I would venture to say, that I think that ovariectomists have shown more than a necessary amount of caution in dealing with the pedicle. A few small vessels, with sluggish circulation, enough to supply a pound or two of not very vascular cellular tissue, are what we usually have to deal with. We never meet with a vessel of the magnitude of the radial or ulnar, and torsion or ligature will suffice for these. I have had no hesitation in using ordinary catgut—and that not of the thickest size. If the pedicle be dragged upon while the ligature is being applied, the central portions have a tendency to retract after being cut through, and the ligature is then liable to slip. If the pedicle were dense, I should not transfix with a needle; a vessel might be pricked, and will go on bleeding behind the ligatured portion.

Adhesions.—I have used catgut for all adhesions requiring ligature. Forcible pressure is of very great value. There is a class of adhesion, usually somewhat extensive, which is too vascular to be simply torn across, and yet not vascular enough to seem worthy of the time and trouble spent in tying it in portions. For the treatment of such adhesions, I have thought that our armamentarium would

be improved by such an instrument as that shown in the woodcut. It combines crushing with cutting. The adhesion, grasped in the blades of the instrument, is violently squeezed; and then, by



pressing down the lever, is cut through beyond the crushed portion by a concealed blade working on hinges. The crushed portion of adhesion left behind is three-sixteenths of an inch in breadth. Some saving of time and trouble may be effected by the use of this instrument.

Tapping the Cyst.—All the trocars with which I am acquainted are liable to permit of an escape of fluid by the sides of the puncture. To obviate this, I use a forceps which, when closed, forms a hollow tube accurately fitting the simple trocar used. The trocar is plunged in, and is tilted, so that its contour bulges the cyst-wall; the forceps then grasps cyst-wall and trocar where the puncture is made. Thus about an inch of cyst-wall is firmly compressed against the trocar, and a firm grip of the tumour is got, enabling us to move it about without risk of the fluid escaping.

Rapidity of Operation.—Much of the mortality after ovariectomy is caused by shock. Most of the other death-giving factors have been overcome or made to recede; but the influence of shock remains about stationary. There can be no doubt that, over and above the mere operation, the prolonged anæsthesia must be an important contributor to the patient's collapse. In one of my cases, where the patient was taken to the operation-room, anæsthetised, and returned to bed within half an hour, the absence of anything like shock impressed me very much. The amputation of a finger might have been attended with no more immediate general disturbance. Consistently with carrying out a thoroughgoing treatment of every detail, I think we ought to be as rapid as possible. A few moments saved here and there in such a proceeding as ovariectomy will sum up to a goodly aggregate before the operation is over. And these five or ten minutes in a case which is hovering between life and death may kick the beam on the right side.

FOREIGN BODY IN THE BLADDER.

By F. SWINFORD EDWARDS, F.R.C.S.,

Assistant Surgeon to the West London Hospital, etc.

J. L., aged 40, a labourer, was admitted into St. Peter's Hospital on November 8th, 1881. He had suffered with stricture of the urethra for six or seven years. Twelve months previously, the stricture was dilated by catheters up to No. 10 English. As his urine was continually dribbling away, and no instrument could be passed, he had sought admission into the hospital.

After hot baths and a morphia suppository, a catgut bougie, No. 2 French, was passed by our house-surgeon, Mr. Woolley. On the following day, a No. 4 French bougie was successfully introduced. On November 10th, the same bougie was again passed in the morning. Toward 7 P.M., as the patient had not been able to empty his bladder all day, the house-surgeon endeavoured to pass a catheter, but without avail—so he introduced a No. 4 pilot bougie and screwed on a catheter, which was passed on into the bladder. By this means, the patient's urine was drawn off. On withdrawing the instrument, the patient gave a violent start, just as the junction between the pilot bougie and catheter was passing through the stricture, the effect of which was that the bougie was left behind on the proximal side of the stricture, so as to occupy the bladder and prostatic urethra; the stricture being situate in the membranous urethra. The long urethral forceps were at once passed down, but without success. As the stricture had been dilated to No. 12, and the patient was suffering no pain nor inconvenience, he was left for a while.

Two days after this (November 12th), I saw the patient for the first time; and decided, without further delay, to divide his stricture, and, if possible, to extract the bougie from the bladder through the urethra. The patient being placed under ether, internal urethrotomy was performed by means of a Fergusson's manoeuvre urethrotome. After which, I was enabled to pass a small-sized lithotrite, by which the pilot bougie was quickly loosened and removed from the bladder. The bougie, which was twelve inches long and of No. 4 French gauge, was found already to have, in places, become adherent to the lining of the bladder.

The after-history of this case is not in any way remarkable. The patient left the hospital a fortnight later, able to micturate freely and comfortably. He passes a No. 22 bougie occasionally.

Mr. James C. Marshall, resident in the hospital, after performing a Fergusson's operation, introduced the bougie from the bladder by means of a Fergusson's manoeuvre urethrotome. Marshall and the late Dr. J. H. J. (1871). Mr. Marshall, in a letter, in his work on "Internal Urethrotomy," (London, 1880), narrates a similar case, in which the patient, a labourer, No. 3, by means of a labourer. The bougie had become adherent to the lining of the bladder, and the stricture was divided by the Fergusson's manoeuvre urethrotome.

bladder. The surgeon ruptured the stricture by Holt's method, and left the bougie for future extraction.

These cases show how important it is to see that the connection between the pilot bougie and catheter (or whatever form of instrument is intended to be passed) is firm. Again, the guide, at its junction with the screw, needs careful inspection, as I have frequently found the gum-elastic quite rotten there, and in an unfit state to be used. The chance of this occurring is lessened by careful attention to cleansing and drying after use.

SURGICAL MEMORANDA.

SYPHILIS VERSUS CANCER.

APROPOS of cases already related in the JOURNAL, where a differential diagnosis as regards these two diseases presented some difficulty, the following case of pharyngeal disease may be of interest.

History.—A very respectable married woman, aged 50, living far out in the country, with no family, began to suffer from her throat four months previously to my seeing her; the first symptom being pricking pains like a knife running through both sides of throat. Since then, steady increase of difficulty and pain in swallowing, so that for the past month only liquid nourishment could be taken, and she was obliged to hold the fluid for some time in her mouth, and let it trickle down into the gullet by very slow degrees. Flesh and strength were reduced; she had no appetite, and was confined to bed. She had been treated in Dublin with gargle and bitter mixture without results. Pulse 120, small and thready. The attention was at once arrested, on entering her room, by the extraordinary fetor emanating from the patient. It was of that peculiarly pungent stinking quality, characteristic of cancer in its later stages. Its sickening taint pervaded the room, and clung to the hand, despite repeated washings, after examining the diseased part.

Physical Condition.—The uvula and soft palate were unaffected on the buccal surface. The back of the pharynx was covered thickly with purulent secretion. On examination with the finger, a rugged irregular mass was felt, occupying the back and right side of the pharynx: the surface was knobbed, hard and bossy: the secretion very adherent, even after repeated douching, so that the colour of the part could not be ascertained satisfactorily. Laryngoscopic inspection was unsuccessful, owing to irritability of the throat, and constant welling of frothy fluid: the voice was unaffected. There was tenderness on pressing laterally over the transverse processes of the vertebrae, and on rotating the head, which she could not do herself; a distinct grating sensation was felt, not easily localised.

The age of the patient, the circumstances, and especially the peculiar fetor, seemed to me to indicate cancerous disease. A gloomy prognosis was made, and palliative treatment, with iron, was adopted without benefit. Shortly afterwards, I learned from the apothecary that the patient had consulted him, two years before, for a rash over her entire body, including the face, which went away after taking medicine, which, she said, "rotted her teeth." Moreover, her husband had been treated for syphilis at some establishment a year or so before that. Acting on this information, mercurial inunction was prescribed, and in a few days, along with it, three-grain doses of iodide of potassium thrice daily in treacle, as viscid fluids were more easily swallowed. Immediate improvement took place: in a week she could eat meat, and, in a few days more, anything she liked. The fetor and discharge rapidly and permanently disappeared; the gummatous infiltration also diminished steadily, and perfect cure resulted: leaving, however, an adherent condition of the soft palate and the wall of the pharynx, which produced considerable contraction of the mass, pharyngeal aperture, with consequent obstruction to normal respiration. An accidental discovery saved the patient's life, as the disease was, to all appearance, advancing surely to a fatal termination.

THOMAS DRAPES, M.B., Ennisclorthy.

RETENTION OF URINE.

There is always, one may be of some practical interest in showing the value of opium in certain conditions of stricture. W. A. Wood, Esq., was the subject of a tight stricture of the urethra, such in the last resort as the urethral portion. When I was called to him he was in great distress, not having passed his urine for about 24 hours. Knowing by experience, in such cases, the futility, if not mischief, of using a catheter, I gave him two grains of opium, ordered fomentations and gruel, and left two more grains to be given, if necessary, during the night. In the morning, I found he had passed a tolerably easy night. He had taken the second dose of opium, the spasm had subsided, and he passed his urine naturally. No other treatment was needed.

HENRY MOYNOTT, Ludlow.

CLINICAL MEMORANDA.

CASE OF RHEUMATISM WITH HYSTERIA.

I WAS called, a short time ago, to see a healthy female, about twenty-five years of age. She was standing at a large iron gate, and the wind, being very high at the time, shut the gate with great force upon her arm. She was immediately sent to the hospital, when the wound, which was a very severe one in the thick fleshy part of the arm, was sewn up, she having had chloroform administered to her. No bones were injured. The wound healed quickly, and she was sent home, cured, to her friends in the country. Having a long distance to travel, she caught cold on the journey, and was seized, the second day after her arrival, with a very sharp attack of rheumatism, all her large joints being much swollen, hot, and tender, and with all the other well-marked symptoms of rheumatism. On the evening of the second day after this attack, I was called in great haste, and found her suffering from hysteria, the paroxysms being very frequent and violent at times. She allowed me to grasp the swollen wrists and ankles apparently without feeling pain, although she could not let me handle them the day before. In this state she continued several days, and recovered from the rheumatism in an unusually short time for such a sharp attack. I have known the family for many years, and there is nothing in the family history to account for such an attack. The girl herself blames the chloroform given her when her arm was injured, and says she has never got over its effects upon her. But one can scarcely suppose that this could be the cause of such an attack from its administration at such a remote period. The case is interesting, as it is seldom one meets with such a complication in the early stage of acute rheumatism.

R. CRAIG.

THERAPEUTIC MEMORANDA.

ON THE TREATMENT OF ECZEMA BY DIET.

ALTHOUGH I have no doubt that Banting's diet is of great service in the treatment of some cases of eczema, yet I think that if the case published by Mr. Creswell Rich, in his article on the subject in the JOURNAL of May 13th, had been treated by the pitch and vaseline alone, without any restricted diet being enforced, the result would have been equally satisfactory.

During the last twelve months I have had in my practice two very severe cases of chronic eczema, which I treated by local applications of vaseline and oil of cade. The first case was that of a boy, aged 8 years, whose trunk and thighs were covered with eczema since he was three months old, and who had been under the care of several medical men without deriving any benefit from their treatment. I prescribed the oil of cade ointment, and cod-liver oil and syrup of the iodide of iron internally. In six weeks the skin was perfectly healthy. The second case was that of a girl, aged 22, whose entire body from head to foot was affected with the disease. The external treatment in this case was supplemented by the administration of arsenic internally. I admitted her into the Lynton Cottage Hospital on January 16th, 1882, and she is now about to be discharged perfectly well. While in the hospital she was allowed a very liberal diet. The strength of the ointment I employed was two drachms to the ounce of vaseline.

F. C. BERRY, B.A., M.B.(Dublin).

I AM unable quite to admit that the treatment of eczema by a Banting diet as recommended by myself in the JOURNAL of April 8th, is "by no means a new departure in the dietetic treatment of skin disease." I recommended it only for the eczema of fat and lymphatic infants, because I had as yet no data before me for extending that restriction. If Mr. Rich has even for "several years" pursued a system of dietary of a different kind, that does not impair the novelty of my suggestion. He explains very clearly what it is that he names a Banting diet. According to him, it consists in "the omission of milk, and an excess of saccharine and starchy food from the diet"—merely this; only that its efficacy is very much enhanced by the addition of "a little cod-liver oil." Now this addition of the richest and most fattening of oils is, I submit, quite inconsistent with the most essential of the conditions of Bantingism, I should be disposed rather to call it a Rich diet than a Banting diet. But Mr. Rich seeks to prove that this somewhat inverted Bantingism is of avail, because in a solitary case of eczema which he apparently quotes from hearsay, an ointment of pitch and

vaseline had improved a patient who happened at the same time to be "Bantingised." It is a well ascertained fact that pitch ointment will, quite unaided, often cause a case of chronic eczema to recover completely.

Bantingism appeared to me of benefit in the eczema of fat and "pasty" infants, because I had tried it unaided by other means in that particular condition, and had found it, thus tried, to be of decided use.

BALMANN SQUIRE,

Senior Surgeon to the British Hospital for Diseases of the Skin.

THE HYPODERMIC ADMINISTRATION OF AMYL-NITRITE.

I HAVE administered amyl-nitrite hypodermically thirty or more times during the past eighteen months. In all cases, a ten per cent. solution in rectified spirit was used. In no case did any untoward inflammatory or suppurative symptoms occur afterwards. The action of the drug was immediate in every case, the subjective phenomena being like those experienced when using the ordinary methods of administration. The spirit solution appears to be an excellent preparation for use, as a small quantity kept in an ordinary stoppered bottle for some months retains its full efficiency at the present time. The dose usually administered has been ten minims of the solution, equal to one minim of amyl-nitrite. In lumbago, where the patient is seen at the commencement of the attack, and the disease is not of long standing, the drug given in this manner instantly relieves the symptoms; a patient who is unable, previously to its administration, to bend the trunk without the most exquisite pain, five minutes afterwards can do so quite readily. In a case of paraffin-poisoning, where the patient was in a state of collapse and almost pulseless, one administration (inhalation having been ineffectually tried) brought on an immediate resumption of cardiac function, the man speedily recovering. Its action in this case would, I apprehend, be due to the relief momentarily given to the congested centres by the peripheral hyperæmia induced. In another case, one of duodenal colic, the patient was found rolling on the floor from the acuteness of the pain; when, on injecting fifteen minims of the spirit solution, the pain disappeared as if by magic, and the patient was at once able to resume his ordinary position. The value of this drug by ordinary methods of administration has already abundantly demonstrated how great a boon the discovery of Dr. Lauder Brunton is in the hands of the profession, notably in cardiac angina; and I feel confident that its utility may be still further enhanced by giving it as here recommended, hypodermically.

J. J. FREDERIC BARNES, M.R.C.P., F.R.C.S.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ROYAL PUBLIC DISPENSARY, EDINBURGH.

CASES IN THE SKIN DEPARTMENT.

(Under the care of Dr. W. ALLAN JAMIESON.)

CASE 1. *Pityriasis Maculata et Circinata*.—A. D., aged 21, a compositor, applied on February 8th, 1882. Six months ago, he noticed some roughness on his back between the shoulders. This gradually spread down the back, then invaded the chest near the sternum, and extended downwards. He was in the habit of washing with soap and water as far as the waist three times a week, and took an entire bath once a month. He said he was in good health; but his tongue was thickly coated with white fur. He was occupied from morning till night. The whole of the front of the chest and the upper part of the abdomen, the sides of the neck between the clavicles and scapulae, and the back from the spines of the scapulae to the lower dorsal region, were the seats of an eruption. This consisted of rose-red macules, from a pin's head to a pea in size, and of lines, also bright rose-red, about one-twelfth of an inch in breadth, either annular, crescentic, or gyrate, and each enclosing a space of greater or less extent, and of a fawn-yellow colour. The lines or spots were elevated about a line above the surface, and were sharply defined. The eruption was set thickly on the affected parts, and was sparingly covered with fine bran-like scales, easily detachable. It was said to itch a little, but there

were few excoriations. Scales were removed from various parts, treated with liquor potassæ, and examined; but no trace of fungous elements was discoverable. He was directed to wash well with soft soap and warm water, to dry the parts carefully, to sponge with vinegar, and immediately afterwards with a lotion of hyposulphite of soda (one drachm in one ounce) with a little glycerine. On February 11th, this treatment had been applied to the chest only. There the previously rose-red lines and spots had faded, and were represented by faintly marked lines having a pearly glance, and not now elevated above the surrounding skin, enclosing areas no longer scaly, but still pale fawn. On the 18th, the places which had previously been the seat of eruption remained rather more pigmented than the neighbouring unaffected skin. Itching had entirely ceased.

CASE II. *Pityriasis Maculata et Circinata*.—O. A., a teacher, aged 26, was a man of rather anxious temperament, who did not take much outdoor exercise. When a boy, he had (strumous) keratitis, and even yet the margins of the eyelids are red and tender. He applied on February 26th, 1882. Three years ago, some spots came out on his chest, and since then had gradually extended, so that they had now encroached on the abdomen, crossed the shoulders to the scapulae, and were found down the back. He was sweating considerably when examined; but the eruption consisted of papules of a rose-red colour from a pink head to a pea in size, and crescentic lines, exactly as in Case I, enclosing fawn-coloured areas. Closely looked into, the lines were found to be made up of minute macules linearly arranged. With this exception, the eruption was exactly similar to that in the previous case. Some scales scraped from several parts were examined, but no fungi could be found. The eruption itched a good deal, and showed evidence of having been scratched. The same treatment as in the former case was ordered. He wrote from the country, where he lived, on March 9th, that the disagreeable sensation which he had felt in the breast and back had almost entirely disappeared, and that he was much more sprightly and hopeful than a fortnight before. "At first sight, the skin seems quite clear, but, on rubbing it, faint traces of the spots with which it was covered are still visible." This was no doubt the remains of the pigmentation due to long persistence of the eruption.

REMARKS BY DR. JAMIESON.—Both cases are undoubtedly similar to those recently published under this title by Duhring and Behrend, but are remarkable in one particular, their long duration. Duhring states that the duration of the disease is from one to three months, when it undergoes spontaneous involution. One of his cases, however, lasted five months; and in the instances cited above, it had not ceased to exist at the end of six months and three years respectively. What is also to have escaped all previous observers is, that Sir Erasmus Wilson has not accurately figured and correctly described the disease in his *Atlas of Portraits of Diseases of the Skin*, under the name lichen annularis, but has done so. In his case, the disease occurred in a man aged 24, and had lasted three years. In his experience, the disease did not terminate spontaneously; and though it might develop pretty much as such, it tended, if not treated, to become chronic. It is a very rare form of eruption, and, as Behrend has pointed out, it is not to be mistaken for the herpes tonsurans maculosus of Hebra and Wilson. While they describe this as an acute and extensive outbreak of eruptions of the body, they nowhere explicitly state that a fungus was the cause of them. In 1877, I removed some scales from patches of the eruption, examined by Kaposi, in his *clinique* at Vienna, as an illustration of the disease, but could find no fungous elements on a careful microscopic examination. Although, however, so far observers have failed to find evidence of its parasitic nature, *pityriasis maculata et circinata* undoubtedly presents many features which ally it with the recognised dermatomycoses; and improved methods of examination may eventually determine its right to be placed in this class. It yields, as noted above, easily to antiseptic treatment. The name *pityriasis*, which has, with various modifications, *rosea*, *maculata*, *circinata*—been attached to the condition, has been very recently, replaced with *furfuracea*; but it is a good thing to be aware of this, that it seems to recall pityriasis versicolor, with which it has certain points of resemblance. It has, like most skin diseases, the tendency to recur. A rare form of ringed eruption, also called lichen annularis, and named lichen annularis by Wilson, is not, however, identical with the exception of the name. The eruption is generally on the face, and at an early stage of eruption it is associated with the eruption of the scalp, and is not, as in the case of *pityriasis maculata et circinata*, associated with the eruption of the scalp, and is not, as in the case of *pityriasis maculata et circinata*, associated with the eruption of the scalp, and is not, as in the case of *pityriasis maculata et circinata*, associated with the eruption of the scalp.

BIRKENHEAD BOROUGH HOSPITAL.

PYÆMIA: PULSATING STERNAL TUMOUR: PYO-PERICARDIUM:
ASPIRATION: DEATH: NECROPSY: REMARKS.*

Reported by A. CRESWELL RICH, M.B.Lond., M.R.C.S., Honorary
Assistant Medical Officer to the Liverpool Hospital for
Cancer and Skin-Diseases.

JAMES F. S., a boy of strumous appearance, aged 15, was admitted to the Birkenhead Borough Hospital on May 1st, 1881, suffering from periostitis of the right tibia. His family and personal history presented no points of importance, being uniformly good. There was no history of injury to the affected limb, but a month before he had run a splinter into the left great toe, which "gathered." The right leg became inflamed ten days before admission, and three days before he had rigors. On admission, the leg showed the usual signs of periostitis. The left great toe was swollen, red and tender; the interphalangeal joint was in a disorganised condition. The leg was incised, and, at the same time, several fragments of necrosed bone were removed from the toe. The course of the periostitis was progressively from bad to worse. The patient had irregular rises in temperature and occasional rigors.

On May 12th, an abscess was forming below the inner side of the ankle. On the evening of May 17th, he complained bitterly of pain in the chest, and a pulsating tumour was seen occupying the centre of the sternum. It was in the exact middle line of the body, opposite the interspace between the third and fourth ribs; it was about the size of a small orange, and fluctuated. The skin over the tumour was thin, but not reddened, and the swelling was exceedingly tender. The pulsation was not expansile, but each beat of the heart conveyed a wave-like impulse to the fluid contents of the swelling.

May 18th. The tumour was larger. The pulse was 120: weak and irregular. The breathing was shallow and rapid; the face a little dusky. At 3 P.M. about two ounces of thin pus, containing lymph-flocculi, were removed by aspiration, with the effect of greatly relieving the dyspnoea and embarrassed heart. On May 20th, the tumour was larger than it was originally, and the skin at the lower part was red and tense. The breathing was again difficult, and the pulse once more irregular; eight ounces of fluid of the same character as before were removed with the aspirator. The relief was immediate. He was troubled by diarrhoea, and a patch of dulness, with tubular breathing, was discovered at the base of the left lung. On May 22nd, the sternal swelling ruptured through a small oval opening forming at the upper part, which gave vent to a quantity of thin pus. A gluteal abscess was also opened.

May 26th. The diarrhoea was relieved, but the patient was sinking. Another opening had formed, somewhat larger than the first. Between the two orifices, the bridge of skin, which was about half an inch in width, had two ovoid fissures, which varied in size with each beat of the heart. At each pulsation, the contained fluid welled up through the openings. Through the upper opening, the pericardial layer of the pericardium was seen to be perforated by a circular hole, about the diameter of a quill. Fatuity was noted on this day.

May 30th. The diarrhoea, which was in abeyance for a day or two, came on again. On the examination of the sternal wound, the pericardial space was found to be now large enough to admit a finger. Through this orifice, the right auricular appendix and part of the right auricle could be seen moving across the opening, as the heart pulsated. The contents of the pericardial sac were purulent, and the surface of the heart had a whitish-yellow appearance.

June 2nd. The temperature continued high. Many purulent discharges were made. The wound was now large enough to admit a finger. The patient died quietly at 9.30 P.M. on June 3rd.

Necropsy performed hours after death. The usual evidences of pyæmia were found. The abscess-cavity was found to extend for some little distance on each side under the attachment of the pectoralis. The sternum was completely divided at the site of the wound, about one-eighth of an inch of its substance between the third and fourth ribs being missing. The upper of the upper fragment was smooth and horizontal, the edges of the lower slanting and irregular. The pericardium on each side was gone for half an inch. The pericardium was truly adherent to the sternum; it was full of purulent fluid containing masses of lymph. The heart was coated with purulent lymph. Opposite the centre of the gap in the bone there was a circular opening in the pericardium, easily admitting a finger; and to the left of this and a few inches from the first, were two smaller openings side by side.

* This case was reported before the Liverpool Medical Institution, February 21st, 1882.

REMARKS BY MR. RICH. — This is undoubtedly a case of great rarity; indeed, I have failed to find any record of a similar one. 1. It may, I think, be safely inferred from the history, that the injury, apparently slight though it was in the first instance, to the great toe, was the source of the pyæmia, and that the periostitis of the tibia and the sternal abscess were, in common with the other abscesses, resulting lesions. 2. There is a difficulty about the explanation of the sternal lesion: it is hard to say where the morbid process commenced. We know that the bones are sometimes affected secondarily in pyæmia; but the sternum is rarely implicated, although it is quite conceivable that it may become involved by spreading of the destructive process from one of the joints in connection with it. The site of disease, in this instance, was between the third and fourth costal cartilages, and nearer the latter; in other words, close to the line of separation between the third and fourth segments of the meso-sternum. Now, at the fifteenth year of life, there would be a broad band of cartilage in this situation, these two pieces of sternum not uniting until the twentieth to twenty-fifth year. This piece of cartilage appears to have gone. The imperfect nature of the joints of the sternum, the absence of synovial membrane, the obliquity of the bone-lesion—all combine to make the condition very puzzling. It might naturally be asked, Would it not be in accordance with our knowledge of pyæmia, to consider the lesion as commencing in one of the costo-sternal articulations? These joints, however, were examined, and found to be normal. It might be looked upon as a periostitis, occurring, like that of the leg, as a result of the pyæmia. 3. The diagnosis of the nature of the tumour hardly called for comment. The situation, the fluctuation, the age of the patient, the detection of a definite bony edge, the rapid development, the constitutional condition, and, above all, the peculiar wave-like pulsation—all pointed in the direction of one definite condition. 4. As regards the treatment, I would call attention to the speedy relief that followed the use of the aspirator. I am indebted to Dr. Bowen of Cloughton for permission to record this case.

MARYLEBONE INFIRMARY, NOTTING HILL.

THREE CASES OF SUDDEN DEATH FROM BURSTING OF AORTIC ANEURYSMS.

(Reported by Mr. JOHN R. LUNN, Medical Superintendent.)

CASE I. *Aortic Aneurysm: Rupture into Oesophagus.*—A. J., aged 67, married, a shoemaker, was admitted in July 1881. Nothing was noticeable about his former history. He had been in the workhouse six years, and able to do a little work. When admitted, he was supposed to be suffering from chronic bronchitis. On the night of admission, he awoke with sudden enormous hæmorrhage from the mouth. Death immediately ensued. At the *post mortem* examination, the lungs were emphysematous and oedematous. There were a few ounces of bloody fluid in each pleural cavity. The pericardium contained two ounces of fluid. The heart seemed to be healthy. The urine was not examined. The thoracic aorta was rather wrinkled, rigid, and atheromatous. The trachea was normal. Just at the junction of the transverse and descending portions of the aortic arch, where it passes over the oesophagus, was a communication between the two tubes, a small irregular aneurysmal cavity intervening. The two tubes appeared to have been separated by a thin membrane, which looked torn, and as if recently ruptured. The aneurysm itself was apparently old, and was about the size of a walnut.

CASE II. *Aneurysm of Aortic Arch: Rupture into Right Pleura.*—G. B., aged 53, married, a carpenter, was admitted in November 1881. The family history was good; there was no history of syphilis. He had always been a hard-working man, temperate in his habits, and had never been laid up before. There was no history of a blow. When admitted, he was suffering from chronic bronchitis, dyspnoea, and a troublesome hacking cough. There was no dysphagia. The pulses were regular. There was no swelling of the extremities, and nothing abnormal was found in the urine. The apex of the heart was displaced downwards and outwards. The sounds were loud, but there was no murmur. There was dulness over the upper part of the sternum down to the third space, and extending to the right, midway the length of the clavicle, and downwards to the third rib. There was no apparent prominence; but a strong systolic heave was felt. No murmur was heard over the dull area. Inspiration was stridulous in front. Pain was occasionally felt passing from mid-sternum, horizontally round the chest, to the back.

The patient improved a little by rest, becoming more able to sleep at nights than on admission, and was rather less troubled by cough and dyspnoea. Though an aneurysm was believed to exist, no warning of rupture was given. The patient died suddenly during the night of

November 29th, having just risen to close the window, and returned to bed.

At the *post mortem* examination, thirty-six hours after death, the body was well nourished, but pale. Rigor mortis was well marked. The liver was pushed down and twisted to the left. The right side of the diaphragm was also pushed down and flattened; it could not be moved upwards, being kept down by a soft resisting mass in the chest. The chest-walls were very rigid, all the rib-cartilages being completely calcified. On removing the sternum, a large cavity was opened at the upper part, above the base of the heart, and on the right side. The anterior wall was thin, and inseparable from the bone. The cavity contained fluid blood and irregular laminated dark clots. In the right pleural cavity, a large collection of blood was seen below the base of the lung; and, on moving the lung forwards, the cavity was seen to be full of blood, mostly coagulated into a large red clot at the back of the chest. The lung was collapsed, but in structure emphysematous and oedematous. The left lung was free and pale; it was congested below, but there was no consolidation. The cavity behind the manubrium was seen to be a large aneurysm, equal in size to a cricket-ball; its walls were thin and generally bare, but lined with a firm laminated clot half to three-quarters of an inch thick on the right side, where it encroached upon the upper lobe of the right lung. On removing the loose clot and liquid blood, a similar large aperture was seen at the back, about half an inch in diameter, with clean edges, opening into the aortic arch. On the convex side, at the junction of the first and second parts, the sac had ruptured into the right pleural cavity by an irregular opening at its thinnest spot. The pericardium contained two ounces of clear yellow serum. The heart was hypertrophied, with thick and firm walls. The valves were somewhat thickened, but competent; the cavities were nearly empty. The first part of the aorta was dilated; the vessel was atheromatous, and very inelastic throughout its whole length; the orifices of its large branches were patent. The trachea was pushed back by the upper part of the aneurysm, which was adherent to it. All round the tube was much gelatinous oedematous connective tissue; the mucous membrane was thickened and congested. The liver and spleen were normal. The kidneys were rather small; the capsules were tough and adherent, tearing the surface extensively on removal.

CASE III. *Aneurysm of Aorta: Rupture into Right Bronchus: Gout: Syphilitic Choroiditis.*—G. H., a stableman, aged 60, married, was readmitted from the workhouse in October 1881, with gout. He had been blind many years, having only just perception of light. The fundus of both eyes was studded with black patches of pigment, the result of choroiditis. No visceral lesions were detected, and he was apparently well, and about to return to the workhouse, when he suddenly began to suffer from nausea and an abundant discharge of blood in gushes from the mouth. He became suddenly very pale and unconscious; respiration and the heart's action stopped in two or three minutes. It was afterwards found out that he had had some hæmoptysis before this date.

At the *post mortem* examination (74 hours after death) the body was well nourished, and there was abundant subcutaneous fat; the surface was pale, with a good deal of hypostatic lividity. The rib cartilages were not calcified, the lungs were evidently in a state of acute insufflation, quite covering the heart. The pericardium, which contained 1½ ounces of serum, was adherent to the heart by numerous thin bands, especially towards the base. The heart was small, pale, and empty; the surface was white and fibrous. The valves were healthy and competent; the cavities nearly empty. The aorta was thickened and inelastic; its surface uneven and very atheromatous. On the inner side of the first part of the arch, beginning just within the pericardium, was a large aneurysm, about the size of an orange, communicating with the vessel by a circular opening about equal in diameter to that of the aorta; the inner coat of the aorta seemed to extend for a little way into the cavity of the sac. The sac began behind the pulmonary artery, passed backwards and to the right, behind the commencement of the aorta, and pressed against the bronchial glands (one of which was blackened and softening) and the bronchi. It was thin-walled generally, but lined by uneven layers of flakey blood clots, where it was in contact with the right bronchus; this tube was perforated anteriorly by an irregular opening, equal to a goose-quill in diameter, by which it communicated with the aneurysm. The rest of the arch, and the thoracic aorta were, like, the commencement of the arch, thick, inelastic, and very atheromatous. The oesophagus was normal. The trachea and bronchi were full of blood, and the mucous membrane was thick and congested. The lungs were large, distended, and emphysematous throughout, and somewhat congested; there was blood in the bronchial tubes. The liver was soft, and of average size; its structure was apparently normal. The spleen was adherent all over to the

peritoneum and adjacent organs, and was soft and pulpy. The right kidney was small; the lower portion seemed of average size, but the upper part was atrophied, both pyramids and cortex having a pale granular structureless appearance. The left kidney was a little larger than usual. The brain was healthy.

The above three cases are interesting as showing how persons suffering from aortic aneurysm may go about their daily work without any apparent local or constitutional disturbance. Only one out of the three cases showed physical signs of an aneurysm during life.

Mr. Lunn was indebted to his colleague, Dr. Benham, for his kind and able assistance at the *post mortem* examinations.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 12TH, 1882.

J. LISTER, D.C.L., F.R.C.S., F.R.S., President, in the Chair.

Amputation of the Penis.—Mr. PEARCE GOULD showed a man, aged 73, on whom he had performed a new operation for amputation of the penis. The disease for which this was done was epithelioma, extending back to the pubes. The scrotum was split along the raphe, the urethra detached from the penis and fixed to the perineum just behind the scrotum, and the crura of the corpora cavernosa were then peeled off from the pubic arch, and the whole organ thus removed. The man had complete power over his urine.

Intermittent Rheumatism.—Dr. S. MACKENZIE exhibited an interesting case of that affection in a female.

Aneurysmal Varix affecting the Hand and Fingers.—Mr. T. SMITH read notes of this case, and exhibited the patient, a healthy female, aged 25, admitted into hospital last February for great loss of blood from an abrasion in one finger. This was easily controlled by pressure. The disease was stated to have commenced at the age of a year and a half, following a severe burn in the left hand. This hand was now much larger than the other, and the whole of its subcutaneous veins were dilated and tortuous; the arteries of the hand and forearm were much enlarged and constricted. A purring continuous venous thrill was to be felt on lightly grasping the hand, and a well-marked arterial thrill on firmer pressure, over the whole of the affected member.

Arteries corresponding to these thrills were to be heard on auscultation.—

Mr. T. HOLMES referred to a somewhat similar case. Operation did not seem desirable, and on consultation the question of ligaturing the subclavian was decided not to be justifiable. The man died of typhoid fever, and the *post mortem* examination showed there was no communication between the artery and the vein. The patient, who was an actor, met with an accident on the stage, after which the condition came on slowly. There was only an enlarged and varicose condition of the veins and arteries.—Mr. HEATH had twice seen such a condition in the lower limb. In one case, the increasing pulsation impelled the patient to seek advice. Pressure on the femoral artery had no effect. No treatment seemed to do any good. In neither of his cases was there any history of accident or injury.—Mr. LISTER remembered seeing a patient under Mr. Syme, whose hand was affected in the way referred to. The arteries and veins were enlarged and pulsating, the ring finger being especially implicated. The pulsation was aneurysmal, and he looked upon it as a peculiar form of *nævus*. Mr. Syme decided to do nothing, and that was probably the best course in such cases.—Mr. SMITH thought his case different from arterial *nævus*. He had seen but one other example of aneurysmal varix, produced by a youth cutting his femoral artery and vein, with a penknife. The patient was now fairly well, which showed that these cases tended to improve.

Removal of Epithelioma of the Tendo Achillis.—Mr. T. HOLMES read notes of this case, which was that of a young man suffering from an ulcer of the leg, which presented decided appearances of epithelioma, both to the eye and to the microscope. It was of very large size, and extending to the tendo Achillis, and accompanied with considerable enlargement of the inguinal glands. The total removal of the epithelioma was effected by the free excision of the arterial aneurysm, including the subclavian and the enlarged glands, and the entire limb. This was the first case of the total removal of epithelioma. Mr. LISTER had been struck by the frequency of the removal of these cases. In a case recently under his care, of that epithelioma of six years' growth, this was removed, and cured with good result, though the growth returned in a few months. In another case, a woman had an epithelioma of the corner of the leg, also removed. The condition

also seemed affected. This would not be a suitable case for operation.—Mr. T. SMITH said that all surgeons must have been struck with the varying malignancy of ulcers. Epithelioma in a subject of twenty must be very rare—he had never seen a case. At such an age it could hardly be very malignant.—Dr. WILTSHIRE remarked that, even though epithelioma rapidly spread when it attacked the vagina, one scraping often sufficed to relieve pain and hæmorrhage, though an offensive fluid continued to flow. In two of his cases the patients did well for some months, but after that time grew worse; one had died, and the other was rapidly growing worse. In a case where Paul Mundé operated for him, the whole uterus came away; the woman lived for eight months, but died at last from uræmic coma. A patient who had been scraped and cauterised four and a half years ago was still well.—Mr. R. W. PARKER was struck by the fact that the tendo Achillis was entire in Mr. Holmes's case, as cancers tended to eat into any tissue.—The PRESIDENT mentioned the case of a patient who often came to Simon at Heidelberg, for relief for an epitheliomatous ulcer in the rectum. He thought the spoon should only be used where the knife could not be employed. However carefully removed, epitheliomata did recur. In a case of his own, he had removed an epithelioma of the cheek, making a wide cut; but the growth returned. He was not sure of the epitheliomatous nature of Mr. Holmes's case.—Mr. HOLMES, in reply, said he suspected that many growths originally local tended to become epitheliomatous and constitutional in type. His case certainly corresponded to the ordinary descriptions of epithelioma, and he would urge that such cases, if early treated, might result in the extirpation of a disease rapidly becoming malignant.

Removal of Loose Cartilages.—Mr. T. HOLMES gave particulars of this case, which was, in two respects, remarkable; first, on account of the number of loose cartilages (there being six of large size and one small one) contained in the joint in a person not apparently affected with chronic rheumatic arthritis, and still very active, and even athletic; and next, on account of the perfect impunity which attended the somewhat protracted manipulations necessary for their extraction, there being no rise of temperature or any symptom of inflammation, except that which followed a somewhat too early use of the limb; and this was only trifling.—Mr. HAWARD had removed three loose cartilages from the knee of a man some time ago, and since then one in another patient. He advocated a free incision as better than a small one. He preferred small lithotomy-forceps to the fingers in the removal of the cartilages.—The PRESIDENT said the case was both rare and interesting. He had only seen one under Professor Thiersch, who removed several from one joint—some rather large. They seemed to grow after separation. Mr. Joseph Bell had suggested that they should first of all be fixed by a needle, cut down upon, and removed by the needle.—Mr. HOLMES condemned this plan, especially if the cartilages were hard and resistant. Free incision, with antiseptic precautions, was undoubtedly the best and simplest plan of procedure. In his own case, he had failed to find two cartilages. Professor Pirrie mentioned a case where twenty-five were removed. It was quite a mistake to suppose that the joints were always diseased when loose cartilages existed in them.

A Case of Chronic Spinal Syphilis.—Dr. ALTHAUS read a paper on this case. The patient, a healthy young man, suffered, eight years after an infecting sore, from severe headaches, which continued for six months, and were followed by an attack of aphasia and right hemiplegia, after which they ceased. He recovered his language, but the paralysis remained, and was followed six months later by paralysis of the left leg and of the bladder and bowels. There was rigidity in the paralysed limbs, and an enormous increase of tendon-reflexes, so that the slightest irritation, such as a sudden noise, opening the door, etc., caused the legs to shake fearfully, exhibiting the condition of spinal epilepsy. The centre of these movements was in the patellar tendon, but percussion of any point of the tibia and the rectus femoris led to similar, although less violent, phenomena; ankle-clonus was likewise marked, and the faradic and galvanic excitability of the nerves and muscles appeared to be increased. In the right arm, powerful tendon-reflexes could be elicited by gently striking the metacarpal bones, the capitulum ulnæ and the styloid process of the radius, the olecranon bone, and the humerus. The abdominal and cremasteric reflexes were likewise increased; the muscles of the body were parætic; the urine, which had to be drawn off by the catheter, was healthy, except that there was a small amount of albumen. The sexual power and desire were increased. Dr. Althaus considered the exceedingly violent tremor to be from which the patient had suffered as owing to a granular deposit, to which it was generally ascribed, but to syphilitic endoarteritis, which was going on all the time the headache lasted, and which ultimately led to thrombosis of the left middle cerebral artery and softening of brain tissue. When the artery was completely blocked,

the headache ceased, never to return. With regard to localisation, he argued that it was not the main branch of the Sylvian artery which had become blocked, but its cortical system, more particularly the anterior and posterior parietal arteries, and that the affection was, therefore, not one of the corpus striatum, but of the central convolutions bordering the fissure of Rolando. His chief reason for this was, that the aphasia had been quite temporary, and that, in plugging of the main branch of the middle cerebral, loss of language was generally permanent. He thought the paralysis of the left leg and of the bladder and bowels, which came on six months after the first attack, not to be owing to fresh arterial thrombosis in the right cerebral hemisphere, but to secondary sclerosis of the pyramidal strand spreading from the right side through the anterior commissure to the left side of the lumbar enlargement of the cord, where it involved, not only the pyramidal strand, but also the paths for the conduction of motor impulses to the bowels, bladder, and sexual organs.

Disorders of Movement following Right Hemiplegia.—Dr. W. M. ORD read notes of this case. M. A. J., aged 53, female, servant, was admitted for the first time to St. Thomas's Hospital on May 25th, 1881. On the evening of the preceding day, she had suddenly lost power over the right arm and leg, without loss of consciousness. When examined, she presented complete motor paralysis of the right arm and leg, with impairment of sensation more marked in the leg than in the arm. There was no facial paralysis, but the right pupil was larger than the left, and sensation was impaired on the right side of the face. There was no defect of mind or of speech. For a few days, her condition became worse. She became apathetic, had some difficulty in articulation, and loss of the memory of words, some paralysis of the right facial muscles, and loss of control over the bladder, without rise of temperature. The urine contained no albumen, but the retina presented the signs of albuminuric inflammation. After this condition had lasted a few days, she began to amend. Her intellect became clear, and voluntary motor power and sensation returned—in the leg first, afterwards in the arm. She was discharged on September 30th, showing very little weakness of the right side. When readmitted, on February 17th, 1882, she stated that, at the time of her leaving the hospital in September, two fingers of her right hand used to twitch involuntarily. She did not mention this, and it was not noticed. But from that time she began to experience steadily increasing involuntary movements of the arm and hand, with stiffness of the leg. When admitted for the second time, she was in very fair general health. There was some imperfection of movement of the right half of the mouth, but no other facial paralysis. The tongue deviated to the left. The left pupil was smaller than the right. The right arm was in constant movement—upper arm, forearm, and hand all sharing. At present, when she was sitting with the right hand resting on her lap, the fingers were all extended, and were alternately moved together and separated, as in the act of playing on the pianoforte; the palm of the hand was pressed with a rocking movement against the lap, the wrist rotating in about a fifth of a circle; the elbow was sometimes quiet, sometimes adducted and abducted gently. The shoulder was rhythmically raised and depressed. These movements were perfectly regular, and recurred at the rate of about 140 times in the minute. When the hand was moved voluntarily from the lap, the movements became more extensive. If a book were presented to her, she brought her hand to it with a double series of pendulum movements, small in the hand and wrist, large in the whole limb, which swayed several inches alternately on each side of the intended line of movement. Ultimately she seized the book and held it firmly, while the arm continued its vibrations. When the whole arm was abducted, the vibrations increased in extent and force, moving the limb as though it were a pump-handle vigorously worked, shaking and swaying her whole body. The movements ceased during sleep, and were sometimes almost lost when she was sitting or lying very quiet with the hand and arm completely supported. Sometimes, on walking, she found the arm stiff for a time. There was no loss of sensation and no disorder of sensation. The patellar tendon-reflex was much exaggerated on the right side, not on the left. The arm tendon-reflexes could be elicited, but not ankle-clonus. Her mind and speech were clear, but she walked with a limp, because of the stiffness of the right leg, which, however, did not prevent any of the rhythmical movements seen in the arm. The superficial reflexes were normal, except that the plantar was increased on the right side. The eyes presented now no abnormality. The original hemiplegia was probably hæmorrhagic, there being no valvular disease, and the signs of albuminuric retinitis having been present soon after the attack. The movements were neither those of athetosis nor of chorea, but, resembling in part those of paralysis agitans, more closely approached the vibratory tremors attending voluntary movements in sclerosis of the lateral columns, and disseminated sclerosis. The ex-

aggeration of the tendon-reflexes went with this to lead Dr. Ord to believe that in this case the past hemiplegic disorders of movement probably depended upon a descending lesion.

OBSTETRICAL SOCIETY OF DUBLIN.

SATURDAY, APRIL 1ST, 1882.

J. A. BYRNE, M.B., President, in the Chair.

Hypertrophy of Uterus and Dilatation.—Dr. ATTHILL showed a specimen which he regarded as one of hypertrophy of the uterus with dilatation of its cavity, as the result of stenosis of the cervical canal. It was taken from the body of a woman aged 40, who was admitted to the Rotunda Hospital last February. Since early girlhood, she had suffered from dysmenorrhœa, which had increased in severity as she grew older, till latterly her periods were painful and prolonged, and the loss of blood excessive, so that she was very anæmic. The uterus was as large as a cocoa-nut, but the os could not be felt, nor could a sound be introduced into the uterus; but a small silver probe could be passed, with the help of a speculum, for five inches into the uterus. The uterus was very tense, and the diagnosis of tumour was made; but its nature could not be determined. The os was incised as far as the os internum, whereupon a copious gush of muco-purulent fluid escaped; so that it was thought that an abscess had been opened. No pain or distress followed till four or five days afterwards, when she was attacked with jaundice and incessant vomiting, and she died within three days. In making the necropsy, no tumour of any kind was found; but the uterus was enlarged, and its walls enormously hypertrophied. The woman was a virgin, and the cause of death was localised peritonitis.—Dr. PUREFOY remarked that the result here was similar to what had frequently been observed as the result of incising the imperforate hymen. For there, although relief was given by making a small opening and allowing the accumulated menstrual fluid to escape, in a few days afterwards symptoms of pyæmia showed themselves, and the patient died.—Dr. MACAN did not think the specimen a very satisfactory example of dilatation of the cavity of the uterus from the closure of the os; he thought the uterine walls might have contracted since the operation.

Hegar's Dilators.—Dr. MACAN showed a set of Hegar's dilators as modified by himself; they were made to taper so that the base of No. 1 should exactly correspond in size with the top of No. 2, and so on to the last.

Imperfect Development of Genital Organs.—Dr. HORNE showed a fœtus exhibiting a very imperfect development of the genital organs. The front of the chest was covered with a network of greatly distended veins. The whole abdomen was greatly enlarged. The genital organs were almost wholly absent. There seemed to be rudimentary traces, but whether they were the penis or not was difficult to say; and there was complete absence of the anus.

On Some Cases of Noma Pudendi.—Dr. PUREFOY referred to the early mention and varied use of the term "noma" amongst medical writers, from Hippocrates down to our own time, and the consequent inaccuracy of the descriptions of cases so termed. The only writer, so far as he knew, who had described "noma pudendi" with accuracy, was Mr. Kinder Wood. It commonly happened that the diseased condition was already fully developed before medical aid was sought; but in a few cases the following symptoms preceded, by about three days, the affection of the pudendum; chilliness, succeeded by heat, slight headache, loss of appetite, thirst, torpor of the bowels, and general languor. Pain in micturition generally first attracted attention to the genitals, which would be found enlarged, inflamed, and of a livid colour. Within twenty-four hours from the inception of the inflammation, the inner surface of the labia was covered by a crop of vesicles, which quickly burst, leaving as many superficial ulcers, from which flowed a dark offensive ichor. After the inflammation began, the pulse was quick and weak, and as the ulceration extended, the face became of a peculiar pallid hue, very pathognomonic of the affection. He agreed with Mr. Wood in regarding the disease as one of a distinct and specific nature. Dr. Purefoy had seen, in all, five cases of noma; all of them occurred in children under three years of age, except one of eleven. The first was the only fatal case. In the early stages, he applied warm bread poultices, and subsequently carbolic oil (1 in 40) dressings, aided by constitutional treatment.—Dr. ROE considered that cancrum oris was identical with noma pudendi, the difference consisting in its situation.—A discussion followed, in which the President, Drs. Henry Kennedy, Madden, McVeagh, and Macan took part; and Dr. PUREFOY replied.

Causation of Head and Other Presentations during Labour.—Dr. NEVILLE read a paper on this subject. He commenced by pointing out that the presentation of the head might, *par excellence*, be consi-

dered as the natural one, being the safest for both mother and child, and occurring in 95 per cent. of all labours, premature or at term. This being so, it would be necessary, first of all, to ascertain the causes which lay at the root of so great a frequency of head-presentations. The several factors of normal causation having been once determined, it would be comparatively simple to fix on those which would act so as to bring about abnormal results. He then considered the general statical conditions, referable both to the foetus and its environments, under which the former spends the latter months of pregnancy *in utero*. These considerations included the attitude of the child—one of almost universal flexion—which gave to its body a roughly ovoid form; the average specific gravity of the entire foetal ovoid taken as being 1050, but greater at its head than at its breech extremity. Consequent on the uneven distribution of its specific gravity, the centre of gravity of this ovoid was situated towards the head end, and nearer its dorsal than its ventral aspect. This position of its centre of gravity was shown by the numerous experiments on floating or sinking foetuses, conducted originally by Dubois, then by Simpson, and subsequently, under more perfect conditions, by Duncan, Veit, and others. The centre of buoyancy of a foetus immersed in fluid was situated nearer its breech than its head end, on account of the greater size of the former. The average specific gravity of the liquor amnii might be stated as 1012, and there could be no doubt that, relatively to the size of the foetus, it usually became progressively less during the last three months of pregnancy. The ovoid form of the uterus was next considered. This, Dr. Neville thought, depended, as did also that of the foetus, on intrinsic and vital rather than on extrinsic or mechanical causes. The inclination of the uterus to the plane of the horizon in the erect or dorsal position of the patient formed a very important element for consideration. Only when the patient lay on her side was the long axis of the uterus nearly coincident with the plane of the horizon. Dr. Neville then considered in detail the action of gravity on the foetal ovoid under normal conditions, as above. He showed that the action on a foetus not in a condition of stable equilibrium might be decomposed into two factors, which he named the sinking and the twisting factors. The result of the former of these would be that the foetus would sink through the liquor amnii until arrested by the uterine walls; of the latter, that, in so sinking, the body would rotate round its centre of gravity until the centres of buoyancy and gravity were in the same vertical line. It was shown that in this way the foetus would be in a state of stable equilibrium when under normal circumstances its head presented. It was pointed out that on mechanical principles the "twist" factor might, when compared to the "sinking" factor, have a very appreciable effect on the sinking foetus, though it would not be easy to calculate its actual potency. Dr. Neville thought that, so long as the foetal ovoid remained freely movable within a large amount of liquor amnii, the action of this "twist" factor would be quite sufficient to account for the frequency of head-presentations. When, however, as towards the end of pregnancy, the foetus came more closely in contact with its limiting environments, he did not think that this factor would prove by itself sufficiently strong to change, for example, a breech into a head-presentation. Other explanations for the frequency of head-presentations at term became necessary. These explanations might be sought for in growing need for what may be termed form-adjustment, or form-accommodation. The effect of foetal movements and of uterine contractions in perfecting this adjustment were considered, and to both he was inclined to attach considerable weight. The frequency of complete changes of presentation during the latter weeks of pregnancy, even among primiparae, and where there was a very scanty amount of liquor amnii, proved fatal to the theory which would attach too exclusive an importance to gravity acting at or near term. Uterine contractions favored presentations of the head by necessitating adjustment. Foetal movements acted in the same way, and were, moreover, especially apt to effect changes in any other presentation than that of the head. Hence the predominance of head-presentations at term might be accounted for in part by the fact, that in these the foetus was in a condition of stable equilibrium as regards gravity; and in part also by the fact that the need of form-adjustment was then best induced and promoted both by the foetal movements and uterine contractions. Any explanation which neglected one or more of these co-operating factors was, as far as unsatisfactory and incomplete. The paper concluded with a general summary of the causes of presentations other than those of the head, showing how they could, severally, be referred to some recognised want or defect among the normal factors of causation.

MR. T. F. BURDETT, late Medical Officer for the Lee Division of the London Union, has obtained a superannuation allowance of £40 12s. 3d. per annum.

REVIEWS AND NOTICES.

THE RELATIVE MORTALITY, AFTER AMPUTATIONS OF LIMBS, OF LARGE AND SMALL HOSPITALS, AND THE INFLUENCE OF THE ANTISEPTIC (LISTERIAN) SYSTEM UPON SUCH MORTALITY. By HENRY C. BURDETT, Esq. Read before the Statistical Society, May 16th, 1882.

WITH the main object of this paper we so heartily agree, that it is with some regret we feel ourselves compelled to dissent from any of its statements; and we hasten to express our agreement, in distinct terms, lest our dissent from parts of the paper should be taken to apply to the whole. Mr. BURDETT'S main object we take to be to advocate the maintenance, in small towns, or villages, or in the neighbourhood of large manufacturing works, of small hospitals to which the sick and wounded can be at once transferred, without the delay and exposure involved in seeking admission and getting transported into the county or metropolitan hospital. To that proposal we have always given a consistent support, and we rejoice at the success which has attended it. At the same time, we have never admitted that any evidence has been produced to show that these small hospitals (which are now usually termed "cottage hospitals") are more healthy, or are safer places for the performance of surgical operations, than the large hospitals; and we regret that the supporters of cottage hospitals should have thought it necessary, in recommending their favourite institutions, to attack those still more useful ones, which not only minister to the necessities of the urban population, but also perform the far more important function of improving medical and surgical science, and teaching it to successive generations of students and practitioners. There is really no such necessity. The two institutions are in no respect antagonistic; nor does the need for the so-called cottage hospitals depend on any lack of salubrity or success in the large metropolitan hospitals; nor is it true that there is any such insalubrity. The present attempt to show that the mortality after amputation is less at small than at large hospitals, though fairer and less obviously biased than Sir J. Simpson's celebrated onslaught in his papers entitled "Hospitalism," is, on that very account, less successful; since, if it show any difference at all, that difference is reduced to a figure which is obviously accidental, and which any accident might reverse. The comparison is founded on a collection of 326 amputations from 61 cottage hospitals, and these are compared with Mr. Erichsen's book (published some years since), recording the amputations performed in University College Hospital during 38 years previous to its publication. The result is, that the mortality of the former is 17 per cent., and that of the latter 25 per cent. We say advisedly that such a comparison does not really prove that there was any difference at all in the results of the practice at the two classes of institutions; for, first, Mr. Burdett's 61 hospitals are a minority of the cottage hospitals, to which he sent for information. The latter were 160 in number, and of these, 92 only replied to his circular, 31 replies being that no amputations had been performed. How are we to know whether, if the other 68 had taken the trouble to answer, the 17 per cent. might not have grown into 25? But, allowing that the figure 17 correctly represents the percentage mortality, is the comparison fair between a series of cases, all of them recently performed, and most very recently, and another which goes back more than forty years? The present reviewer has watched London hospital practice, and especially that of one large hospital, for over thirty years, and can testify that the results of amputation (apart from any question of "Listerism") has been steadily improving during the whole period—a fact which, we had thought, was completely proved by the late Mr. Gulliver; so that a comparison confined to the contemporary practice of cottage and metropolitan hospitals might have shown no numerical difference at all, or a difference on the other side of the account. This remark applies to all the other references (and they are numerous) made by Mr. Burdett to the statistics produced by Simpson, Bryant, Malgaigne, Liston, Brodie, Holmes, etc. They are not made, as statistical comparisons, to be worth anything, ought to be made, between things which in all other respects are exactly alike. As if to prove the fallacy of his statistical method, Mr. Burdett has added some observations on antiseptic surgery, and, adopting "Schneider's antiseptic statistics," has drawn the conclusion that "surgeons who adopt it [Mr. Lister's treatment] conscientiously" are able, "irrespective of the size of the hospital belonging, to reduce the mortality in such cases to 4.36 per cent." If, then, a difference in surgical treatment can reduce the mortality (in cases assumed to be similar) from 17 to 4.36 per cent., how can we be expected to believe, without any other argument than a string of figures, that an alleged difference between 17 and 25 per cent. must depend merely on the size of the hospital? Must it not depend on difference in the practice, or on difference in the selection of cases,

or on many other causes? Would it not be just as fair to argue that the country surgeons lost fewer patients after amputation, because they treated their cases better? In fact, this view of the case would derive some support from Schede's statistics, which tend greatly to discredit Mr. Burdett's conclusions. The fact is, as has over and over been said, such statistics as these cannot, in their own nature, be convincing. To persons who are firmly impressed with the idea that London hospitals are pestiferous, and are hotbeds of erysipelas and pyæmia, they appear of importance, because they support their preconceived views; but those who know both sides of the question can only regret the superfluous labour spent in their collection.

Another matter we must refer to, though briefly. Mr. Burdett quotes as follows from "a critic", and accompanies the quotation with the following demand for a retraction.

"After regretting the absence of any attempt to estimate the real sanitary condition of cottage hospitals as tested by the prevalence and spread of erysipelas in these institutions, the same critic observed: 'Every one knows by this time how inferior the arrangements for nursing, cleanliness, and ventilation in cottage hospitals are to those of our great city hospitals.' This last statement is made by a gentleman who holds a deservedly high place amongst metropolitan surgeons. It is so entirely imaginary and contrary to the fact, that I must ask him to unreservedly withdraw it. Before doing so I should wish him to visit such hospitals as Cranleigh, Boston, Grantham, Petersfield, Reigate, Savernake, situated as they are in different parts of the country, and ministering as they do to the wants of agricultural and urban populations. He will then feel compelled to admit he has inadvertently been led to make a charge of bad management against these crisply (*sic*, probably a misprint) conducted little hospitals which has no foundation in fact. Whatever sins may be laid to the charge of cottage hospitals, they are certainly not filthy, badly nursed, or ill ventilated."

But then who brought any charge, or who ever said that these little hospitals were badly managed, filthy, badly nursed, or ill-ventilated? We believe that the great hospitals of British cities and large towns are the model of what has as yet been attained in hospital management, and that their construction, nursing, and other arrangements, though of course not perfect, are yet better than those of any other similar institutions in the world—most certainly in this part of the world. The cottage hospitals are inferior to these; but yet are very creditable and successful institutions. Such conclusions are not formed *à priori*, but rest on personal experience at two cottage as well as one metropolitan hospital.

The sentence, as we understand it, was intended to refer mainly to the old cottage hospitals which were really cottages, and were necessarily inferior in ventilation and in cleanliness to regular hospitals. In nursing, such institutions must always be inferior, since the nurses have neither the experience nor the supervision of those in metropolitan hospitals. We should, however, have supposed that in cleanliness and in ventilation and in other points of construction, the new small rural hospitals (which are those now designated "cottage hospitals," though they hardly correspond to that name) were superior to the old cottages, were it not for the evidence which Mr. Burdett here produces, in some sentences which follow very oddly on the indignant rebuke just administered, and make any retraction or any journey in search of evidence quite superfluous.

"My observations lead me to fear that at present these new hospitals are worse for the patients than the old cottages. The former had no system of direct drainage; the latter have a system of their own. So far as my observations have gone, I have found the sanitary arrangements of every new cottage hospital faulty, with one solitary exception, the Grantham District Hospital." The italics are Mr. Burdett's own.

"Architects, almost without exception, display a fatal ignorance of the most rudimentary principles of sanitary construction. Only recently a new cottage hospital was built, and the patients transferred from the old cottage, which had done good service for nearly twenty years. In this case, as usual, the closets were placed inside and in the centre of the hospital. The soil-pipes were unventilated, and were directly connected with the cesspool, and many of the drains ran beneath, instead of outside, the hospital. No care in dressings, and no amount of watchfulness on the part of the medical attendant or the nurse, will prevent an outbreak of erysipelas or of something worse if the sanitary arrangements remain as I found them. Unless the cottage hospital managers set themselves steadily to work to stop this grave danger, they had best rest content with the old cottage as it is. If many fresh hospitals are built on the present bad system of construction, the mortality of cottage hospitals will, in my opinion, very soon exceed that of the larger general hospitals."

We leave it to the reader whether the above testimony from a professed advocate of cottage hospitals does not justify the assertion that

their construction is inferior to that of our metropolitan hospitals, and that, if exact records were kept, the prevalence of erysipelas and other hospital diseases would probably be found at least equal, allowance being, of course, made for the admittedly less severe nature of the cases treated in the rural hospitals.

We regret this attempt, ill-judged in our opinion, to revive Sir J. Simpson's accusations against large hospitals. We had thought that the controversy that then occurred had sufficiently discredited his conclusions, and that subsequent experience had conclusively refuted them. But misstatement has stubborn powers of life, and old prejudices die hard. Fortunately they do die at last: and we are quite satisfied to trust the reputation of our great hospitals as places for the treatment of medical and surgical cases to time, aided by the ample information which most of them now publish to the profession of all that goes on within their walls.

Both rural and urban hospitals have their appropriate sphere, but their spheres are different. Any really useful and fair comparison between the results of their practice would be extremely difficult. It would involve much labour, and very probably, after all, the inquirer, if he were really well-informed and impartial, would give up the comparison as leading to no definite result. Mr. Burdett's paper appears to us to be quite inconclusive.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE
ALLIED SCIENCES.

MULLINER'S PATENT INDIA-RUBBER COLLAR AXLES.

THE patent india-rubber collar axle manufactured by Messrs. H. Mulliner and Co., Leamington, is an ingenious, simple, and inexpensive improvement in carriage axles. The patent india-rubber collar is made to surround the axle at the part where the spring rests upon, and is connected with the axle and isolates the spring from the axle-tree, thus giving greater elasticity and acting as a powerful preventive of reverberation and sounding noises in broughams, etc., in crossing tramways, pavements, and uneven surfaces. This increased safety, given to a carriage by the removal of shocks to the axles, springs, and under-carriage from concussion, is an important feature; but such an arrangement will be found especially valuable to invalids and others who desire to travel noiselessly and without shock or vibration. The experience of the past two years has, we believe, established for this invention the advantages first claimed for it, viz., durability and freedom from getting out of order. One advantage of this system is, that it can be applied, at small cost, to any carriage already in use.

MEDICAL CARRIAGES.

AMONG the exhibits of Messrs. Harrison and Brass (Victoria Carriage Works, Elgin and Inverness) at the Crystal Palace are the "Acme Medical Car," and the "Improved Sanspareil Gig," which appear specially adapted to the requirements of medical profession. The principal feature of the "Acme Medical Car," is its easy accessibility, the back seat being on a level with the bottom of the vehicle, while this seat, with the back rest, will fold down and slide under the body of the car, which (the foot-board closing up) is thus converted into a gig. The "Acme Medical Car" is fitted with hand drag, folding leather hood, lamps, and loose apron, and weighs under 4 cwt., being as light as an American buggy, while possessing the great advantage of a full lock. The wheels are of hickory, the tires and body plates of steel, the springs (Armstrong's patent) extremely easy, and the axles (Daker's patent) require no washers, being fitted with a spiral spring at back of the dustpan, and another between the nut and the collet. Thus, not only is the expense of the constant renewal of washers avoided, but the jolt consequent on a wheel getting into a rut is greatly lessened. The "Sanspareil Gig" is fitted with a single axle spring placed transversely, while a spring in the front takes away the knee action of the horse. It is a handsome and strong vehicle, yet weighing only 2¾ cwt.

MR. THOMAS GRIFFITH, of St. Helens, Lancashire, who had been in practice there for twenty-one years, and who had been in the habit of taking chloral for the purpose of inducing sleep, accidentally took a larger dose than usual about one o'clock on Tuesday morning, with a fatal result.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, 11 High Holborn.

The British Medical Journal.

SATURDAY, JUNE 3RD, 1882.

DEFECTS IN MEDICAL EDUCATION.

THE attention of the British medical public is constantly being directed towards the examining authorities at the Royal College of Surgeons of England and its Council which controls them. The opinion of the profession with regard to the evil effects of any encroachment of anatomical upon clinical studies has manifested itself in the way already noted in our columns during the past two months, and the College has taken notice of their recommendations by propositions of somewhat extreme measures to remedy the evils of what must be termed chronic studentism. Still, the most enlightened examining bodies cannot frame regulations for a curriculum which will ensure to every student hospital education in certain matters most useful, if not most essential, to him in the practice of his profession. The young member of the College, when beginning practice immediately after qualification, must of necessity be in possession of much valuable knowledge, even if he have filled no junior house appointment in his hospital. If consulted by a patient, who is in good general health but has a large solid swelling, he may correctly diagnose a sarcoma or an aneurysm, and give his advice and prognosis accordingly; he is not likely to thrust his knife carelessly into abscesses situated near large vessels; he will surely know the meaning of flooding increased at each labour pain, and he will probably be triumphant in the detection of cardiac murmurs, distinguishing mitral from aortic disease, and in guiding his treatment accordingly. Still, however good may have been his medical school, its teachers, its beds, its out-patients, its pharmacopœia, and its other advantages, there will yet remain many things which will puzzle him when beginning practice. Some of these have no bearing on hospital education: others might be gravely considered by the powers that control the student's education. The knowledge of prescribing is always rudimentary in the young beginner. This is not entirely owing to his inexperience of drugs. Hospitals must have their pharmacopœias, full of ready-made prescriptions, to avoid the evils of over-worked dispensers, and of poor patients kept waiting for a remedy while complicated prescriptions are being made up. Hence the beginner has been used to prescribe compositions known to him as "Hist. 26," or as "Hist. Cathart.," or medicines represented by initials which do refer to their ingredients, but which would be incomprehensible to any druggist: such as a well-known stomachic draught, composed in vast quantities yearly, at a large military hospital, and always written in prescrip. form, "H.M.S. &c. M.S.," there being no indication as to the name of a man-of-war than indicative of its true composition—sulphuric mint and Epsom salts. In this very draught the carminative, syrup of poppies, is not in any way expressed, even in the full title; and the beginner, who may be called on to administer it to one of those hospital patients, may very naturally suppose the presence of that syrup, and by leaving it out, in prescribing for a private patient, may give him great discomfort and lose his confidence. Nor can the beginner know much of the truly valuable contrivances of modern scientific druggists, and their numerous "phosphates" and "palatable preparations" of patients in need of drugs, if merely desiring to administer the name of drugs,

bulky pills, or turbid dirty-coloured draughts. The next difficulty for the young doctor lies in sending in accounts, and in certain points of professional etiquette; but no hospital training could afford him instruction in such matters, and he will infallibly seek advice from some medical relative or successful senior fellow-student. The most important difficulty lies in his ignorance of minor complaints, and of the social habits, and, above all, the innumerable defects in domestic sanitation, which cause them. Indigestion is ever a great stumbling-block. The pain present in some of its forms often leads the tyro to alarm his patient by an expression of opinion that some very serious complaint exists. Persistent vomiting with obstinate constipation will be a source of great anxiety to the beginner, who may suspect strangulated hernia, and be opposed by his patient on proposing local examination. He is probably versed in the diagnosis of femoral from inguinal hernia and in the steps of any necessary operation, but knows little about asking questions as to the patient's habits, concerning hurry to catch trains, perpetual worry about business, idle habits involving frequent nips of strong or diluted alcoholic draughts, or that opposite condition of mental restlessness which induces the patient to read during meals, and to bolt his food, and walk or work directly after the last dish. The innumerable brands of strong and weak cigars and cigarettes, and the different strengths of tobacco, as well as the use and abuse of tea, are subjects that all bear more or less on dyspepsia and on many other diseases common in private practice.

Then the beginner may make every allowance for the habits of his patient, yet overlook his habitation. This is indeed the worst point of his inexperience. The patient may be feverish, and never eat a good breakfast; but after going out of doors he gets better, and always enjoys dinner; besides, when out of town he always breakfasts well. The young doctor may logically attribute his patient's illness to fatigue over night, and patients are apt to agree, for the sake of agreeing, with any such suggestion, and to suddenly believe that they do get fatigued of an evening. But if more experienced, he may suggest that the drainage may be out of order in the neighbourhood of his patient's bedroom, and with such knowledge not only effect the cure of his patient, but also save him and his family and servants from deadly or debilitating fevers.

Some of the above difficulties might certainly be overcome or made lighter by modifications in the modern system of hospital education. Those who superintend the senior student in out- or in-patient practice should always allow him, and indeed compel him, to write some of his prescriptions in full; indeed, writing the hospital-pharmacopœia prescriptions at full length is almost a duty to the student, and is no obstruction to the hard-worked dispenser. The importance of a faithful study of minor complaints must be practically encouraged, especially in casualty departments; the out-patient staff will often find that the most diligent student needs most guidance in this respect, and the anatomy-prizeman or junior scholar, after triumphantly diagnosing aortic regurgitation, might advantageously, to his own profit, be advised to inquire with equal care and interest into the nature and cause of the "dreadful pain in my chest," complained of by some patient who might otherwise be dismissed with a tonic, without having revealed the fact that he or she drinks three or four pints of weak hot and bad tea; or habitually bolts coarse food at dinner, through hurry or through impaired teeth. It is, however, the study of hygiene that is most imperatively demanded for the patient. This all-important subject is associated, in medical schools, with examinations for honours, and for some of the hardest university degrees. It is clearly advisable that all, and not only prize-students, should know about drainage, ventilation, and similar questions. A short summer course of demonstrations, with compulsory attendance, might easily be arranged at every medical school; and such instruction might be made very attractive to the student if models of houses, drains, etc., were shown to him, and his ingenuity exercised in questions about the arrangements, good or faulty, represented by such models.

ADULTERATION OF FOOD IN 1882.

SEVEN years have passed since the Sale of Food and Drugs Act became law; and recent experiments, as we may call them, which have been made, afford a very good opportunity of testing the real remedial effect of this measure.

The matter has been brought under the notice of the House of Commons in consequence of a Treasury minute of January 20th of this year, which, although it relates solely to chicory and other substitutes for coffee, yet in its spirit relates to every kind of adulterant which is imported rather than manufactured in this country.

Before the Sale of Food and Drugs Act was passed, an exhaustive inquiry was made by a Select Committee of the House of Commons, who received evidence of every kind as far as manufacturers and traders were concerned, and a certain amount of evidence from analysts and medical men. The conclusion of the Committee is fairly summed up by taking their own words, "that the public were cheated rather than poisoned". Naturally, after such an expression of opinion as this, the public, *i.e.*, the taxpayers, had a right to expect that the course of legislation would be such that the existing cheating, as well as the possible chance of poisoning, should be prevented. The most marked thing that was brought out in connection with the inquiry was the fact that adulteration was practically limited to a few substances; that is, certain definite articles of food, in reference to which it would be easy to take determined steps, such as are now being taken by the State Boards of Health in the United States. It was practically proved that milk, butter, coffee, and spirits formed what we may call the backbone of adulteration, with a profit to be derived therefrom. We may at once dismiss spirits from consideration, because the adulterant is almost invariably water, and, perhaps, this dilution is rather better for the consumer than otherwise.

Every year since this Act has been in operation, two series of returns have been published, showing the way in which the Act has worked. One series has been obtained by the Society of Public Analysts, and the other from the official returns of the Local Government Board. The former enters rather more into detail, and, therefore, is, for our purpose, more suitable for comparison. As regards general figures, the variation between the two is so trifling as to need no consideration. It must be borne in mind that both these tabulated returns are based upon the results obtained from samples purchased by the official inspectors appointed under the Act, who, in a large proportion of cases, are well known to the vendors of the goods in question; and that another report, to which we shall refer further on, is based upon independent purchases made by persons who were unknown to the tradesmen from whom the goods were bought.

Taking, first, the official returns, let us see what good has been done by the working of the Act. In the years 1875-6, according to the returns of the Society of Public Analysts, nearly 16,000 samples were examined, and the percentage of adulteration found was 18.10 per cent. In the year 1880, 17,919 samples were examined, and the percentage of adulteration was 17.47 per cent.

Viewed, therefore, from the standpoint of the public, *i.e.*, the consumers, the improvement has only been a trifle over 0.6 per cent. in six years. We need not look far for the reason. Taking the whole country round, only one sample has been purchased for about every 2,000 of the population, and probably not more than one sample out of every million purchased has been subjected to any proper examination in order to find whether it was really what it was represented to be.

A recent order made by the Lords Commissioners of Her Majesty's Treasury, in reference to the importation, "under a duty of 2d. per pound, of coffee or chicory, roasted and ground, mixed without reference to the proportion of the mixture, and the permission to extend this importation to any other vegetable matter applicable to the use of chicory or coffee," opens up the question of adulterants of coffee in a new light; and Mr. Pasteur and others have taken up the matter, and memorialised the Commissioners of the Treasury on the subject, accompanying

their memorial with a series of analyses and other statements, which throw an entirely different aspect upon the degree to which adulteration at present exists. When Sir E. Lechmere, early in the present month, interrogated Mr. Chamberlain on the subject in the House of Commons, he replied that "the change in the Treasury regulations does not make any alteration whatever in the law with regard to adulteration, nor does it, in my opinion, tend to increase the practice of adulteration." The statements of the Chancellor of the Exchequer in the Budget speech appear to be in direct opposition to Mr. Chamberlain's, since the Government appear now to determine to prohibit adulterants other than chicory; but this specific alteration has but little bearing on the general way in which we must deal with the subject.

Acting upon the view which the Treasury originally expressed, Mr. Pasteur purchased thirty-seven samples of coffee (so-called) at various shops in and about London, and submitted the whole of them to Messrs. Wigner and Harland for analysis, with the astounding result of finding that only two samples out of the thirty-seven were genuine; that is, more than 94 per cent. were adulterated. The adulterants found were, in addition to chicory, which was present in almost every sample, dates, dandelions, finings (which were said to consist of roasted figs and other substances); and the proportion of coffee, in several cases, fell as low as 10 per cent., and in some cases even lower. It is quite possible that, in some of these samples, nothing could be found which would indicate that the public were being poisoned, but there was certainly most conclusive proof that they were being cheated or swindled. Averaging the whole of the samples, the analysts found that they consisted of about 35 per cent. of genuine coffee, and about 65 per cent. of adulterants; and yet, notwithstanding such a condition of affairs as is shown by this statement, we find the Government giving increased facilities for adulteration, by allowing the importation not only of chicory, dandelion, and finings, but of any other vegetable matter, *e.g.*, roasted mangold-wurzel, turnips, or anything else, which, by being so far charred as to give it a brown colour and a slight solubility in water, can pass to the eye of an inexperienced purchaser as something outwardly resembling coffee.

Coffee, tea, and cocoa all contain certain active principles which have a specific and, to a certain extent, valuable effect when taken as beverages; but no one has yet been found to assert that chicory or roasted vegetable roots of other similar kinds possess any such active properties. Again, coffee, tea, and cocoa, all class among the valuable vegetable products; while chicory and its congeners rank very slightly above cattle-food in value.

The effect of the Treasury Order would, therefore, have been this: that, the importation of these substitutes and adulterants being legitimatised, the detection of them, when brought into retail sale, would be thrown upon the public analyst; and inasmuch as not one sample in one million of those purchased is, as we have before remarked, submitted to analysis, it follows that practically the whole would pass into consumption without detection, and the public would be defrauded to this indefinitely greater extent; and this is exactly what is happening at the present time as regards twenty substances other than coffee, and as regards some of the most valuable drugs in the Pharmacopoeia.

The bearing of this on the coffee-trade is, of course, an important question, but with that trade itself we have nothing to do; and we refer to the matter simply as affecting the general scope of legislation relating to adulteration and the protection of the public.

From numerous inquiries we have made, it seems more than probable that, if an independent man were to take the matter up, and examine into the statistics of adulteration of certain other articles of food in everyday use, the results would be found to be nearly, if not quite, as bad as in this case of coffee. The fact seems simply to be this. The Sale of Food and Drugs Act was passed against the wish of a certain class of men claiming to represent dealers in the commodities concerned, whose sole object was to put every difficulty in the way of the efficient execution of the Act, and render it as far as possible abortive. Their success exceeded what was suspected at the time by

the experts who were watching the matter. The vendor is now fenced round on every hand with technical precautions which should be observed when the samples are purchased; and, in the great majority of cases, he is, as we have said, well acquainted with the inspector who comes to procure samples for analysis, and he is allowed to label the samples; so that, even if coffee be asked for, and he sell 90 per cent. of chicory, he is protected so long as he labels it a mixture; and, even supposing all these precautions have been neglected, half a score of technical objections are always open to him, while solicitors specially retained by the trade associations do their best to prevent conviction. Of course, in 1875, the public were not sufficiently acquainted with the injury and fraud which was being perpetrated by adulteration, and they brought no pressure to bear upon the Government on the matter; but, since that time, France, Germany, Belgium, and the United States, have all gone far ahead of us in their legislation on the subject; and it is perfectly clear that some further steps must soon be taken here to remodel our Adulteration Acts, and put them on such a basis that a tradesman who swindles his customer by selling him chicory instead of coffee, shall be dealt with in the same way as any other man who obtains money under false pretences.

SLEEP AND SLEEPLESSNESS.

"A NATURAL Philosopher," writing to the *Daily News*, propounds what he conceives to be a new method of inducing sleep, and claims for his excogitation the dignity of a "proud discovery." To tell the story in his own words, the notion which has occurred to him is "to marry the mind to the body." For example, he makes the finger of his right hand describe a series of circles, while he is thinking of the books in his library; and, as he says, "thus turning over in my mind books and circles, it will go hard with me if the one does not presently melt into the other, and the whole into a dream." The conditions of success are laid down as follows. "I maintain sleep must follow, if this process is carried on with strength of mind to sternly check all quitting of those two great points—a congenial walk for the fancy and persistence in describing circles. But the jade fancy must not turn aside, nor must the mind swerve. Circle must follow circle, book must follow book, like the stroke of a pendulum." "A Natural Philosopher" is apparently ignorant of two facts about sleep, which are all-important in the treatment of sleeplessness, and which are curiously illustrated in his ingenious device, and the success which seems to have attended its employment in the experience of the "discoverer." It may be worth while to note these facts, and the lessons they teach, by way of recalling certain practical phases of the physiological process of periodic rest, to the mind of the busy practitioner, who is almost daily called upon to treat the troublesome and destructive malady of sleeplessness.

As Dr. Mortimer Granville, the most recent systematic writer on this subject has pointed out, general sleep is the aggregate of independent though normally correlated sleeps induced in various parts of the system. Cerebral sleep, or physiological rest of the higher brain centres; automatic sleep, or rest of the executive centres; sensory sleep; muscular sleep; visceral sleep—are all component parts and factors of the general sleep. Any one of these varieties, or integers, of sleep may be deficient or excessive, and the result will be marred by the disturbance of that harmony which is essential to the perfection of all organic functions. This is the first fact to be noted. "A Natural Philosopher" gives evidence of the need that, in his case, exists for a general reduction of soundness in the automatic and muscular systems, by the recitation to non-stop of movements, which weary the centre that presides over the right hand; and, at the same time, weary the muscular system through one of its most fatiguing and unproductive exertions. The second fact to which we allude, and which is the foundation of the result desired, is that of what is called the "habit" of sleep. With a view to treat sleeplessness, ought the patient to be put to bed, and, if so, how? The first question, that the periodic recurrence of sleep is a result of habit, and, therefore, the act of "going to

sleep" ought to be also a habit. Dr. Mortimer Granville insists strongly on this point. He says: "The cultivation of a habit of going to sleep in a particular way, at a particular time, will do more to procure regular and healthy sleep than any other artifice. The formation of the habit is, in fact, the creation or development of a special centre, or combination, of the nervous system, which will henceforward produce sleep by a natural rhythmical process. . . . It is not very important what a person does with the intention of going to sleep; but he should do precisely the same thing, in the same way, at the same time, and under as nearly as possible the same conditions, night after night, for a considerable period—say three or four weeks, at least. The result will amply reward the effort." "If 'A Natural Philosopher' had formed any other habit, involving a sufficient amount of muscular exercise to meet the special needs of his case, he would have been equally successful.

Sleeplessness is wakefulness, and it should always be treated from this point of view. A very common cause of insomnia in certain of its most troublesome forms, namely those accompanied with mental restlessness and worry, is such vaso-motor disturbance or debility—it may be either or both—as prevents the conversion of the jactatory or pulsating current of the blood into a continuous and steady flow before it reaches the capillaries. When this state of affairs exists, relief may occasionally be obtained from a moderate use of some stimulant in the form of a "night-cap", but that is a mere expedient for the service of the moment, and does nothing towards permanent cure. The rational remedy for this form of insomnia is undoubtedly a tonic treatment, acting as directly as possible on the vaso-motor centre or system; sedatives do harm. The commonest cause of sleeplessness is, however, disproportionate fatigue, by which some part or system of the organism is over-worked, while others are not sufficiently exercised. The diagnosis of cases of this class requires a very close scrutiny of the habits of life of the sufferer, and a rigorous testing of his senses and functional activities in detail. Dr. Mortimer Granville has described thirty-six causes or forms of sleeplessness falling into this category. A scientific treatment of insomnia must obviously consist in something widely different from the administration of opium, chloral, or bromide of potassium, in such doses as may suffice to stupify the faculties, and perhaps in a round-about way induce sleep.

The subject is one which has not yet received that close study at the hands of physiologists and practitioners which its practical importance would justify. The most painstaking experimenter has been Vulpian. He wholly rejects the anæmic theory, and has, as it would seem, conclusively demonstrated the fallacy of that generally accepted view. Not only for its own sake, but for the sake of the many mysterious phenomena of health and disease upon which a full elucidation of the nature and causes of sleep and sleeplessness would probably throw light, it is much to be desired that the whole question may before long engage the serious attention of the many able investigators in our midst.

INFANT PSYCHOLOGY.

THE philosophical reviews have been busy for years now upon the new topic of the development of the human mind in its earliest stages. Since Mr. Darwin and M. Paine amused themselves by publishing their observations on babies, the arrival of each new infant in a philosopher's household has been seized upon as a scientific opportunity not very far inferior to a transit of Venus or an eclipse of the sun. The dim faculties of the "corpus vile" itself must have been puzzled by the amount of psychological vivisection, if we may so call it, which turned the nursery into a kind of laboratory of mental science. What mothers and nurses thought of the matter, has not as yet been revealed. But the editorial tables still groan beneath the weight of wisdom which the happy fathers, ambitious of eternal fame, have distilled in hot haste and sent forth as a contribution to the enlightenment of the world. The last of these *litteræ* which has come under our notice is itself a new departure. It is a paper by M. Percy in the *Revue Philosophique*, concerning the uterine intellect. He modestly names it "The Faculties of

the Child at the Epoch of Birth"; but it is needless to say that he goes further. Like the rest, he has started from nursery observations, which to us seem very trivial. Any old woman could surely have told that "Marie", a lively child of three and a half months, would be very fond of flowers, especially if bright coloured, would appreciate caresses, and cry if reprimanded, and would be remarkably jealous. But it is in theory that M. Percy flourishes. He has not even an opinion as to the question of the progressive evolution of colours for the baby. Whether it be after the scheme suggested by Gladstone and Magnus for the race, or whether Mr. Grant Allen be right, or whether there be such an evolution at all, he does not say. But he throws out the opinion that it is the contrast of light and shade that first educates the child, and that it is his muscular experiences which raise the idea of exteriority. Then he regards the vast hypothesis, which to him appears to be elementary and obvious fact, that the distinction of his own cries from voices and noises not his own causes the child very soon to imagine, as distinct from himself, beings capable of making themselves heard and understood like him. The idea of causation seems to arise, in a similar way, and at the age of about two months and a half, by the contrast of the movements produced by the baby's own muscular efforts with movements not produced by him. And so on through the whole list of primary categories, as far as M. Percy has dealt with them as yet.

This sort of thing proves, we venture to suggest, the very inadequate perception of the real difficulty of the problem which these light-hearted psychologists possess. They would probably despise any hints tending to recommend a study of the *à priori* side of the question. Most of them, indeed, tacitly assume, or practically imply, that the old idea of a spiritual entity—a soul or self other than the organism, and not a function of it—is superseded. Whether this be so or not, we can hardly discuss here; but surely it is scarcely serious work for the advancement of truth, if, at the outset of a fresh investigation such as this, the discoverers ignore altogether any theory of knowledge but their own. For example, it is plain that the child never could attain to ideas of exteriority or causation in the manner suggested, unless he had in his mind some such ideas already present. Their explanations of the genesis of these notions imply in truth that antecedently the notions were there.

When M. Percy goes on to speculate on the intellectual life of the foetus, he starts a problem which is, no doubt curious, but on which little experimental light can be thrown. His own remarks are of the vaguest. What he says, however, leads us to notice some remarkable points. How is it that, during the fourth and fifth months, the cerebral development of the foetus advances with disproportionate strides? If the infant at the moment of birth is not, as C. Vogt suggests, simply "*un être spinal*", would it be true to say that of any earlier period? And what possible theory can we imagine to explain the passage from merely animal existence to conscious ideas? Does self-consciousness—the power of realising oneself as an identity distinct from passing sensations, and of relating these to one another so as to build up a world of objects around us—does this come into the infant's life suddenly? and if so, when? If it does not, how can we conceive of gradations in such a matter? These are the real problems of uterine and infantile psychology; and these, we must add, are matters on which those who have hitherto treated of these things throw no kind of light.

There are many other things which are curious in themselves, and may ultimately prove valuable indications. It is strange, for instance, that, notwithstanding the comparatively late development of the perfect auditory organ, the new-born child begins almost at once to show great sensitiveness to very slight sounds, which mostly tend to frighten him; while, even with an eye apparently in full development from the first, he seems almost insensible to light, and it is weeks before he appears really to see, or at least to observe, even a bright object. It is so easy to accumulate accurate statistics upon such points, that much interesting matter ought to be quickly collected in some reliable form. But it

is to be hoped that the observers and experimenters of the nursery will not too readily jump to the conclusion that they have found there the key to all philosophical puzzles. The mystery of knowledge must probably be itself unravelled long before we are in a position to speculate about the beginnings of individual life.

At the last meeting of the Council of the Royal College of Veterinary Surgeons, Mr. George Fleming, Army Veterinary Department, was elected President for the third time.

THE Earl of Shaftesbury presided at a recent meeting held at Willis's Rooms on behalf of the seaside branch of the Metropolitan Convalescent Institution at Bexhill, near St. Leonards. In response to the special appeal, donations were announced to the amount of £791.

WE may remind our readers that the debate on Sclerotomy at the Ophthalmological Society takes place on the 8th instant; and that, if necessary, an adjournment will probably be made to the following day. A very full discussion of the subject is expected, and visitors who may desire to attend will be welcomed.

IT is announced that the French Minister of Marine has placed at the disposition of M. Alphonse Milne-Edwards the vessel *Le Travailleur* for a dredging expedition in the Bay of Biscay as far as the Canary Islands. The operations, which are to be made with a view to studying the fauna and flora in deep sea, will take place in July and August next.

WE understand that, owing to the resignation of Mr. James Lane, Mr. Edmund Owen has been appointed surgeon to St. Mary's Hospital. Mr. Augustus Joseph Pepper, who has acted for some years as supernumerary assistant-surgeon at this hospital, is, we believe, a candidate for the vacancy produced by the promotion of Mr. Owen, and will probably be appointed.

THE eminent surgeon, Baron von Langenbeck, has tendered his resignation of the professorship of surgery in the University of Berlin, which he has held for many years with advantage to surgical science and honour to himself. His resignation has been accepted by the Prussian Government; and instructions have been given to take the necessary steps for the appointment of a successor, to enter on the duties of the chair in October.

THE Paris medical men, especially specialists in nervous diseases, are much interested, if not puzzled, by a patient recently received at the Beaujon Hospital. She was found by two policemen, insensible, on a seat in the Champs Elysées. At the station-house, Dr. Pinel was unable to restore her to consciousness, though he used every known means. She was in a state of ecstasy, her eyes wide open, and a smile on her lips. She remains mute; eats but little, and seldom. She is far advanced in pregnancy.

MR. F. M. BALFOUR was on Wednesday elected to the new Professorship of Morphology in the University of Cambridge. Mr. Balfour holds one of the Natural Science Fellowships at Trinity College; is a Fellow of the Royal Society; and last year the medal of the Royal Society was awarded to him, in consideration of his researches in morphology and embryology, which have placed him in the front rank of European biologists. Professor Balfour is a young man, having taken his degree, through the Natural Sciences Tripos, in 1873; and it is to be hoped that the duties of his professorship will not interfere with his continuance of the work of original investigation, for which he has shown himself so eminently qualified.

THE following additional sums have reached us towards the fund being raised on behalf of the family of the late Sir John Rose Cormack: Dr. MacLagan (Edinburgh), £20; Mr. G. R. Gilruth (Edinburgh), £1 1s.; Dr. W. J. Marshall (Greenock), £5.

MEMORIAL OF VON GRAFE.

ON May 22nd, a memorial statue of the eminent ophthalmologist, Albrecht von Gräfe, was unveiled, in the University of Berlin, in the presence of a large assemblage, including several Government officials; the professorial staff of the university; von Gräfe's son and daughters; his cousin, Professor Alfred von Gräfe of Halle, and other members of his family; and also several ophthalmologists from distant parts, among whom was Professor Arlt of Vienna. The statue, which is of bronze, is somewhat above life-size, and is said to be a strikingly correct resemblance; it represents von Gräfe with his left hand resting on the back of a chair, and his right holding an ophthalmoscope.

QUARANTINE IN EGYPT.

THE Commission appointed by the French Academy of Sciences to investigate the question of the advisability of modifying the system of quarantine in Egypt have sent in their report. We are glad to find that they concur in the view which we have repeatedly expressed, that there exists an abuse of sanitary measures prejudicial to commerce, and propose that an international conference should be held at Brussels, in order to establish a sanitary code which would reconcile all hygienic desiderata with commercial interests.

STIMULANTS IN WORKHOUSES.

THE Visiting Committee of the Strand Workhouse have had their attention called to the great quantity of beer, wine, and spirits consumed in the house. They found that a pint of beer *per diem* was allowed to many of the inmates for work done. The doctor did not approve of this; but said he understood, when he took office, that this allowance was the wish of the guardians. The committee recommended that the beer be diminished by one-half daily, and that the other allowances be left to the discretion of the surgeon. A gradual reduction in the amount was suggested; but it was stated, in answer, that the men employed in painting and cleansing would not work without beer. The chairman of the committee remarked that, if they refused to work, the master had his remedy. If the master find this beyond his power, we would suggest that he communicate with Mr. Wearne, the medical officer of Helston Workhouse, for advice how to manage this much-needed reform. In 1879, the "drink" consumed in that workhouse cost the ratepayers 12s. 4½d.; 1880, 7s. 3d.; 1881, 7s. 4d.; a total for three years of £1 16s. 11½d. We learn from the *Sanitary Record* that, without cutting off the supplies from those who were previously habitually accustomed to the allowance, Mr. Wearne determined to treat new comers differently; and, while dispensing with alcoholic drinks, he substituted stimulants of a more abiding and sustaining nature, as milk, sugar, sago, cocoa, and corn-flour, in extra quantities. Or, as we gather from the same journal, the Falmouth Workhouse might be appealed to for instruction, where Mr. F. C. Bullimore is the medical officer, and where the drink bill for the year ending March 25th, 1882, only amounted to 9½d.

LATE SOMNAMBULISM.

THE *Times* of May 29th contained the following curious and painful announcement. "On the 25th of February, drowned on the Cape of Good Hope, during somnambulism, in the imaginary but gallant attempt to save life, John Rodd Child, Lieutenant of H.M. ship *Esperanza*, beloved and lamented by all who knew him." It seems that Lieutenant Child, in an unusually vivid dream, in which was recalled what is not an uncommon incident of his vocation, responded promptly to the ideal cry of "A man overboard"; and rushing on deck, while still asleep and still dreaming, sprang into the sea to save, as he supposed, even at the peril of his own life, his drowning shipmate. A truly noble nature is revealed by such brave action under circumstances when the man stands confessed, all disguises laid aside, and when many of the subsidiary aids which stimulate and brace to praiseworthy conduct when all the mental faculties are in full play were no longer operative; and we can well believe, therefore, that this heroic officer was beloved and is deeply lamented by all who knew him. The sudden

immersion, no doubt, dispelled his disastrous dream and restored him to consciousness; but the bewilderment of his situation, when he awoke and found himself in the trough of the sea, must have deprived him of presence of mind and of the power to make efforts for his own safety. Lieutenant Child's dream is, of course, correctly described as somnambulism; but somnambulism, it is to be remembered, is only a dream in which an unusual combination of cerebral centres is involved. During somnambulism, that faint functional activity of some limited areas of the grey matter of the hemispheres which corresponds with ordinary dreaming becomes more intense, and, while other areas—the activity of which is essential to complete wakefulness—remain still dormant, spreads to the nervous mechanism concerned in the externalisation of ideas, and so results in action. Somnambulism requires to be thoroughly re-investigated in the light of recent discoveries in cerebral physiology. A few years ago, a murder was committed in Scotland in a state of somnambulism, and the person accused was acquitted on the ground that he had no knowledge of what he did nor control of himself when, dominated by a dream, he broke the law.

SPEECH FOR THE YEAR.

THE Society carrying on this work at Ealing has just held its fourth annual meeting, which was largely attended. Among those present were Dr. B. W. Richardson, Dr. Symes Thompson, Mr. Howard Hayward, and other gentlemen connected with the medical profession. The proceedings of the day included the adoption of the annual report and balance-sheet; the appointment of officers; the inspection of the Society's new premises at Castle-Bar Hill, Ealing; and an exposition of the mode of teaching, by which visitors were able to note the progress of the pupils. The report contained much valuable information, showing how rapidly the system was spreading in various countries, and how the progress of the Society here had necessitated the removal to more extensive premises, which could be adapted to the growing requirements of the work. More teachers are sought for than the college is able to supply. The demand can only be met by an accession of candidates for teaching, and of funds to defray the necessary expense. A meeting to promote the cause of the Society is shortly to be held at the Mansion House.

THE REMOVAL OF INFECTIOUS CASES.

THE Paddington Medical Officer has issued a circular letter to the various metropolitan boards of guardians, suggesting that an alteration be made in the law, "whereby greater facilities would be given for persons taken into the Metropolitan Asylums Board's hospitals than at present, so that they need not be accompanied by an order from a medical or relieving officer." According to this amendment, "any registered medical practitioner, called to see a person suffering from an infectious disease, may give a certificate to the person in charge of the patient, to the effect that the patient is suffering from an infectious disease, and is in a fit state to be removed to a hospital." It will then only be necessary for some one to take the certificate to the vestry or office of the district board, when the fever-carriage will be immediately despatched for the removal of the patient: upon whose departure, the sanitary inspector, apprised of the case, will proceed to the work of disinfection. The plan adopted at present is as follows. The medical man called in recommends the patient's removal to the hospital. He directs the person in charge of the patient (generally wife or daughter) to go to the workhouse, where she sees the relieving officer, tells him her story, and receives from him four documents, which she then proceeds to take to the Poor-law medical officer. When found, this medical man by-and-by makes his visit to the patient; and, for the second time, a certificate of the nature of the case is given to the person in charge, together with more documents, an order of admission and one for the fever-carriage. The applicant then goes again to the vestry-hall, and shows the order for the fever-carriage to the hall-keeper, who takes the order to the cab-master, who sends a man with a horse to the stone-yard where the carriage is kept, who drives to the patient's house, who is assisted into the vehicle, and finally conveyed away to his destination.

tion. All this delay is no doubt very objectionable to the patient; but, as the medical officer remarks, the public are equally and as directly interested in a reform: "These journeyings to and fro through crowded streets, whether in a public conveyance or not, are fraught with danger to the public, are unnecessary, and should be prevented. The same remark applies to the person who accompanies the patient to the hospital and returns in the manner indicated." Some of the guardians, to whom this letter has been read, object to the proposed simplification of the present method, because "the suggestions, if adopted, would open too wide a field for admission to the hospitals."

THE CLINICAL SOCIETY.

THE concluding meeting of the Clinical Society for the session just concluded was held on Friday, May 26th, and was devoted entirely to the discussion of questions of medicine and dermatology. It was rendered the more interesting by the presentation of the report of the committee on hyperpyrexia in acute rheumatism, which was appointed about two years ago. An abstract of the report will be found printed at page 807 of this day's BRITISH MEDICAL JOURNAL, and the important conclusions at which the committee have arrived are appended thereto. Dr. Greenhow contributed a paper on cases of rheumatic fever treated with iodide of potassium and sulphate of quinine, from which it would appear that this treatment contrasted favourably, in Dr. Greenhow's experience, with the treatment by salicine and salicylate of soda. As Dr. Glover remarked, it would perhaps have been preferable if Dr. Greenhow had tried quinine alone; the union of drugs in exact experimental inquiries is not usually to be commended. The remainder of the meeting was chiefly given up to papers on cases of diseases of the skin. Dr. Crocker read a paper on the prurigo of Hebra, Dr. B. O'Connor exhibited a case of ichthyosis, involving the entire surface of the body, and Dr. S. Mackenzie read notes of a case of lupus-psoriasis. Dr. Churton (Leeds) contributed notes of the sequel to a case of double hæmorrhagic pleurisy with formation of cholesterine. The patient had died with signs of septicæmia shortly after the making of an incision into his left chest, and after death the floor of the pleura was found covered with a thick layer of old degenerative cells, and lymph containing cholesterine.

A NEW COLONIAL MEDICAL SCHOOL.

THE Government of New South Wales has, we read in the *Australian Medical Journal*, more than doubled the annual endowment of the Sydney University. The Senate has therefore determined to open the Medical School there in June next. Mr. W. J. Stephens has been appointed Professor of Natural History, and Dr. McLaurin Professor of Anatomy and Physiology. The chair of Natural History is to include Geology and Botany. There has been much difference of opinion as to the propriety of appointing local men, without first learning whether better teachers could be obtained from England. Dr. McLaurin has subsequently resigned the chair of Anatomy and Physiology on account of ill-health. Applications have been invited for the following offices: Demonstrator of Comparative Anatomy, Physiology and Histology; Demonstrator of Anatomy and Physiology; Lecturers on Practice of Medicine, Surgery, Midwifery, Clinical Medicine, Clinical Surgery, General Pathology, Materia Medica and Therapeutics.

OXFORD LODGINGS.

THE work of reforming the sanitary condition of the lodging-houses licensed by the University of Oxford has been carried out with such vigour and completeness, that it is now officially stated that, out of the total number of 520 licensed houses, containing accommodation for 1,100 undergraduates, only thirteen remain which have not yet been reported by the sanitary officer to be in a satisfactory condition. The inspection appears to have been of a very searching kind, and it is formally notified that henceforth no new house will be licensed unless the sanitary arrangements are carried out in accordance with plans prepared by the delegates. This important improvement has been attained at a cost to the University of nearly 2,000 guineas.

PROFESSOR HUETER.

SURGICAL science in Germany has sustained a severe loss in the death of Dr. Hueter, director of the surgical clinique at Greifswald, who died of renal disease, after several weeks' illness, on May 14th, in the forty-fourth year of his age. After graduating, and travelling for some time in foreign countries, he was, in 1863, appointed assistant in the Berlin Pathological Institute; in 1864, assistant in Langenbeck's wards; and, in 1865, qualified as a private teacher of surgery in the University of Berlin. In 1868, he accepted an invitation to the professorship of surgery at Rostock; and, in 1869, succeeded Bardeleben at Greifswald, in the post which he held at the time of his death. His accomplishments in surgery were very extensive; there was no branch with which he was not acquainted—no subject or theory which he did not investigate. His latest work, *Grundriss der Chirurgie*, was completed only a month or two before his death. He carried out the investigation of the pathology of joint-diseases with singular diligence, and has published the results in an exhaustive work, which abounds in original ideas on the subject. Hueter was a most fertile writer. He was editor of the *Deutsche Zeitschrift für Chirurgie*, and author of the articles on Pyæmia, Traumatic Fever, and Tracheotomy, with allied operations, in Billroth's great *Handbuch der Chirurgie*. He investigated the value of Lister's method; and, by his strict observance of it, has done much to give it a commanding position in German surgery. His remains were buried at Marburg, the place of his birth, on May 15th.

THE USE OF ALCOHOL IN HOSPITALS.

THE Honorary Secretary of the British Medical Temperance Association writes:—"In November 1880, it was stated in the public papers that the medical officer of the Walton Workhouse of the West Derby Union, Liverpool, had reported to the Board of Guardians that the mortality among the sick paupers in the infirmary during the previous two months had been three times as great as usual, and that this was owing to a large reduction in the amount of alcoholic liquors administered. The data on which this opinion was founded not being given in the paragraph referred to, the Council of the British Medical Temperance Association petitioned the Local Government Board, through their president, Dr. Richardson, to institute an inquiry, and suggested several questions to which answers were required before the conclusion could be warranted that the reduction of the total quantity of alcohol consumed had any connection with the increased mortality. The Local Government Board approved of the proposed inquiry, and sent down an inspector to endeavour to obtain the necessary information. Certain returns were made, and these were placed in the hands of the Council to report upon. After careful examination and analysis, it was discovered that, of the whole quantity of alcohol used in the two months (valued at £31 17s. 7d.), a very large proportion had been consumed by cases which ended fatally. It was also found that several of the fatal cases were of such a nature that the absence of alcohol could not have had any relation to the result. The information supplied was found to be very defective on several important points, and quite insufficient to warrant the conclusion that the rate of mortality was either unusual or due to the decreased consumption of alcohol, much less to lend any support to the wide generalisation that without the use of alcohol as a drug the mortality of the sick would be increased. These conclusions were concurred in by the inspector who made the inquiry."

PARISH MORTUARIES.

THE need of some decent arrangements by which bodies awaiting the coroner's inquest may be properly housed and treated with due care and respect, and the further necessity for suitable places in which the coroner's inquiry may be conducted, have been repeatedly pointed out, and are almost every week emphasised by fresh occurrences. This week, at an inquest held at Hendon, Mr. Warner, the proprietor of the hotel to which the dead body had been removed, stated to the coroner and jury that he thought it high time that the authorities of the large parish of Hendon should provide a mortuary for the reception of those

found dead or expiring within the boundaries of the parish. The coroner said he quite agreed with what had been said, and that with the exception of St. Pancras, the whole of the up town parishes in his district had built or were erecting mortuaries for the reception of the dead, the separation of which from the living was of the greatest importance on the score of health, leaving out the question of decency. The authorities of Islington Parish had erected a model building for the reception of the dead. The jury likewise expressed their opinion that such mortuaries should be built in every parish throughout the county. It would probably have a useful result, if Sir William Harcourt would commission a skilled person to report to the Home Office on the arrangements existing in France and Germany, and for these purposes especially, or those recently completed at the Paris Morgue. London ought no longer to be a reproach in these arrangements, for both in our reverence for the dead and in respect for justice and its ministers, the English people are not wont to consider themselves second to any other nation. It must be confessed that the irreverence and inefficiency of our present arrangements in regard to bodies awaiting examination, as well as for the reception of the coroner and his jury, are not to be matched in any part of the civilised world.

THE BERLIN HYGIENIC EXHIBITION.

THE anticipations of a speedy re-opening of the ruined Hygienic Exhibition have, we regret to read, proved somewhat premature. Careful investigations by the Board of Directors have led to the unavoidable conclusion that nearly a year must elapse before the buildings and collections can be sufficiently restored. In consequence of the disaster, the authorities are naturally averse to grant permission for the construction of mere wooden sheds, whilst the exhibitors on their part dread the expense of erecting massive or even glass and iron houses. The directors may well be thankful that the terrible fire which laid low the greater part of the Exhibition in the comparatively short space of less than two hours did not occur a few days later, when it might have been filled with thousands of visitors. It is alleged that to save expense the directors had purchased the well-dried materials from the committee of last year's Industrial Exhibition in Halle, and scarcely provided for a sufficient supply of water for average needs, to say nothing of emergencies.

ARMY LANCE INSTRUCTION.

HERR VON MADAI, the President of the Berlin Police, has just established a "Philanthropic Corps", composed of police officers and constables, a certain number of whom are chosen from the different police divisions. These members of the force are to attend weekly lectures in the town hall on the treatment of invalids and sick persons suffering from sudden illness or accidents. By this means, it is expected that shortly about three hundred constables will have obtained sufficient knowledge of medical science to treat sufferers before regular medical aid can be obtained. Particular attention will be directed to the best means of restoring life to persons taken from the water.

THE ARREST OF FERMENTATION.

M. PAUL BERT, following in the steps of M. Bechamp, has, by a series of experiments, discovered that oxidised water arrests fermentation resulting from the presence of living organisms (vibrios, bacteria, yeast-cells, etc.), but is inert in the presence of amorphous ferments (diastase, saliva, pancreatic juice, etc.).

BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

THE sixtieth annual meeting of the Birmingham Medical Benevolent Society was held on May 26th. The following officers were elected for the ensuing year. *President*: Dr. Bassett. *President-elect*: Mr. W. Smith (Redditch). *Vice-Presidents*: Dr. Hickinbotham and Mr. Morant (Loughborough). *Directors*: Dr. Lester, Dr. Savage, and Dr. Webb. *Treasurer*: Mr. Bartlett. *Treasurer and Secretary*: Dr. Sawyer. The annual report showed a prosperous condition of the Society's affairs. The income for 1881 was £620 4s. 10d.; of this sum £405 was expended in grants to disabled and distressed members, and

to the widows and children of deceased members. At the end of the year, the funds of the Society amounted to £9,987 4s. 8d. After the meeting, the members dined together at the Grand Hotel; Dr. Bassett occupied the chair, and Dr. Sawyer the vice-chair. The directors make an earnest appeal for new members. The roll of the Society contains only 248 names, although the work of the Society extends over an area containing about 3,000 practitioners. Any registered practitioner, "regularly practising his profession," and living within fifty miles of Birmingham, is eligible for membership; and members do not lose their privileges by removal beyond the radius prescribed for their admission. The annual subscription is one guinea, and this payment ceases when twenty-one subscriptions have been completed. The financial position of the Society is sound and secure. By careful management, the directors have accumulated a capital of ten thousand pounds, which is placed in the charge of well-known professional trustees. This considerable sum, by the laws of the association, must never on any account be diminished; the interest arising from its investments, together with all donations, may, at the discretion of the directors, be given to suitable applicants. The Honorary Secretary will gladly afford information to applicants for membership or relief, and gratefully receive and acknowledge donations. Our brethren in the Midlands, whether benevolently or providently disposed, or both, ought not to forget the claims of this excellent Society.

THE VALUE OF HOSPITALS.

A GRAND bazaar and athletic festival has been held in Stanley Park, Liverpool, in aid of the funds of the Stanley Hospital, and was formally opened by Lord Derby, who, in the course of a brief address upon hospitals and their work, remarked that they were a form of charity absolutely free from risk or even the suspicion of imposture, and, in addition to the direct good they did, they were of immense indirect advantage to the community, because they were schools of professional teaching from which all classes profited. It was by the bedside of the hospital patient that the eminent physician or surgeon secured a large part of that skill which he used for the relief of his wealthy patients. He agreed with the view that hospitals should be self-supporting to a greater extent than at present, and he should be glad to see a further extension of a movement which had taken hold of the public mind for obtaining from the patients a contribution towards the medical assistance they received; but, in the meanwhile, it was clear they must keep their hospitals on the old footing. When a man fell ill or suffered an accident, they could not stop to inquire whether he could afford to pay for being cured, or whether it was partly his own fault he fell into trouble; they must cure him first, and consider afterwards who was to pay the bill.

POST MORTEM EXAMINATIONS IN HOSPITALS.

ON Friday, May 26th, Mr. Flowers had before him at Bow Street the summons against the Registrar of the Children's Hospital, Great Ormond Street, for performing a *post mortem* examination on the body of a child without the permission of the nearest relative. The case was first argued by Mr. Besley, the prosecuting counsel, said that he appeared for a certain body of philanthropic gentlemen, who, under the name of the Vigilance Committee, had combined together to defend the rights of the people, whenever and wherever these appeared to be assailed. In the present instance, they wished to obtain a decision of the question whether there was any right on the part of the authorities of a hospital to make a *post mortem* examination without the express leave of the nearest relative. Mr. Besley was careful to say that he desired to make no attack upon the medical men interested in the case, or upon the management of the hospital. The body for whom he appeared had merely chosen this as a test case. The facts of this particular case have already been detailed (April 1st, 1882, p. 468). The legal argument between counsel, which occupied most of the time of the court, turned very much on the question whether the Anatomy Act could be held to apply to the case at all, or not. The proceedings were not taken under the Act; and the prosecution relied chiefly on a

passage in the code (Report of Commission on the Law of Indictable Offences, 1879, page 97), in which the commissioners advise that certain pains and penalties shall be visited on any person improperly interfering with, or offering any indignity to, a dead body; and the summons, in fact, was taken out in the following terms: that the person charged "did unlawfully interfere improperly with a certain dead human body.....that is to say, by cutting the dead body, and thereby offering an indignity to the said dead human body," etc. For the defence, it was urged, in the first place, that the passage in the report merely expressed the opinion of the commissioners, and was not a law of the land; and that, in the second place, a properly conducted *post mortem* examination (and it was not pretended that anything else had been attempted in this case) was not an improper or indecent interference with, or involved any indignity to, a dead body. Mr. Besley relied on the Anatomy Act to prove by analogy (for, as we have said, it was not contended that the Act applied to this case) what was an improper interference; and he urged that any interference was, under that Act, improper, which occurred before the expiration of forty-eight hours after death, and which was not preceded by the removal of the body to some place licensed for anatomical examination. The magistrate observed that he was well aware that there was a great difference between an ordinary *post mortem* examination and a dissection such as was conducted in an anatomical school. On the question, however, to be decided—namely, whether the authorities of a hospital, in making a *post mortem* examination without the express leave of the nearest relative of the deceased, were exceeding their legal rights—he reserved his opinion for a fortnight. The question is undoubtedly one of great importance to hospital authorities, and indeed, indirectly, to the profession generally; and it is no doubt most desirable that a decision should be obtained. We cannot, however, help regretting that the prosecution has elected to proceed by a criminal indictment. The hardship thus inflicted upon the hospital, and especially upon its registrar (for, as the person who actually performed the *post mortem* examination, the summons was directed against him), is considerable; and, should Mr. Flowers decide to send the case for trial, the individual hardship will be very great, and must compel the sympathy of the profession at large.

OMNIVOROUS ECCENTRICITIES.

MR. BENTHALL has favoured us with the following report of the case of a man, whose peculiar feats have attracted much attention. About 11.30 P.M. on May 16th, E. S., a strongly built labourer, aged 30, applied at the Derby Infirmary for relief under the following circumstances. He had for some months been in the habit of amusing the frequenters of public-houses, and obtaining money or beer for himself by tearing up with his teeth and swallowing felt hats and newspapers. He had also the power of passing a whole hen's egg into his pharynx, retaining it out of sight for a time, and then returning it. On the night in question he had swallowed a newspaper, and collected four or five penny pieces from the spectators, when it occurred to him to finish the performance by imitating the egg trick with these coins. In doing so, he allowed them to slip down his throat. Being either fearful of the consequences or anxious to regain his money, he produced vomiting by swallowing large draughts of salt and water, but without recovering the coins. He then sought aid at the Infirmary, but made no mention of having swallowed the paper. Taking into consideration the number of the coins and the probable size of the man's gullet, it was thought advisable to try an emetic. The man was therefore given a full meal of porridge, and after an hour's time, when it was hoped the pennies would be enveloped in the food, an emetic was given. Vomiting followed, but there was no welcome chink in the bowl. On examination of the vomit, considerable surprise was excited by the presence of three or four rolls of printed paper three inches long by an inch broad. The emetic having failed to dislodge the coppers, the patient reluctantly consented to remain in the infirmary. He was admitted under the care of Dr. Curgiven, and was ordered a meat diet with an astringent mixture to keep the bowels quiet. On the following day he had a

taste of copper in his mouth, but no other symptoms. On May 18th he had some uneasy sensations in the stomach and "faint feelings." On May 23rd, his bowels had been opened once, the motion was constipated, but otherwise natural. The patient had been wanting to go out for some days, and now became so importunate that he was discharged with a caution to keep quiet. On May 27th he came, stating that the coins had not yet passed. He was ordered an aperient. He has not been to the infirmary since; the result therefore is not known.

SOIRÉE AT UNIVERSITY COLLEGE, LONDON.

ON Wednesday, May 31st, the Professors of University College gave their annual *soirée*. It was very largely attended; art, science, literature, and medicine contributing each its quota. Visitors were received by the Deans of the Faculties on the Flaxman Staircase, and passed from thence to the Octagon Room and the General Library. In the latter room were works of art, pictures by eminent hands, antique and modern antique silver plaques, épergnes and shields by Messrs. Hancock, glass vases and cups by Messrs. Powell and Sons. In the buildings of the Slade School were to be seen works executed by its pupils, while in the South Library microscopical and scientific instruments were shown by various firms; Professors Ayrton and Perry showed electrical measuring instruments, and Mr. Strot made experiments on attraction and repulsion due to sonorous vibrations. Professor John Marshall has for many years advocated the construction of hospitals on the "circular-ward" principle; this idea has been carried into practice at Antwerp, where a large hospital, to contain about 500 beds, and erected upon this principle, is now nearly approaching completion. Professor Marshall exhibited at the *soirée* a plan of the building, which had been sent to him by M. Zackelmans, the architect. The hospital, which covers a large space of ground, consists of a central building containing chapel, administrative offices, and convalescent wards. Connected with this by corridors are eight circular blocks; each block consists of two storeys; each storey forms one ward, containing twenty beds. We hope shortly to be in a position to give fuller details with reference to this new departure in hospital construction.

THE DUTIES OF PUBLIC VACCINATORS.

UNDER this heading, a rather sensational article has appeared in some of the "dailies", reflecting on the conduct of a public vaccinator for making four scarifications on an infant's arm when performing vaccination. The child died; and an inquest was held, when the mother and the landlady said that the lymph did not take, nor were the pustules healthy. A medical practitioner, who was called in, is reported as having stated that death had resulted from the vaccination pure and simple, as the child could not bear up against four insertions of lymph, whilst it might have done so against two; that death had resulted from convulsion following irritation of the skin, and not from poisonous lymph. Upon this evidence, several of the jurors expressed an opinion that public vaccinators should be compelled to diagnose every case thoroughly, and perform their duties with proper discretion. It is much to be regretted that a qualified medical practitioner should lend himself in any way to the outcry against vaccination; and the more so in this case, as it is imperative for public vaccinators to make four scarifications, not only in accordance with the directions of the Local Government Board, but also for the protection of the children and the public. The unfortunate occurrence of convulsions a few days after vaccination did not justify the medical opinion expressed at the inquest, especially as the doctor did not see the child until it was in a state of collapse. There do not appear to have been any symptoms of blood-poisoning or erysipelas; on the contrary, the child is said to have been perfectly healthy when seen four days after vaccination, except as regards the effects of the vaccination. The verdict of "Shock to the system, following vaccination", was the almost necessary result of the medical evidence, which appears to have been founded on imperfect data, and to be very regrettable, if not unjustifiable, as throwing blame upon a medical brother who had only performed his ordinary professional duties.

PRIZES OF THE ROYAL COLLEGE OF SURGEONS.

THE following is the subject for the Jacksonian Prize of the ensuing year:—"The Pathology, Diagnosis, and Treatment of Obstruction of the Intestines in its various forms in the Abdominal Cavity." For the present year, the subject is "Wounds and other Injuries of Nerves, their Symptoms, Pathology, and Treatment". Essays for the latter must be sent in on or before Saturday the 30th of December next. At the same time, the Essays for the Collegial Triennial Prize must also be sent in; the subject for which is "The Relations between the Radicles of the Lymphatic System and Capillary Vessels". The pecuniary value of the respective prizes is the amount of the dividend, between £12 and £13. The Collegial Triennial Prize consists of The John Hunter Medal executed in gold, to the value of fifty guineas, or, at the option of the successful author of the dissertation, of the said medal executed in bronze, with an honorarium of fifty pounds.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

THE Fellows of the Royal College of Surgeons, whose addresses in the United Kingdom are known to the secretary of that institution, will no doubt have received by this time the summons to attend the annual meeting of the Fellows of the College on Thursday the 6th July, to elect three of their body into the Council of the institution. The retiring members, who offer themselves for re-election, are Mr. John Marshall, F.R.S., surgeon to University College Hospital and vice-president of the College; Mr. Henry Power, chairman of the Board of Examiners of the College of St. Bartholomew's Hospital; and Mr. Alfred Baker, consulting surgeon to the Birmingham General Hospital. The only fresh candidate of whom we have heard, is Mr. John Croft of St. Thomas's Hospital, a member of the Court of Examiners, who nearly obtained his seat in the Council on the last occasion.

THE FEATURES OF THE RECENT EPIDEMIC OF ENTERIC FEVER.

THE number of deaths caused by enteric fever always decreases about this time of the year, and we may, therefore, conclude that the diminished number of deaths recorded by the Registrar-General during the last few weeks marks the conclusion of this year's epidemic. The general experience of the disease during the past winter in London has been, that this last epidemic presented several unusual features. In his report for 1880, the Registrar-General states that the mortality is at its minimum about the end of June, "from which time it rises pretty steadily till it attains its maximum", about the end of October. Last year, the epidemic seems to have begun with unusual suddenness, for the deaths, which, during the first three weeks of September, were 13, 10, and 21 respectively, suddenly rose in the fourth week to 40. The maximum number of deaths in one week was 53, the number registered for the third week of October and for the first week of November; from this time, the weekly mortality grew slowly less, but still remained far above the average, so that the deaths during the last four months of 1881 were 629, against 261 during the same period of the previous year. With the new year, the mortality began to decrease, and, in the last week of January, fell below the weekly average. According to the report before us quoted, it was to be expected that the mortality, "after a few small fluctuations, about the mean, for a week or two", would "definitely fall below it for the remainder of the annual period". This anticipation was only fulfilled in part, for there appears to have been a remarkable increase during the latter part of March, the number of deaths registered during the last week of that month being 35. The total mortality for the first four months of this year was 336, against 180 in the corresponding period of last year. There seems to be a prevalent opinion that the number of deaths among children has been unusually great during this epidemic; and, on inquiry at several of the children's hospitals, we have found this idea corroborated. An examination of the weekly returns of the Registrar-General, however, only partially confirms this. We have taken for comparison the mortality in 1880-81 and 1870-71. In the former year, the number of deaths under five years was 58, which

amounted to 13.15 per cent. of the total mortality from typhoid fever; in the latter year, the number of deaths under five years was 126, or 18.94 per cent.; in the winter of 1881-82, the number of deaths under five years was 83, or 8.68 per cent. These figures, no doubt, contrast very strongly with the statistics given by Dr. Murchison in his classical work, for these show but 7 deaths under 5 years out of a total number of 1,034 deaths; but his figures are open to the obvious objection that they are derived from a single hospital, into which young children are probably not often admitted. Again, if we take into account only the deaths occurring under one year, the information to be gathered from the returns does not seem to confirm the opinion above referred to. Deaths under one year were first separately recorded in 1876, and since that time they have averaged a little over 7 in each winter, the highest number being 13 in 1878-79 (the last epidemic), and the lowest being 2 in 1880-81. Still, as we have said, the opinion prevails in the best informed quarters that the death-rate this year in children has been, so far as experience in London goes, unprecedented: this reservation is necessary, as the fatality in different localities must vary extremely, if the statements of Barthez and Rilliet, who report 29 deaths out of 111 children attacked, can be taken as fairly representing the death-rate in France. Liebermeister, indeed, says that children less than a year old are very seldom attacked, a statement which will apparently require modification in the future. During the past epidemic, the deaths of six infants under one year were attributed to typhoid fever; and, when the difficulty in the diagnosis of this disease in early life is remembered, it seems probable that the number of infants attacked must be much larger than has been generally supposed. Another unusual character of the recent epidemic has been the frequency with which laryngitis has been noticed. Formerly this complication was chiefly known to us through the descriptions of German physicians; Dr. Murchison, for instance, had, in his wide experience, met with but "three or four" cases, while lately it has been comparatively frequently seen; for instance, two such cases were published in the same week last month, one in our own columns, and one in those of a contemporary. The laryngitis usually begins at a late stage of the disease, and has been supposed to have a relation to insufficient diet; but this theory does not seem borne out by recent experience. The lesion of the larynx has been described as a simple ulceration which begins in the mucous membrane; this ulceration may be but of slight importance, or may extend deeply, causing destruction of the cartilages of the larynx, and extensive suppuration about the neck. It has been known, also, to lead to acute oedema of the glottis, resulting in asphyxia if tracheotomy were not promptly performed. In the foregoing remarks, we have but lightly touched upon the outlines, as it were, of several important questions; but we have said enough to show that the typhoid epidemic of 1881-82 presents features which will well repay labour and reflection.

PIROGOFF'S LAST ILLNESS.

IN a letter to the *Wiener Medizinische Blätter*, Professor Billroth states that he has had the opportunity of examining a portion of the tumour which caused the death of Professor Pirogoff. The Russian surgeon had recently consulted his German colleague, who writes as follows. "When Pirogoff consulted me in Vienna, I was under the impression that his disease had begun as a chronic inflammatory process in the alveolus of the left second upper bicuspid tooth, which came away, the growth then projecting into the gap, and resembling the infiltrated sarcomatous epulis which I have frequently seen in old subjects." After Pirogoff left Vienna, this growth increased greatly in size, and ultimately showed epitheliomatous changes, and the lymphatics behind the angle of the jaw became indurated. Dr. Wywodzow forwarded a piece of the tumour, removed after death, to Professor Billroth, who found that more than two-thirds of the sections he prepared consisted of a small-celled highly vascular fibro-sarcomatous tissue: on the free surface of one section, epithelial proliferation could distinctly be seen; and in one example all the appearances of ordinary epithelioma, with nests, were detected. Professor Billroth was, from

the first, strongly opposed to operative interference. His distinguished patient, over seventy years of age, was suffering from double cataract, and had become very emaciated during the last few years of his life, besides showing other symptoms of senile physical weakness. Operation for a growth that had begun as a sarcoma, had undergone cancerous degeneration, and could not have been taken away without the removal of a large part of the upper jaw, would have been too hazardous, and too likely to be followed by recurrence, to be justifiable under these circumstances. Professor Billroth, in conclusion, declares, with an emphasis increased by the aid of typography, that "I am no longer the bold and dauntless operator I was known to be when in Zurich; now I always ask myself this question: Would you let this operation be performed upon yourself if you were in your patient's place? As years pass by, one becomes more and more resigned; still I feel that, in each succeeding year of life that destiny may yet allow me, I will be more and more affected by hearing of failures and bad results in the work of our profession."

THE LONDON TEMPERANCE HOSPITAL.

WE publish in another column a report of the ninth annual meeting of the governors of the London Temperance Hospital. This hospital is prospering in the sense of funds and in the increasing number of patients, such as may be had for this or any other hospital, whether of the old school, the new school, or of any form of speciality whatever. There is no doubt that the experiment is an interesting one, and it would be satisfactory if, within a moderate compass, some precise information respecting it could presently be obtained. Cardinal Manning, we observe, announced that he was glad to see that the effect of the non-alcoholic treatment was telling powerfully on the London hospitals. It would be interesting to know on what information this statement was based. So far as we know, no data whatever are in the possession of the profession at large which could allow this hospital to have the slightest influence upon hospital treatment generally: and we believe, as a matter of fact, that the hospitals generally are practically unaware of its existence, and that medical science has as yet learnt nothing from it. We say this, because every cause loses from being overstated, and we are not inclined to think that at the present moment this temperance hospital, as it is now organised and with its existing relations, has succeeded in producing any impression upon the medical profession. We are not aware that there is any fault ascribable to any person or persons for this state of things; but we chronicle what we believe to be a fact, as the record of fact is in such a case more useful than any imaginary inference could be.

EXCISION OF THE PYLORUS.

THE *Wiener Medicinische Blätter* of May 18th contains an account of a discussion, at a recent sitting of the Congress für Innere Medizin, on the Diagnosis of Carcinoma of the Stomach, and on the operation of resection for that disease. Dr. Henck of Heidelberg read the case of excision of the pylorus for carcinoma performed ten months ago by Professor Czerny, which was briefly described by the latter surgeon at the International Medical Congress, and is recorded in its *Transactions*; and it is satisfactory to learn that the patient, who gained eleven pounds weight at the end of the sixth week of the operation, was, at the beginning of last month, ten months after the operation, quite well, with no symptoms of recurrence of the disease. Dr. Henck tabulated the clinical history of twelve resections of the stomach. One, which recovered, was performed in a case of stricture of the pylorus following perforating ulcer. The remaining eleven were for the removal of cancerous growths; four of these recovered from the operation; out of the recoveries, three patients are still alive, and free from any recurrence; the fourth is known to have died four months after the excision, from a return of the disease. In the discussion which followed the reading of Dr. Henck's paper, Professor Lichtheim observed that mobility of an abdominal growth detected by palpation in the region of the pylorus was no proof that, if the growth were pyloric, there were no adhesions. In a case under his care, the

swelling could be freely moved about under the abdominal wall when the patient was narcotised; yet, on opening the abdominal cavity, the pylorus was so strongly adherent to neighbouring parts, that its removal was impracticable. Professor Kühle stated that the rapid implication of the chain of lymphatic glands in front of the bodies of the vertebrae behind the stomach, in cancer of that organ, renders many cases unsuitable for surgical treatment. Dr. Henck remarked that the same objection stands in the way of operation in cancer of any other organ. As early diagnosis is so important, Dr. Ewald asked if the members of the Congress could confirm the theory of Van der Velden, that free hydrochloric acid was absent in the gastric juice in cancer of the stomach; but no researches had been made towards the confirmation of this theory by those present who had some experience of operations for the radical cure of malignant gastric disease.

SCOTLAND.

HEALTH OF GLASGOW.

THE report of the medical officer for the fortnight ending May 13th, shows that there were 515 deaths registered, representing a death-rate of 26 per 1,000 living. In the corresponding fortnight of last year, the death-rate was 25½ per 1,000. From pulmonary diseases, there were 192 deaths, representing a death-rate of 9.7 per 1,000 living, and constituting 37.2 per cent. of the total deaths. There were 7 deaths from fever, all being from enteric; while the infectious diseases of children caused 50 deaths, viz.: 28 from whooping-cough, 6 from scarlet fever, and 16 from measles. The number of cases of fever registered was 34, of which 31 were enteric, 2 typhus, and 1 undefined. There were also 102 cases of measles, 69 of whooping-cough, 43 of scarlet fever, and 17 of diphtheria registered, of which 30 were removed to hospital, and the remainder kept under supervision at home.

LOCH KATRINE WATER.

THE monthly report of the quality of Loch Katrine water has been issued by Professor Mills. The results are returned in parts per 100,000: Total solid impurity, 2.98; organic carbon, 0.128; organic nitrogen, 0.016; ammonia, 0.000; nitric nitrogen, 0.009; total combined nitrogen, 0.025; hardness, 1.0; chlorine, 0.64; temperature, 47.38° Fahr. The water was sampled on May 15th. It was of a very light brown colour, and contained very little suspended matter.

PATHOLOGICAL ANATOMY IN ABERDEEN.

AT a special meeting of the managers of the Royal Infirmary, Aberdeen, a letter was read from Dr. Francis Edmond to the Senatus of the University, requesting that the newly elected professor of pathological anatomy be allowed access to the materials afforded by the infirmary. This request is in accordance with the terms of Sir Erasmus Wilson's deed of foundation of the chair. For the successful teaching of pathology, it is absolutely essential that the professor have access to the material afforded by the *post mortem* room. The matter was referred to a committee.

UNIVERSITY OF EDINBURGH.

THE written examination of the final takes place on Friday and Saturday; the oral begins next week; the examinations in clinical surgery have finished; those in clinical medicine are about two-thirds done. Owing to an indisposition, which is universally regretted by the profession, Professor Spence will be unable to examine orally. The Thomson Bursaries, of the annual value of £25 for four years, have been awarded; one to Mr. W. Bramwell Reid of Wanlockhead, as a recognition of his excellence in his examinations; the other to Mr. G. R. Thomson, Iona. The Senatus have awarded two Vans Dunlop Scholarships, each of the value of £100 per annum for three years; one to Mr. Cecil Reddie, B.Sc., in Chemistry and Practical Pharmacy; and the other to Mr. A. C. Younan in Anatomy, Physiology, Materia Medica, and Pathology.

DEATH OF DR. G. C. PIRIE OF DUNDEE.

WE regret to announce the death this week of George Clark Pirie, M.D., L.R.C.S.Ed., Medical Officer of Health for Dundee and Surgeon to the Police there. Born in Dundee in 1832, he studied in Edinburgh, and there received the degree of M.D. and the diploma of L.R.C.S.E. in 1853. Subsequently to his graduation, Dr. Pirie practiced for some years in Liff, Forfarshire; he afterwards settled in Dundee, where he soon acquired a good practice, and received various appointments. In addition to those above mentioned, he was surgeon to the 4th Forfarshire Artillery Volunteers and Consulting Physician to the Royal Infirmary, Dundee. His loss will be regretted by the profession in Dundee and by many of the public. He was only fifty years of age when cut off from a life of usefulness, in which the careful discharge of his duties and his earnestness as a sanitary reformer were recognised by all.

REGISTRAR-GENERAL'S QUARTERLY REPORT.

THE report of the Registrar-General for the three months ending March 31st, for Scotland, shows that the annual proportion of deaths for every ten thousand of the population was 193. This is the lowest rate that has been recorded during these months since the Registration Act came into operation; in England the rate was 216 for every ten thousand of the population, the lowest that has been recorded since 1837. For every ten thousand of the inhabitants of the principal towns in Scotland, the annual rate was 224; in the large towns, 207; in the small towns, 184; in the insular rural districts, 169; and the mainland rural, 157. In all the groups of districts the rate was lower than for the first quarter of 1881. The individual rates were, per ten thousand of the population, in the principal towns—Leith, 180; Dundee, 194; Edinburgh, 197; Aberdeen, 208; Greenock, 228; Perth, 246; Paisley, 247; and Glasgow, 251.

IRELAND.

THE Royal Medical Benevolent Fund Society of Ireland will hold its fortieth annual meeting next Monday, June 5th, at the King and Queen's College of Physicians.

IRISH MEDICAL ASSOCIATION.

THE annual general meeting of this Association will be held on Monday next, at twelve o'clock, at the Royal College of Surgeons. In accordance with the usual custom, the members will breakfast together on the morning of the meeting at the Shelbourne Hotel; and the annual dinner will take place in the Albert Hall of the College of Surgeons.

CENSUS REPORTS: CO. TIPPERARY.

THE population in 1881 amounted to 199,612, being a decrease of 17,101 as compared with 1871. As regards pauperism, the condition of the county is not very encouraging. For example, in 1871, the recipients of Poor-law relief numbered 4,344, but last year the number was 7,778, of which 4,444 were in receipt of relief. Of the population, no fewer than 66,826 were wholly illiterate.

THE DENTAL HOSPITAL OF IRELAND.

THE first public annual meeting of the friends and supporters of this institution was held last week at the hospital; Alderman Sir J. W. Mackey in the chair. The hospital was opened in October 1879, and since that time its four operating surgeons have attended to 9,000 patients. The number of operations performed during the year 1881 was 4,700. The work done that requires ordinary treatment, unless in the case of the very poor, or of those not of English parentage, or of those with general medical diseases, there is charged the small fee of 6d. While this payment gives a sense of responsibility to the patient, it contributes very materially to the funds of the hospital. The amount received from this source during the past twelve months was sufficient to pay more than a third of the rent of the hospital, and was treble that

subscribed during the previous fifteen months—an additional fact showing the increased popularity of the institution. The honorary secretary, Mr. W. Booth Pearsall, stated that it was intended, if means permitted and as the resources of the hospital developed, to open a school for the training of pupils who may wish to practise dentistry, of young medical practitioners about to join the army and navy medical services, or to practise in country districts. The report having been read, its adoption was moved by Mr. Barton, Vice-President of the College of Surgeons, who said that it was quite impossible to give the requisite attention to dental cases in general hospitals. He therefore thought this hospital was a development of the greatest possible advantage to the community. The Rev. Dr. Haughton seconded the resolution, remarking in doing so that everyone in the room had thirty-two good reasons for supporting it, for they all had, or ought to have, the remains of thirty-two good teeth in their heads. Resolutions were also spoken to by the Right Hon. Lord Justice Fitzgibbon and other influential persons; and a number of subscriptions were handed in at the close of the meeting.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

FROM the thirty-ninth annual report of the Council of the College, to be submitted to the meeting of the Fellows summoned for this day, Saturday, the 3rd instant, at 12 o'clock, we learn that, during the year ending April 5th, 1882, 3 candidates were admitted to the Fellowship of the College, and 106 gentlemen received the letters testimonial; 1 licentiate obtained the diploma in midwifery; 95 candidates for the junior class examination were rejected; and 42 candidates for the final examination were rejected; 253 candidates presented themselves for the preliminary examination; of these, 69 received first class certificates, 54 received second class certificates, 70 received pass certificates only, and 60 were rejected; 163 gentlemen received the diploma in dental surgery. At the special meeting of the Fellows of this College, held on the 25th ult., the discussion on the proposed expenditure in connection with the school of the College, to which we referred in a leader last week, was adjourned *sine die*. This will not, we presume, prevent the matter from being discussed on the submission of the Report of Council at this day's meeting, or at any adjournment therefrom. The abstract of the accounts of the College for the year ending April 5th, 1882, shows that, including a balance in bank on April 5th, 1881, of £267 10s. 4d., the income of the College for the year was £6,918 12s. 7d. Of this sum, £2,199 15s. 0d. was received from dental candidates; £415 5s. 3d. represents the interest on the sum of £10,000, the sole funded property of the College, which is secured on mortgage; and the remainder is made up of examination and registration fees. The balance in bank to the credit of the College was £851 14s. 3d. Were it not, therefore, for the 194 dental candidates at £10 10s. each, the College would be in debt. We observe that, at a meeting of the Council of the College held December 1st, 1881, it was resolved: That, in order to bring the regulations of this College into conformity with those of the two Colleges which are giving examinations "sine curriculo" in dental surgery, the regulation by which the dental examination, "sine curriculo", in this College shall cease (after three years of grace) on August 1st, 1881, be rescinded, and that, in place thereof, the regulations of the Scotch licensing bodies be adopted, viz., "That candidates whose names are on the Dental Register shall be admitted to examination 'sine curriculo'." The Irish College can hardly be blamed for determining not to be outdone in the competition for candidates by rival bodies in a sister country. It is to be presumed, however, that the Dental Register will soon be exhausted of candidates qualified to avail themselves of the facilities offered them by the Colleges so anxious to act in this respect in conformity with each other; and that their income derived from such a source—amounting, in the case of the Irish College for the last four years, to a total of £5,500—will accordingly shortly cease. In consequence, therefore, of this state of the College funds, and as an outcome of the proposal to expend a large sum of money on the school of the College, Dr. Robert McDonnell, who is not connected with any medical school outside the

College, has given the following notice of motion, to be considered at a meeting of the Fellows to be held this day (Saturday) at noon, viz.: "That, keeping in view the present financial position of this College, and the expenditure hitherto made, and now proposed to be made, on its school and buildings, the Fellows recommend to the Council carefully to consider the recommendations of the School Commission; and further express this opinion, that the time has arrived when the Fellows should be called upon fully and deliberately to consider whether a school should still be maintained in connection with the Royal College of Surgeons in Ireland." As there are no College funds available for such an outlay as must be needed to carry out the proposed structural changes, the finance committee recommended the Council to arrange for such over-draft at the bank as would be from time to time required, and to borrow such sum as might be eventually required to pay off the bank at 4½ per cent.; the professors of the school to pay two-thirds of the interest and two-thirds of whatever interest the College may be charged for any extra money they might be obliged to raise for the proposed building. However willing the present professors, to whose interests the expenditure will be beneficial, might be to consent to the foregoing terms, which were agreed upon by the Council, it is suggested by those who are averse to it that any such agreement made by them would not be binding on any of their successors should a professorial vacancy occur. And it is urged that the election of any candidate to a professorship who made any pledge to pay such interest, if elected, might be held to be illegal. It is considered doubtful whether corporate funds can be voted by any members of a corporation who would individually benefit in any way by their expenditure. A meeting of the Fellows will also be held on Monday, the 5th June next, at one o'clock, pursuant to the provisions of the Supplemental Charter, to elect a President, Vice-President, Council, and Secretary, for the ensuing year.

FELLOWSHIP EXAMINATIONS IN THE IRISH COLLEGE OF SURGEONS.

THE Council of this College have recently adopted new regulations for the examination of candidates for the fellowship of the College, which have now been officially promulgated. Heretofore, certain concessions, more or less at the option of each examiner, were supposed to be made in the case of candidates who had been some years qualified; and it is with a view, we presume, of defining such concessions, that the new regulations have been made. The candidates are divided into five grades, as follows.

Grade I. Candidates possessing no Qualification.—In this class, candidates shall first be examined, for two days, for Letters Testimonial of the College, on obtaining which they shall be further examined on a third day in the additional subjects required for the Fellowship.

Grade II. Licentiates of the College of less than ten years' standing.—(The examination in this and in the succeeding grades is to extend over two days.) *First Day* (consisting of two parts)—1. Oral. Subjects—*a.* Anatomy; *b.* Comparative Anatomy; *c.* Histology and Physiology. 2. Dissections. *Second Day* (consisting of four parts)—1. Clinical Examination in Surgery. 2. Written Examination in Surgery. 3. Oral—*a.* Theory and Practice of Surgery; *b.* Pathology; *c.* Theory and Practice of Medicine and Therapeutics. 4. Operations on the Dead Subject. *Fees:* Urban Practitioners, £31 10s.; Rural Practitioners, £21.

Grade III. Candidates of less than ten years' standing, possessing Qualifications in Surgery of other Bodies, shall, if admitted to Examination, be examined according to Grade II. The fees are: for urban practitioners £52 10s.; for rural practitioners £42.

Grade IV. Licentiates of the College of more than ten years' standing.—*First Day* (consisting of two parts): 1. Oral—Surgical Anatomy; 2. Operations on the Dead Subject. *Second Day* (consisting of two parts): 1. Clinical Examination in Surgery and Medicine; 2. Written Examination in Surgery; Oral: *a.* Theory and Practice of Surgery, including the reading of written answers; *b.* Morbid Anatomy. The fees are as in Grade II.

Grade V. Candidates of more than ten years' standing, possessing Qualifications in Surgery of other Bodies.—Such candidates shall, if admitted to Examination, be examined according to Grade IV. In all the grades, £10 10s. is to be retained by the College in case of rejection.

ZYMOTIC DISEASES IN PROVINCIAL TOWN DISTRICTS.

DURING the quarter ending April 1st, 53 deaths from small-pox were registered in Belfast, 10 in Waterford, and 1 in Clonmel. Scarlatina caused 57 deaths, of which 23 were in Limerick, 16 in Newry, and 14 in Belfast. To fever 80 deaths were attributed, viz., typhus 46, enteric 21, and simple continued fever 13. Nearly all the fatal cases of fever in Cork were due to typhus; while in Belfast the mortality from enteric fever and typhus were nearly equal. Diphtheria caused 15 deaths, and diarrhoea and dysentery 67.

CHARGE AGAINST A MEDICAL OFFICER.

A MEETING of the Lurgan Dispensary Committee was held last week for the purpose of investigating a charge of neglect and incompetence made against Dr. Harman, medical officer of No. 2 Dispensary. The charge was that a child named O'Neill, who was under Dr. Harman's care, had been permanently disabled by negligent treatment of a broken arm. After evidence had been given, the committee adopted a resolution exonerating Dr. Harman from all blame, and attributed the injury to the neglect of the child's parents to attend to Dr. Harman's instructions.

LISMORE UNION.

DR. BRODIE recently held a sworn inquiry into certain charges made against the medical officer, master, and nurse of Lismore workhouse; and, last week, the Local Government Board communicated with the guardians in reference to these accusations. It appears that the medical officer was unable to live in harmony with the master and nurse, and the Board suggested whether it would not be advisable to replace those officers by others who could discharge their duty with propriety and good temper. The guardians, after considering the matter, resolved to reprimand the master and nurse, and to call on the medical officer to resign. If all three officials had received the same punishment, no valid objection perhaps could have been made; but that the master and nurse should merely receive a caution, and their superior officer be requested to send in his resignation, seems to us very arbitrary conduct on the part of the guardians; and we sympathise with Dr. O'Reilly, who has served for the past fifteen years as medical officer of the workhouse.

NOVEL METHOD OF COMMITTING SUICIDE.

ON May 26th, Sarah Newman, aged 38, married, a patient in the County and City of Cork Hospital for Women and Children, committed suicide in the following remarkable manner. Deceased had been in hospital for about a month, under Dr. Cummin's care, for endocervicitis, and had been informed that she was sufficiently well to be discharged. On hearing this, she was dissatisfied, not wishing to return home. She was found at a quarter-past 6 A.M. by the night-nurse dead in her bed, and part of a stocking protruded from her mouth. The lady-superintendent of the hospital was immediately called, and saw her. She felt her heart and pulse, and found both had ceased to beat. She observed a piece of stocking in her mouth, took hold of it, and pulled part of it out; but it was so firmly fixed that the remainder did not come. The woman was then dead. At the inquest, Bridget Sullivan deposed that the deceased occupied a bed in the room in which witness slept. At about 5 o'clock on that morning she heard her getting up and closing the shutters; she then returned to bed. Witness got a pain in her side, and did not notice the deceased until 6 o'clock; she did not notice her moaning, as she was in the habit of doing so. Witness, however, believed she did moan soon after she returned to bed. She heard her say that she hated to go home, that she would rather stop in the hospital. The Lady Superintendent and the night nurse were also examined, and deposed as stated above. As there were several other patients who slept in the same ward as the deceased, who were too ill to be present at the inquest, the coroner had visited them, and was told that Dr. Cummins visited her the previous day, and he then told her that she would soon be going home, as she was getting better. When Dr. Cummins left her, she

show a reckless expenditure without a prospect of meeting it justly and honourably? The money received for examining dentists, being a nett total of £3,164 1s. 2d., has been earned by legitimately and honourably carrying out the intentions of the legislature, and has enabled the College to pay off, sooner than it might otherwise have done, the money borrowed from the bank; and a further income will arise from the same source, of which, however, I think it better to make no mention in this statement, so as to avoid all cavilling.

As to this further expenditure that we are accused of being about to undertake in a still more reckless and improvident manner, what is it? We found that the requirements of surgical education had outgrown our space, means, and appliances, just as our museum and library had outgrown our accommodation. We found by our charter that we were bound to keep "the several buildings and schools of the said College in proper repair, enlarging them when required", and we proposed to do it. For this purpose, we were informed that an expenditure of £2,600 would be necessary. To allow a margin, we put it down at £3,000. Of this sum we think the present state of the finances of the College justify us in expecting to be able to pay at least £1,500; the more sanguine of us think it will be in our power, before the buildings are completed, to advance even more; but taking it at the lower sum, we propose that the College professors shall pay interest on all money advanced out of the College funds at the rate of three per cent., and that they shall pay two-thirds of all interest on account of any money borrowed to be expended on the improvements. The result of this would be that the College would receive £45 a year interest on £1,500 at present lying idle. Thus they would have to pay about £67 10s. interest for £1,500 to be borrowed to complete the improvements, but on this they would receive an additional £45 from the professors. The College funds would thus have to meet the large annual expenditure of £22 10s. for the carrying out of duty imposed on the Council by the words of the charter, as above cited. To prevent this monstrous job, all this heated controversy has arisen; a special meeting of the College has been called; the thunder of the press has been invoked; and the BRITISH MEDICAL JOURNAL has denounced the Council of the College for "questionable" proceedings and dishonest recklessness of expenditure. Twenty-two pounds ten shillings *per annum*! A mountain was in labour, and lo! there came forth twenty-two pounds ten shillings *per annum*. But this £22 10s. was only to be expended for a few years, until this balance of £1,500 could be paid off, which, with an average surplus of £400 a year, should not take very long, and then there would be a permanent income coming into the College for money expended on their own premises of £90 a year. But, it is said, in other schools the money laid out in improvements is provided by the professors. In other schools, the buildings and appliances belong to the professors, and when they retire or die their shares are sold for the benefit of themselves or their successors. In the College school, the buildings and appliances are the property of the College, and the professors have no claim on them whatever.

Of the other charges in your article, it is not necessary for me to speak. The report of the Council is now in the hands of the Fellows, and if they cannot see their refutation in it, they are more blind than I take them to be.—I have the honour to be, sir, your obedient servant,

GEORGE H. KIDD, Ex-President and Member of Council
of the Royal College of Surgeons, Ireland.

* * Dr. Kidd is in error in stating that we made any charge against the Council of the Irish College of Surgeons, or accused it of any crime. As journalists, we claim the right to comment on the published financial reports of a corporation, and the proceedings of its governing body. On such information our remarks were based, and Dr. Kidd has not controverted their accuracy. As regards the use of the term "questionable", as applied to the granting of dental diplomas by the College of Surgeons, Ireland, with which Dr. Kidd is so very angry, we never did question the legality of the College "in being first in the race" to avail itself of Sir John Lubbock's Act to create licentiates in dental surgery, wholesale and on easy terms, from among existing dentists who have taken no previous steps to attain such distinction. (*Vide* report of speeches of Mr. Turner, Dr. Storrar, and Dr. Wood, at the meeting of the General Medical Council, October 26th, 1881.) But we do still question whether the College has gained credit by the continuous issue of such qualifications; and we know that, in thinking they have not, we are in accord with a large number of its own Fellows, with that of eminent members of the General Medical Council, and of the dental as well as of the medical profession. The facts of the case speak for themselves, however. It is idle to charge us with partisan sentiments on a matter in which we have obviously none but the most impartial opinions, and on which we deal with the matter at issue on general principles, which are alike applicable to all colleges and universities.

If, without anger or violent language, Dr. Kidd, or any other less officially concerned personage, can show good reason how that traffic in diplomas can be considered professionally desirable or beyond question, which is what he claims for it; or, if he can establish the utility of expending collegiate funds in the manner proposed, we shall be as willing to adopt that view as we are at present distinct in expressing the opposite. It is not unnatural that our comments upon some of the proposed financial arrangements of the Royal College of Surgeons of Ireland has evoked a reply from its chief executive officer, although it is to be regretted that, in the diction of what is evidently a letter written in the white-heat of controversy, a tone is adopted and forms of expression are used which are in somewhat more than doubtful taste.

SIR,—I am one of those Fellows who read your leader, headed "The Royal College of Surgeons in Ireland", last week, with much satisfaction. It appeared to me a very fair and temperate statement of the case. As a member of Council, I can testify that, in the main, the facts stated by you are correct.

The majority of the Council have, as I think, acted with undue haste; and you are quite right in stating that they "would hear of no delay." They have thus forced on for discussion questions of the greatest moment—questions which deserve the fullest and calmest consideration.

The great question, which overrides all others touching the School, is this. Is it desirable that a College of Surgeons should unite within itself the two functions of teaching and also of examining for its diplomas? Experience has convinced me that it is not desirable; and it is quite certain that, in the present day, there is no necessity for a school of surgery in connection with our College.

There is no lack of excellent schools of anatomy and surgery in Dublin and the provinces (in fact, there are too many of them); and the duty of the College of Surgeons ought to be to supervise all with a fair, firm, and impartial hand—not to patronise, pamper, and protect one special school. I have always been a "free trader" as regards education; and I hold that the system of "protection" adopted by the Irish College of Surgeons has produced the worst results.

Let me hope that, in the discussion of this matter, we may still have your columns open, so as to give a fair hearing to both sides.—Yours,
ROBERT McDONNELL, F.R.C.S.I.

Dublin, May 31st, 1882.

SIR,—In your issue of May 27th, there occurs, in a leading article on the Royal College of Surgeons in Ireland, the sentence, "But for this interest, and the money obtained last year from the rather questionable granting of some hundreds of dental diplomas, the College would be absolutely in debt." As a few of the Fellows of the College express indignation at the phrase "questionable granting", and, as I consider that the course adopted by the College during the past year, and indeed for some time previously, fully warrants this phrase, I purpose to write a few words on the subject. About one feature of the granting of the dental diplomas there can be no question, viz., that a large sum of money has been realised to the College by this procedure. In the earlier years of this diploma-granting, matters had a greater show of decency than during the past year. Many highly respectable practitioners came up for examination at the beginning; but, before long, this source of income was exhausted. The capability for diploma-granting did not, however, cease, when ceased the candidates of acknowledged respectability. Druggists' assistants—nay, I am told hairdressers and others of that ilk—were received with open arms. The dental section of the Dental Board demurred, and exercised their right of veto, at the meetings of the Board of Censors, to exclude the chemists and druggists. Forthwith the right of veto was taken from them, and the Council took unto itself the admission of candidates to examination. These circumstances make many of the Fellows think that the honour of the College has been seriously impaired. If it be asked why this was done, the answer is, a certain section of the Council knew that the College needed funds, and, by hook or by crook, must get them. The Fellows at large were never consulted on this dental traffic, nor was the opinion of the Fellows of the College practising dentistry asked or taken. One thing is now certain: even of the hairdressers and druggists' assistants there is an end, and some other scheme must be evolved to meet any extraordinary expenditure on the part of the College. Unless such can be devised, if extraordinary expenses are to be incurred, the day of general collapse is certain and inevitable.—I beg to remain, faithfully yours,
R. THEODORE STACK, F.R.C.S.I.

SIR,—The leading article on the Irish College of Surgeons in last week's issue, has pointed out very clearly the evil effects of supporting a particular school by grants from College property. A week ago a

MILITARY AND NAVAL MEDICAL SERVICES.

It is stated that Surgeon-General W. A. Mackinnon, C.B., who served during the Indian Mutiny campaign and the New Zealand war will succeed Surgeon-General Shelton as head of the medical branch, which includes the command of the Army Hospital Corps at Whitehall.

SURGEON-MAJOR J. ARNOTT has been appointed to the Professorship of Midwifery at the Grant Medical College, Bombay, vacated by the death of Surgeon-Major Hughes.

THE death of Surgeon-Major W. S. Chapman, A.M.D., in his 55th year, is announced. He was placed on half-pay on the 11th of November, 1877.

THE SICK BERTH STAFF OF THE ROYAL NAVY.

SIR,—In your issue of April 20th, "Senex" remarks that the "naval medical officers in general must have been surprised from the letter of a 'Medical Officer' in a previous issue" that such a staff existed as a nursing staff. The medical officer and sick berth staff are surprised that they are non-existent.

"Senex" goes on to show that a nursing staff, when required, is "selected by the medical officer, and approved of by the captain. Who are these nurses that are selected and approved of, but the nursing staff, consisting of sick berth steward, attendant, and assistants? The nurses stated by 'Senex' are generally from the patients' messmates". This class of nurses is very exceptional indeed, only occurring in epidemics, and only then when the sick berth staff are exhausted by fatigue in their arduous duties; and even then the same responsibilities are retained by them—the "sick berth staff".

I read, further, the following extract: "The duties of the sick berth staff are not those of nurses". From this we gather that "Senex" cannot really be an authority on such a vital question. The quotation from Queen's Regulation does not in the least establish such a statement. The paragraph in question is: "The sick berth steward, attendant, and nurses are to be entirely under his direction" (medical officer's). In this we can see that nurses are sick attendants, also sick berth stewards, attendants, and assistants, are nurses; therefore, all are nurses. What more can establish the fact that the sick berth stewards and attendants under the supervision of medical officers are but nurses?

I quite agree that the nursing staff should be entirely under the medical officer's directions; but it is too true we are not. In many instances, we are employed as postmen, ships' police, messengers, and occasionally to get up coals, clean galleys, under the immediate supervision of a ship's cook.

I, with others, thank "Medical Officer" for the true interest expressed towards a neglected and "non-existent class"; and I am very sorry to class the letter of "Senex" with other testimony in existence against our true worth. Is there not a member of Parliament that would take our cause up, and make our class what it should be—recognised and better paid?—I am, etc.,

ONE OF THEM.

MILITIA SURGEONS.

SIR,—Allow me, as an old militia surgeon of thirty years' service, to thank you for your able advocacy of our claims for some compensation or retiring allowance. The best part of our lives have been given to Her Majesty's service entirely for the convenience of the public service, and this at a great sacrifice to our private interests. It is not unreasonable that these claims should be taken into consideration by the War Office, and fairly decided, in consequence of the repeated promises of former Secretaries of State for War, that they should be taken into consideration, and decided on the merits of each case. This has not been done, and, at the age of sixty-five years, when private practice is out of the question, our claims cannot justly be ignored. The old militia surgeons are deeply indebted to you, Surgeon-Major MacCormack and Dr. Farquharson, M.P., for your advocacy of our case.—I am, sir, your obedient servant,

AN OLD MILITIA SURGEON.

THE DEATH-RATE OF EUROPEAN SOLDIERS IN INDIA.

SIR,—In the Croonian Lectures reported in the JOURNAL of March 25th, I find the following sentence: "Sanitary work has already reduced the death-rate of European soldiers in India from 60 to 16 per 1,000, and is gradually proving as beneficial to the civil population." With regard to the latter, I have no accurate information. The rates of mortality in official tables vary from 8 to 81 per 1,000, and are considered by most, if not all, reporters as of doubtful accuracy. Concerning European soldiers, the statistics may be relied on; and I quote from the seventeenth annual report of the Sanitary Commissioner with the Government of India for 1880. In that year, which was considered more favourable than 1879, the mortality, excluding troops in Afghanistan, is given as 24.85 per 1,000, and the loss from invaliding as 26.31 per 1,000; equal to a total loss of 51.16 per 1,000. On further examination into the loss from invaliding, it is found that 3 per 1,000 were invalided for discharge from the service, that is presumably for diseases of an incurable nature; and I do not think I err much in concluding that the victims were drafted into the civil population, to speedily end their days in public hospitals or the workhouse. All causes combined, then, would give a mortality more nearly approaching 30 than 16 per 1,000; this, too, in a population specially selected, and 75 per cent. of which is composed of men between twenty and thirty years of age. I do not think that I have chosen any exceptional period for illustration, for, taking the past ten years, I find the loss from mortality and invaliding has never been under 34 per 1,000. To leave the invaliding, with its results, out of the account, would furnish most erroneous statistics and equally erroneous impressions, which it is time to dispel, as they appear to have already existed for many years.—I am, sir, your most obedient servant,

W. DUNCAN,

Surgeon-Major, Indian Medical Service.

Sir A. Tulloh's evidence before the Royal Commission gave as the mortality per 1,000 of British troops in India from 1817 to 1855: Bengal, 79.2; Madras, 62.9; Bombay, 71.1; the average being 71.1 per 1,000. The mortality per 1,000 from 1855 to 1880 was 29.30; from 1866 to 1870, 27.48; from 1870 to 1875, 18.53; in 1876, 15.30; in 1877, 12.71; in 1878, 21.45; in 1879, 34.55; in 1880, 28.32. In 1879 and 1880, the death-rate was increased by the mortality in Afghanistan. The mortality in the British Army has always been raised by military service. During the Marhatta war in 1804, it was 134 per 1,000. During the late Afghan cam-

paign, it was 34.55 per 1,000. In the return and disposition of regiments, many men with impaired constitutions returned to stations in India, to increase temporarily the list of sick, wounded, and dead. Thus, the average mortality of British troops in India between 1817 and 1855 was 70 per 1,000. This gradually decreased under sanitary work until, in 1877, it was 13.60 per 1,000. After this, owing to the Afghan war, and probably also to short service and its increase of deaths from fever, it again rose. Obviously, however, the rate under ordinary circumstances is the test, not that under the exceptional circumstances of war; but, even in the latter case, it is greatly improved.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE INSANE IN WORKHOUSES.

IN accordance with the directions of the visiting justices of the Cumberland and Westmorland Asylum, Dr. Campbell, the medical superintendent of that institution, last year visited all the workhouses in these counties, with the view of ascertaining how far they were capable of relieving the asylum by accommodating chronic and harmless lunatics. His conclusion is that, unless where special wards for lunatics, with paid attendants and nurses exist, or where the master and officers take a special interest in insane patients, there is but little encouragement to discharge into workhouses the surplus population of asylums. Except where the mental aberration is of a very trifling description he thinks that lunatics in workhouses tend to deteriorate, becoming dirty and untidy in their habits, and falling off in physical condition. A casual visit to the wards of an asylum sometimes creates the impression that many of the chronic cases seen there might be suitably and economically dealt with in workhouses; but one is apt to forget, Dr. Campbell says, that it is only by unremitting attention, and by an elaborate system of treatment and discipline, that lunatics in asylums are maintained in the tranquil, contented, well-nourished, and cleanly condition in which they are seen to be.

THE BROMPTON PROVIDENT DISPENSARY.

SINCE the opening of the dispensary in June 1877, the number of members on the register has increased steadily if not rapidly. With the exception of the year 1878, more members have been added during this year (1881) than during any previous year. At the beginning of 1878 there were 313 members, and at the beginning of the three following years the numbers respectively were 416, 509, 565; and now, at the beginning of 1882, there are 686 members paying regularly.

The members' payments for the year, exclusive of fines and midwifery fees, amounted to £124 18s. 2d.—viz., £60 12s. 8d. from January to June, and £64 5s. 6d. from July to December.

The midwifery fees amounted to £20 13s.; and a total sum of £123 was divided between the two medical officers.

THE STAFFORD COUNTY ASYLUM.

THE Stafford County Lunatic Asylum at Burntwood, near Lichfield, contained on December 31st last 566 patients. Since its opening, seventeen years ago, 2,073 patients have been under treatment in its wards. The Commissioners in Lunacy, at the close of their annual inspection, note that since Dr. Spence assumed the superintendence of the institution many important alterations and improvements have been effected. Defects in the drains have been remedied by the ventilation of all soil-pipes and the disconnection of all sinks and bath waste-pipes from the drains. Several wards have been painted, papered, and very tastefully decorated. An improved mode of sewage irrigation has been adopted, by which the old tanks have been disused and the liquid sewage discharged direct from the drains upon the land. Beer has been struck off the dietary in the idiot ward, and through the praiseworthy perseverance of Dr. Spence grace is now sung at meals, which was not previously the practice in the establishment, many patients offering opposition in the matter.

CORK OPHTHALMIC AND AURAL HOSPITAL.

DURING the past year 1,513 extern and 201 intern patients were treated at the hospital, and as a proof that the institution is appreciated by the class who seek its aid, it may be mentioned that, of the entire income for 1881, amounting to £518 5s. 2d., there was a sum of £280 3s. 7d. contributed for the support of patients. "Cottage Home" wards have been recently erected for private patients of the better class willing to pay an additional sum for their support; and a sum of £300 has been expended in erecting and furnishing these wards. Of the 201 cases admitted to hospital, 199 were sent out cured or greatly benefited, and 2 were discharged as hopeless. Since the establishment of the hospital in 1868, no less than 20,540 patients have received treatment through its instrumentality, showing the necessity existing for such an institution in Cork.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

PUBLIC HEALTH IN THE TEESDALE UNION, DURHAM.

WHEN, eight years ago, the Public Health Act was put in operation in the Teesdale Union, the board of guardians, who are the rural sanitary authority, divided the union into three districts, and gave the following stipends to each of the three Poor-law medical officers who were appointed to office: No. 1. Area, 62,210; population, 3,520; salary, £25 10s. No. 2. Area, 86,910; population, 6,897; salary, £32 5s. No. 3. Area, 23,832; population, 5,817; salary, £32 5s. These respective amounts, having regard to the area and population of each district, are obviously sufficiently low; but, two months ago, the guardians suddenly intimated to their officers their resolve to cut down the stipend of each, and to reduce each by £5. Much to the credit of Dr. Mitchell the late holder of No. 1 district, this deduction was objected to; whereupon the board offered the appointment to the holder of district No. 2, who also declined; but, in the medical officer of district No. 3, the board found a person who was willing to undertake the sanitary care of 12,857 persons, distributed over an area of 86,042 acres, for the munificent sum of £47 15s.

We have always maintained that, in constituting district Poor-law medical officers the sole health-officers in these respective districts, a serious blow was struck at the efficient working of the Public Health Act, as very few Poor-law medical officers (who are all engaged in private practice) can hardly ever give the time or exhibit sufficient independence to overtake the duties of a public health-officer; and the case in point is one which bears out our views, for what gentleman can perform the duties involved in the superintendence of so large a population, distributed over such a wide area.

We presume that, as half the stipends are paid out of the consolidated fund, this modification of districts and curtailment of pay will be reported to the Local Government Board, and their assent solicited. We shall be anxious to see what manner of reply will be given by the department to this effort on the part of the Teesdale Board to minimise the benefits of the Public Health Act.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

ST. MARY CHURCH.—The recent census returns give the population of this Local Board district as 5,759, showing a gain of more than eleven hundred over the previous enumeration. Amongst this population 177 births and 94 deaths were registered, the death-rate, excluding the deaths of three non-residents, being equal to 16.4 per 1,000. Zymotic diseases were fatal in six cases, three being from whooping-cough, two from continued fever, and one from diarrhoea. The district under Mr. Karkeek's charge seems extending in a variety of directions. Many new houses were built during the past year, some of which are without proper drainage, being connected with cesspools. The health-officer rightly calls the serious attention of his authority to these "miserable sanitary delusions;" and he would do well also to recommend the framing of building by-laws based upon those issued by the Central Board. The district appears to have been kept under thorough inspection, though the report is somewhat meagre in detail.

St. Giles.—Mr. Lovett finds some cause for satisfaction in the fact that the average death-rate for the decennial period 1870-80 was really 5.0 per cent. lower than that of the preceding period, showing, he thinks, that the sanitary improvements ordered by his Board have produced beneficial effects. He reports for the year 1880 actual birth and death-rates of 25.3 and 23.7 per 1,000 respectively, basing his calculations on the 1871 census. The district, in common with the metropolis, generally suffered severely from an epidemic of scarlet fever, which caused 45 deaths, which continued throughout the year, reaching its intensity in August, when more than fifty children were reported to be suffering from the disease. Whooping-cough was also very prevalent, being fatal to forty-five children. Of the other deaths from the seven principal zymotics (190) measles was responsible for 37, diarrhoea for 30, erysipelas 14, fever 7, and small-pox for three. From "the other zymotic diseases" 35 deaths were registered, including one fatal case of typhoid fever. Appended to the report is a summary of the sanitary work performed during the year. We are glad to observe that steps have at last been taken for the erection of the much-needed mortuary for the district.

St. James.—In Dr. Tatham not only has the corporation of this important and crowded city an active, energetic, and efficient officer, but the world at large has one of the few thoughtful and penetrating sanitarians who appreciate the importance of local study and research in

helping to the solution of large general problems. Dr. Tatham's work, as reflected in his annual reports, is of the most exact and valuable kind; and he evidently spares no pains to get to the bottom of everything that comes before him in the performance of his multifarious duties. He accounts for the late appearance of his report for 1880 by explaining that the discrepancy which was found to exist between the population recently enumerated, and the number estimated to be living at the time of the census, was so large as to vitiate such of the deductions in the report as were based on the estimated population. The 1881 census returned the population of Salford at 176,233, showing a gain of 51,428 as compared with the previous census so that, corrected by the result of the recent enumeration, the population at the middle of 1880 is estimated at 171,727. Amongst this number of persons there were 4,799 deaths, being equal to a death-rate of 27.9 per 1,000, of which no less than 54 per cent. occurred amongst children under four years of age, being the highest proportion of deaths under that age ever reached in Salford since records have been kept. Alluding to this excessive mortality, Dr. Tatham directs attention to the diseases which depend for their prevalence and fatality on the neglect to which infants are subjected in consequence of the industrial occupation of their mothers. He shows that, with the exception of Leicester, Norwich, and Nottingham, Salford is of all large English towns the most fatal to infant life, and that compared with the twenty large towns of England, including the more unhealthy of them, the rate of infantile mortality in Salford is as 118 to 100. The total zymotic deaths of the year (1,403 in number) were equal to 29 per cent. of the mortality from all causes. Of these deaths, 1,261 were referred to one or other of the seven more familiar infectious diseases, giving a death-rate from this group of 7.4 per 1,000. This rate has only twice been exceeded in Salford during the last ten years. Scarlet fever was excessively fatal, causing 279 deaths against, 203 in 1879, and was prevalent in an epidemic form during the greater part of the year. An exceptionally high mortality is also reported from whooping-cough, which was most fatal during the first half of the year. The deaths from this disease (219) were chiefly confined to the children of poor persons, who were either unwilling or unable to protect them from cold during the acute stage of the disease. One hundred and thirty deaths were due to "fevers," including typhus, enteric, and simple continued fever. In May 1880, typhus fever became prevalent in an epidemic form in certain localities, and not the least interesting part of Dr. Tatham's report is his description of the outbreaks. It appears that the disease was first imported into the district at the end of March, and in May it had assumed alarming proportions. During the first six months of the year 24 cases of typhus occurred, and the rate of mortality amongst them was equal to 29 per cent. During the months of July, August, and September, 24 cases occurred, but the rate of mortality amongst these patients did not exceed 17 per cent. In the winter quarter of the year 31 cases occurred, with a rate of mortality equal to 32 per cent. In the spring quarter of 1881 the number of seizures was 22, of which 14 per cent. died, whilst from April to August only three cases occurred, none of which were fatal. The rate of mortality was far heavier amongst patients over 40 years of age than at any other period of life. Thus from the tenth to the twentieth year of age the fatal cases were in the ratio of eight to every 100 persons attacked, while at the age of 40 years and upwards 50 per cent., or just one-half of those infected, succumbed to the disease. In this respect therefore the experience of the present is fully in accord with that of previous epidemics. With the exception of a few artisans and their families the people who were the subjects of typhus were of the poorest possible class. In one part of the district known as the "factory" the health-officer had to deal with a state of things hardly possible of conception. It is difficult, he states, to give by a description in words an adequate idea of the manner in which these people pass their lives. They are so irregular and migratory in their habits that they cannot be said to have any settled residence: crouched up in the corners of rooms for warmth, with nothing better for a bed than straw or filthy floors, these poor wretches lay huddled on the floor in a condition almost too filthy to describe. For the most part there seemed to be no distinction of sex or even of family as regards their distribution in the sleeping-rooms. Husbands and wives, lodgers and tenants of both sexes, lay huddled together on a common floor, in a state of filth which can truthfully be described as bestial. Under circumstances like these, there is little wonder that the most common diseases fall in every province, town, or that when once the disease had obtained a foothold it might be expected to spread with extraordinary rapidity. Enteric fever was also considerably more fatal than usual, 84 deaths being returned to the coroner. Constitutional diseases were responsible for 74 deaths, whilst under the grouping of local diseases those of the heart and lungs were less fatal than usual, amounting in the aggregate but to 5 and 10 deaths respectively, against 573 and 1,001, the decennial average, respectively. Lung disease, however,

showed an increased fatality during the year : pneumonia alone causing 329 deaths, as compared with 243, the average number. During the year the lodging-houses, slaughter-houses, milk-shops, etc., were subjected to careful and systematic inspection, and the current sanitary work was well kept under, no less than 28,136 inspections having been made, and 6,300 nuisances abated.

TORQUAY.—A low death-rate is at all times a matter for congratulation, and especially so where the district happens to be a health resort. At Torquay 372 deaths were registered during the past year, equal to a death-rate of 15.4 per 1,000, the lowest recorded since 1874. The recent census has somewhat unexpectedly shown the population to have been over-estimated : instead of being 27,000 it is not quite 25,000. Some explanation of this is found in the fact that while in 1871 the average number of persons per house was 7.05, in 1881 it was only 6.92. Of the total deaths, whooping-cough accounted for nine, measles for eight, and diarrhoea for three. There was an absence of small-pox, scarlatina, and diphtheria. Typhoid fever, however, was unduly present, five deaths being registered from this cause. Upon inquiring into the circumstances of these deaths the health-officer came across the existence of some monstrous insanitary conditions. In the first case he discovered a "very defective, stinking, and unventilated water-closet, no trap to the drain, and no ventilation. In another there was an old and dirty hopper-closet inside the house, without ventilation or water supply. In the other cases similar conditions were found to exist. Mr. Karkeek, in referring to the prevalence of typhoid, states that in previous years he has noticed that when heavy rains have followed a long drought cases of typhoid have occurred among the servants in first-class houses. He is of opinion that the sewer-gas has been driven into the private drain by the rush of water in the sewers, and from thence to the sculleries where the servants have been occupied. Of the other deaths, 52 were due to phthisis, 57 to chest diseases, and 24 to heart disease. No less than 33 of the 57 deaths from chest affections occurred during the cold weather, and eleven followed soon after. The general method of the report shows a distinct improvement, and we may congratulate Mr. Karkeek on the interest with which he has been able to imbue it.

DONCASTER, GOOLE, SELBY, AND TADCASTER.—Mr. Mitchell Wilson's report for 1880 on this important combination is a great improvement upon that for the previous year. In his report for 1879 Mr. Wilson contented himself with giving a short statement of the present condition of the district "rather than a complete history of its sanitary progress throughout the year." In his present report he gives *in extenso* a sanitary history of the various districts comprised in his combination. But while the reports are individually models of excellence, the information afforded upon the general condition of the combination is of too meagre a nature to be of any real value. Thus there is an entire absence of any comparative tables of mortality, with the single exception of a statement setting forth the death-rate, the zymotic-rate, and deaths at various ages. No mention is made of the total population of the district or of its area, and the total births and deaths are entirely omitted. Of the several districts comprising the combination, Goole rural was the healthiest, the death-rate only reaching 16.3 per 1,000; and Uckhill came next with 17.2. The other rates were : Doncaster rural, 17.6; Selby urban and Doncaster rural of 20.0 : Selby rural, 20.3; and Goole urban, 20.7 per 1,000. In this last district the zymotic death-rate was 5.0 per 1,000, and in the Selby urban 3.6, these rates being chiefly caused by the fatal prevalence of infantile diarrhoea. On the interesting question of the contagiousness of typhoid fever, Mr. Wilson writes :—"The experience of the year in dealing with cases of typhoid fever, as found in cottage houses, is that there is a very serious risk of persons ill from this disease communicating it to others in the same family. The cases referred to are where the infection was not due to local causes, to which all the members of the family were equally liable, but rather those cases arising after the infection was introduced; and precautions, as far as possible, had been taken to prevent pollution of the drinking water, and to disinfect the excrement. . . . In both the outbreaks which occurred at Goole it was particularly noticeable that many of the cases had attacks of a feverish nature, which were, both in point of duration and intensity, very different from the ordinary attacks of typhoid, and yet from the same cause seven cases of true enteric fever were developed." In the Tadcaster rural district arrangements have been made with the Leeds Fever Hospital to receive all cases of infectious disease occurring in the district, but in some other districts there is an entire absence of such accommodation. Measles and whooping-cough are somewhat prevalent in various parts of the combination, and in almost every case Dr. Wilson attributes the spread of the disease to the great carelessness of parents in exposing their children to infection, and by allowing those already infected to attend school.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology for the Fellowship of the College, at the half-yearly meeting of the Board of Examiners, on the 25th instant, and when eligible will be admitted to the pass examination.

Messrs. Stephen Paget, B.A. Oxon., James Norman Vogan, and Frederick William Caton Jones, students of St. Bartholomew's Hospital; Walter Fowler, B.A. Oxon., and William Lyne Blight, of Guy's Hospital; Sinclair White, of the Galway and Sheffield Schools; John Marriott, of the Charing Cross Hospital; Walter Blaxland, of the London Hospital; James Swain, of the Westminster Hospital; and James Edward Blomfield, of University College.

Seven candidates were rejected, making a total of 42 out of the 76 candidates examined.

With this meeting, the examinations for the present session were brought to a close, with the exception of the final fellowship examination.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 25th, 1882.

Pocock, Alfred George Clarke, Coventry Park, Streatham.
Seon, Greville Ewing, Hamilton, Bermudas.
Thomas, John Henry, Tenby, South Wales.
Turner, Alfred James, Powerscourt Road, Lower Clapton.
Wise, Charles Henry, Prospect House, Launceston.

The following gentlemen also on the same day passed their Primary Professional Examination.

Harris, Frederick William, University College.
Hill, Thomas James Cooke, St. Bartholomew's Hospital.
Jago, Charles Sprague, Guy's Hospital.
Newton, Rupert William, St. Bartholomew's Hospital.
Woods, Everard, St. Bartholomew's Hospital.

UNIVERSITY OF BRUSSELS.—The following gentlemen, having passed the necessary examinations, graduated as M.D. on May 12th, 1882.

Batho, Robert, Surgeon-Major A.M.D., M.R.C.P. Lond. 1882, M.R.C.S. Eng. 1889, L.S.A. 1883, 4, Alfred Street, Plymouth.
Collier, Herbert, L.R.C.P. Lond. & Ed., M.R.C.S. Eng., L.S.A. Lond.
Milward, James, M.R.C.S. Eng. 1865, L.S.A. Lond. 1866, 54, Charles Street, Cardiff.
Wharry, Arthur James, M.R.C.S. Eng. 1879, L.R.C.P. Ed., House-Surgeon Great Northern Hospital.

Eight candidates offered themselves, four of whom were referred for six months.

MEDICAL VACANCIES.

The following vacancies are announced :—

- ADDENBROOKE'S HOSPITAL, Cambridge.**—House-Physician. Salary, £65 per annum. Applications by June 6th.
- CHILDREN'S HOSPITAL, Birmingham.**—Assistant Resident Medical Officer. Salary, £40 per annum. Applications by June 20th.
- CHILDREN'S HOSPITAL, Birmingham.**—Resident Medical Officer. Salary, £80 per annum. Applications by June 20th.
- CROYDON GENERAL HOSPITAL.**—House-Surgeon. Salary, £100 per annum. Applications by June 6th.
- CUMBERLAND INFIRMARY, Carlisle.**—House-Surgeon. Salary, £100 per annum. Applications by June 27th.
- GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff.**—House-Surgeon. Salary, £100 per annum. Applications by June 12th.
- GUEST HOSPITAL, Dudley.**—Resident Medical Officer. Salary, £120 per annum. Applications by June 9th.
- HALLSIDE, NEWTON, N.B.**—Medical Officer for the Sick Society in connection with the Steel Company of Scotland's Works. Applications to Mr. McFarlane, 20, Hallside Cottages, Newton.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.**—Resident Clinical Assistant. Applications by June 3rd.
- HULL GENERAL INFIRMARY.**—Junior Assistant House-Surgeon. Salary, £35 per annum. Applications by the 13th instant.
- KILBURN, MAIDA VALE, AND ST. JOHN'S WOOD GENERAL DISPENSARY.**—Resident Medical Officer. Salary, £120 per annum. Applications by the 15th instant.
- KINGTON UNION.**—Medical Officer. Salary, £30 per annum. Applications by June 5th.
- LIVERPOOL NORTHERN HOSPITAL.**—Assistant House-Surgeon. Salary, £70 per annum. Applications by June 3rd.
- METROPOLITAN ASYLUM FOR IMBECILES, Darenth, near Dartford, Kent.**—Assistant Medical Officer. Salary, £120 per annum. Applications by June 7th.
- MID AND SOUTH YELL AND FETLAR AND NORTH YELL.**—Medical Officer. Salary, £70 per annum. Applications to Inspector of Poor, Mid Yell, Shetland.
- NEW ZEALAND.**—Inspector of Lunatic Asylums. Salary, £800 per annum. Applications by June 20th.

UGHTERARD UNION.—Medical Officer for Lettermore Dispensary District. Salary, £100 per annum, £12 yearly as Medical Officer of Health, with £10 per annum for boat hire, and registration and vaccination fees. Election on the 6th instant.

RATHKEALE UNION.—Medical Officer for Pallaskenry Dispensary District. Salary, £100 per annum, with £15 per annum as Medical Officer of Health, registration and vaccination fees. Election on June 11th.

RICCARTSTON ASYLUM, Paisley.—Assistant Resident Medical Officer. Salary, £60 per annum. Applications to R. Rowand, Inspector of Poor, Paisley, by June 5th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum. Applications by June 10th.

ROYAL PIMLICO DISPENSARY, 104, Buckingham Palace Road, S.W. Resident Medical Officer. Applications by June 5th.

SCARBOROUGH UNION.—District Medical Officer and Public Vaccinator. Salary, £50 per annum. Applications by the 7th instant.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY. House-Surgeon. Salary, £100 per annum. Applications to the Honorary Secretary of the Medical Staff.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Senior Assistant House-Surgeon. Salary, £65 per annum. Applications to the Honorary Secretary of the Medical Staff.

TAVISTOCK UNION.—Medical Officer of Health for the Rural Sanitary District. Applications by June 9th.

THE INFIRMARY, Halifax.—Assistant House-Surgeon. Salary, £100 per annum. Applications to the Senior Physician of the Medical Staff by June 10th.

WATFORD UNION.—Medical Officer for Kilmenden Dispensary District. Salary, £120 per annum, with £20 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 9th instant.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Salary, £50 per annum. Applications by June 10th.

YORK COUNTY HOSPITAL.—Honorary Physician. Applications by June 24th.

MEDICAL APPOINTMENTS.

ARMSTRONG, J. W., M.R.C.S., appointed Surgeon to the Northern Counties Hospital for Incurables, Mauldeth Hall, near Manchester.

EVANS, J., L.R.C.P., appointed Surgeon to the Ebbw Vale workmen residing at Beaufort.

JONES, J. H., M.D., appointed Consulting Physician to the Kent County Ophthalmic Hospital, 100 W. Addison, M.D., deceased.

MILLER, H. C., L.R.C.P., appointed Assistant Medical Officer to the Staff of the County Asylum, Burntwood, Lichfield.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

SNELL.—On May 30th, at 131, Green Street, Victoria Park, the wife of E. G. Car. a son.

TAYLOR.—On May 25th, at 2, Belvoir Terrace, Scarborough, the wife of John W. Taylor, a son.

MARRIAGE.

BOUSFIELD—HENMAN.—On May 27th, at the Parish Church, Islip, Edward C. Bousfield, L.R.C.P. Lond., of Wellesley House, Asney Road, Bristol, and Miss Helen, youngest daughter of the late John H. Henman, Esq., of the same place.

An assistant-surgeon on board a German gun-boat, named Bressert, has been washed overboard during a storm, and drowned, the most vigorous efforts to save him being ineffectual.

CHARING CROSS HOSPITAL.—The following appointments have been made: House-Physician, Charles A. Wigan, L.S.A. Lond.; House-Surgeon, Martin de la Motte, M.R.C.S. Eng.; Resident Accoucheur, Cecil R. C. Lester, M.R.C.S. Eng.; Assistant House-Physician, Henry Appleton; Assistant House-Surgeon, S. B. Wyke, L.S.A. Lond.

ST. THOMAS'S HOSPITAL.—The following appointments have been made: A. E. Wells, M.R.C.S., L.R.C.P., Resident Accoucheur; G. F. Cooper, M.R.C.S., L.R.C.P., non-Resident House-Physician; C. W. Hunt, M.R.C.S., L.S.A., Assistant House-Physician; W. A. Duncan, M.D., etc., Assistant House-Surgeon.

The average death-rate in Naples during 1880 was 31.86 per 1,000, being an increase of 6 per 1,000 as compared with the previous year. This remarkable increase of mortality occurred principally in the first five months of the year, when the death-rate averaged, in January, 50; February, 42.75; March, 34; April, 36; which contrast the general condition of the inhabitants that Naples is infinitely more healthy in summer than in winter. One of the most vital questions for the town is that of water-supply. The sewers are filling up more and more every year, and the bad smells, preliminary of disease, are increasing. It is therefore to be hoped that a local committee has received the royal assent to proceed with water-works as soon as possible.

WINTER APOPLEXY.—During the rigorous winter of 1879-80, Dr. E. Bax observed some accidents of an apoplectic character of which he has described the mechanism and symptomatology in a paper read at the Medical Society of Amiens, April 1st, 1880. He arrived at the following conclusions. Cases of apoplexy are more frequent during the winter than during any other season of the year; the more intense is the cold, the more numerous are these cases. The cold renders the surface of the body anæmic, augments the arterial tension, and consequently produces congestion of the viscera, and especially of the encephalon. This congestion, if it do not kill, may give rise to hæmorrhages which are not considerable if the vessels of the encephalon are fairly healthy. It is likewise possible that the anatomical constitution of the blood becomes changed under the influence of cold, and that this change is allied to the pathological phenomena observed. Dr. Bax's observation on the effect of the intropelvic action of cold in producing apoplexy is interesting; but the idea is not new in this country.

HEALTH OF FOREIGN CITIES.—The following facts and figures, derived from a table in the Registrar-General's last weekly return, afford fairly trustworthy indications of the recent health and sanitary condition of various foreign and colonial cities. According to the most recent official returns, the annual death-rate averaged 26.6 in the three principal Indian cities, and was equal to 23.7 in Bombay, 29.7 in Calcutta, and 34.4 in Madras; small-pox caused 58 deaths in Calcutta; measles, 33 in Bombay; and small-pox 19 in Madras. In Alexandria, the death-rate was equal to 35.1, and the 143 deaths included 13 from typhoid fever, and 9 from whooping-cough. In twenty-two European cities, the death-rate averaged no less than 31.1, and exceeded by no less than 10.1 per 1,000 the average rate prevailing last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 54.6, though it showed a further decline from the still higher rates in previous weeks; the 696 deaths in this city included 23 from scarlet fever, and 46 from typhus and typhoid fevers. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did not exceed 19.7; measles caused 4 deaths in Copenhagen, and diphtheria was somewhat fatally prevalent both in Stockholm and Christiania. The death-rate in Paris was equal to 26.9, and corresponded with that which prevailed in the previous week; the deaths in this city included 60 from diphtheria and croup, 50 from typhoid fever, and 23 from small-pox. In Brussels, the rate did not exceed 20.6, although 3 fatal cases of small-pox were recorded. In Geneva, on the other hand, the death-rate was equal to 31.0, although no zymotic fatality was noted. In the three principal Dutch cities, the average death-rate was equal to 25.1, and ranged from 25.8 in Amsterdam, to 22.7 in the Hague; measles caused 8, and whooping-cough 5 deaths in Amsterdam. The Registrar-General's table includes returns from nine German and Austrian cities, in which the average death-rate was 29.9; the rate ranged from 23.9 in Dresden and 25.2 in Berlin, to 34.5 and 38.1 in Vienna and Prague. Small-pox caused 28 deaths in Vienna, 13 in Buda-Pesth, and 4 in Prague. Diphtheria showed fatal prevalence in Berlin and Dresden. The death-rate in three of the principal Italian cities averaged 34.6, and was equal to 41.3 in Rome, 34.5 in Naples, and 20.4 in Turin. Measles showed fatal prevalence in Rome and Naples, and typhoid fever caused 9 more deaths in Turin. In four of the largest American cities, the death-rate averaged 27.7, ranging from 22.3 in Philadelphia to 33.4 in New York. Small-pox caused 8 deaths in New York and 3 in Baltimore; scarlet fever showed fatal prevalence both in New York and Brooklyn; diphtheria also caused 27 deaths in Brooklyn, and 25 deaths were referred to typhoid fever in Philadelphia.

CRITERION OF INGENUITY.—One of the most interesting and amusing teacher to furnish him with a sure criterion for ascertaining the limit that separates reason from insanity. The next day I happened invited to dinner by a party of two individuals, one of whom was most correct in his appearance and in his language, while the other was a very nervous, full of himself, and of his future. When talking leave the paper reminded his master of the criterion which he asked of him on the previous evening. "Answer the question for yourself," said I, "and I will be satisfied." "You have just taken dinner with a madman, and with a sane individual." "Oh," answered the pupil, "the problem is not difficult; the same man that distinguished and well-informed man; as to the other he was a chatter and a fool who could not really be taken up." "Ah," replied I, "you are making a great mistake; the one whom you took to be so very wise, believes himself to be God the Father, and speaks in his manners the manner and manner which he believes to belong to his position; he is a patient at Charenton. As to the young man whom you took for a fool, in ten years he is one of the most illustrious of French authors; he is M. H. de Balzac."

LONDON TEMPERANCE HOSPITAL.—The annual meeting of this hospital has been held at the Library of the Memorial Hall, Farringdon Street. Mr. Samuel Bowly presided. The Rev. Dawson Burns, secretary, read the ninth annual report, which stated that the year's work had given assurances of satisfactory progress, both in regard to the work performed and the support received. In-patients during the year had numbered 351, and out-patients 1,761; and in no case had the medical staff prescribed alcohol, even as a drug. Including a balance brought forward of £143 8s. 2d., the total receipts had been £3,481 10s. 7½d., the maintenance had cost £1,261 1s. 3d., and they had a balance in hand of £943 12s. 2½d. The total amount of the building and extension fund on March 25th last was £26,087 16s. 10d.—Cardinal Manning, in moving a resolution commending the work carried on in the hospital, remarked that it was established as an experiment, but he thought they ought to consider it now as having passed beyond that stage. It had become an established fact that alcohol was not needed under any circumstances. He was glad to say that the effect of this non-alcoholic treatment was telling powerfully on the London hospitals.—Sir Wilfrid Lawson traced the effects of alcohol on various classes of people. He remarked that alcohol was losing many of its friends, and he gave as one instance of how people could do without it, that even an imprisoned Irish member did not appear much the worse for its loss.—Canon Ellison remarked that the temperance cause would not be complete until the example of this hospital had been followed by all the other medical institutions in the country.—Mr. J. H. Raper and Mr. T. Cash (chairman of the Board) also addressed the meeting.

DONATIONS.—A lady has given £500 to the Children's Ward of the Halifax Infirmary.—“A friend” has given £105 to Queen Charlotte's Lying-in-Hospital.—“A friend” has given £100 to the Building Fund of the Home for Incurables, Stanwix, Carlisle.—“Delta” and “A. G. C.” have each given fifty guineas to the British Home for Incurables.—Mr. F. Taylor, of Diss, has given £52 10s. to the Norfolk and Norwich Hospital.—University College Hospital has received £50 from the Peoples' Contribution Fund.

DEPAUL ON A METHOD OF PREVENTING THE NECESSITY FOR INDUCED ABORTION.—Dr. Depaul, in one of his recent lectures, recommends, in certain cases, iodide of potassium, regulated diet, and bleeding to diminish the size of the child, and to prevent the necessity of bringing on abortion. He cited the following case in support of his recommendation. Thirty years ago, a merchant had married a very rickety wife, who became pregnant soon after marriage. A medical man was consulted, and, scarcely knowing what to do under the circumstances, he asked that M. Paul Dubois might be called in, who was obliged to perforate the cranium. A second pregnancy occurred, and on this occasion M. Dubois sent the young woman to M. Depaul; she was then four or five months advanced in pregnancy. Her pelvis measured from 7½ to 7¾ centimètres. He told her that it was necessary, in order that she might have a living child, gradually to diminish the quantity of food she took, and to subject herself to a rigorous diet. She was bled many times, and gradually lessened the proportion of food, according to his directions. He followed the progress of the pregnancy, and especially the increasing dimensions of the child. The eighth month arrived, and it appeared to M. Depaul that, until then, the child had grown very little. He let things take their course, thinking that it was not necessary to bring on premature delivery. Finally, the woman came to the end of the ninth month, and Dr. Depaul was sent for. The head soon cleared the sacro-vertebral angle, and the delivery was easy. The child, a boy, lived; he was very small, but was quite strong enough to be brought up. The same person again became pregnant for the third time. She did not communicate the fact to M. Depaul, and it was only when she was eight months and a half gone that he was sent for to attend her. It was too late to have recourse to the means used in the previous pregnancy, and M. Depaul was obliged to perform cephalotripsy. In a fourth pregnancy, he received notice in good time. The regimen used in the second pregnancy was again successful. The child lived, and is still alive. A fifth time, he was only called in at the moment of delivery, and only succeeded in removing the child by cephalotripsy. M. Depaul considers this case to be very conclusive, and has likewise collected a certain number of similar facts which induce him to affirm that this method may have a certain degree of success, and to recommend it in cases of vicious conformation of the pelvis, so as to avoid, as far as possible, forced abortion.

THE ESTIMATION OF HÆMOGLOBIN.—M. Quinquaud has recently made an interesting communication to the Paris Biological Society, on the mode estimating the total amount of hæmoglobin contained in the blood. This method is based on the well-known bleaching properties of chlorine, which depend on its power of liberating hydrogen, and acting as an oxidising agent, or of provoking the phenomena of

substitution which have been so carefully studied by Dumas, Laurent, and Regnault. M. Quinquaud has by different analyses determined that 5.5 cubic centimètres of solution of chlorine of a certain given strength discharges the colour from 0.085 grains of crystallised hæmoglobin dried at 100° Cent. Although chlorine bleaches other substances, the consequent source of error is, in this case, trifling. The “decouleurimétrie” or discolouring method of M. Quinquaud, the optical method, and direct method, give nearly the same results. An inferior proportion is obtained by the hydrosulphite method, because it only estimates the quantity of active hæmoglobin present, whilst the other methods determine the total quantity.

DIABETIC ENDOCARDITIS.—M. Lecorché points out, in a communication to the Académie des Sciences, that the frequent occurrence of inflammation in the course of diabetes leaves no doubt of the tendency of this affection to produce in the persons who are attacked by it an inflammatory diathesis. The inflammations are not confined to the skin, the digestive canal, the kidneys, nor the lungs; they may implicate other organs. M. Lecorché recently described to the Academy of Medicine, as one of the somewhat frequent complications of diabetes, atrophic cirrhosis of the liver. He now draws attention to endocarditis. Diabetic endocarditis, which he has observed on several occasions, appears to show itself more frequently in females than in males (in eight cases out of fourteen). He has not met with it otherwise than in the chronic condition, and only as a complication of subacute or chronic diabetes. It only appears at an advanced stage of the disease—two or three years, or even more, after its commencement. Its appearance seems to be favoured less by the intensity of the glycosuria than by its long duration. It is localised at the level of the mitral orifice, and M. Lecorché has only seen it on one occasion situated at the level of the aortic orifice. It reveals its existence by a *bruit de souffle* with the first sound at the apex of the heart, and by irregularity and intermittence of the pulse. It is sometimes accompanied by atheromatous degeneration of the arteries (twice out of fourteen cases). It accelerates the progress of diabetes, and frequently brings on death, either by inducing a more or less generalised œdema, ascites, or by becoming complicated with acute hepatitis. It seems to be due to the irritation which the prolonged contact of blood changed by the presence of sugar in excess produces on the lining membrane of the heart.

THE ANTIPYRETIC TREATMENT OF FEVER.—Dr. Austin Flint, in the *Medical News*, concludes a valuable paper on this subject as follows. 1. By the employment of cold water externally in cases of typhoid fever, the temperature of the body may, after a variable time of the continuance of the employment, be reduced to 102° or lower. 2. After a period varying very much in different cases, and also at different times in the same case, the temperature, as a rule, again rises as high as, or higher than, before the reduction. 3. Repeating the employment of cold as often as the axillary temperature exceeds 103°, the number of repetitions required in different cases is extremely variable. 4. The sponge-bath and the wet sheet with sprinkling may be employed to the exclusion of the bath-tub in the antipyretic treatment in cases of typhoid fever as well as of other febrile diseases. 5. These modes of employing cold water may be continued sufficiently long for the reduction of temperature to 102° or lower, and repeated as often as may be required, without risk of any immediate injury, and the study of these cases furnishes no ground for supposing that a liability to complications or accidents is thereby increased. 6. Reduction of temperature by these modes as often as it rises, in the axilla, above 103°, improves the condition of the patient. The cases now studied do not afford proof either that the fatality of typhoid fever or that its duration is thereby diminished. The study of these cases, however, renders it possible that this proof would be afforded by a larger collection of cases. During the period that the cases now studied were treated, seven hospital cases were recorded in which antipyretic treatment was not employed. In most of these cases the temperature did not rise above 103°, and it was for this reason that the treatment was not employed. Of these seven cases three were fatal, but I need not say that it would be unfair to draw any deduction from the contrast as regards the proportionate number of fatal cases. It is well known that, in general, resistance, toleration, and recuperation are not as well exemplified within as outside of hospitals. Moreover, in cases of typhoid fever, patients are not admitted into hospital until some days after the commencement of the disease. The clinical test of therapeutical measures, as far as fatality is concerned, is therefore best afforded by the study of cases in private practice. 7. The result of the analysis of these cases, although not sustaining the statements of Liebermeister and others respecting the controlling influence of the employment of cold externally in cases of typhoid fever, yet not only show this method of antipyretic treatment to be safe, but afford us encouragement to employ it with the expectation of diminishing the severity of the disease and its danger to life.

THE TITLE OF DOCTOR.

A MEMBER.—A licentiate of a College of Physicians has no legal right to the title of Doctor, but there is a certain courtesy and custom under which many physicians are accustomed socially to accept the title, and professionally to use it, although, strictly speaking, it is an university title. We can neither advise nor suggest any means which our correspondent can take to have the title Dr. removed from his doorplate; and would advise him not to attempt so very invidious and doubtful an enterprise.

X.—Of course, Fellows of the Royal College of Surgeons are not entitled to call themselves "Dr." in virtue of their diplomas.

W. H. (Hong Kong) says: "I am anxious to obtain reliable information as to what foreign diplomas, and more especially those issued by the various licensing bodies in the United States, are recognised in England. For instance, would a diploma issued by the Medical College or University of Fort Wayne, Indiana, U.S.A., be considered a legal qualification on which to practise in England?"

The only registered qualifications now are those of the United Kingdom. The University of Fort Wayne, Indiana, is unknown in this country. We may add that, while no foreign qualifications can be entered in the *Medical Register*, only two can be in the *Dentists' Register*, viz., the degrees of Harvard and Michigan Universities.

THE CONVICT DEPARTMENT.

SIR,—I was permitted by you, not very long ago, to warn the junior members of our profession from service in the convict department; and I cannot too strongly urge their avoidance of it, as the only means of forcing the Home Office to redress grievances, which in the army and navy were compulsorily recognised and rectified by the exertion of the same kind of pressure. It cannot be too often, nor too strongly, reiterated, that the responsibilities of a medical officer in charge of a large prison are immeasurably greater than those of a governor, whose salary is double that of the former. Instances too frequently recur which go to prove that the services of a medical officer, however meritorious he may be, fail to be adequately rewarded or even recognised. The oldest medical officer in this inglorious service has lately retired from it. After spending nearly thirty years in a responsible and dangerous charge, it has pleased the Lords of the Treasury to grant him a pension of £125 ss. a year; and they say that this annuity, added to his retired pay on an old and low scale from the Royal Navy, constitutes the superannuation allowance to which he would have been entitled as a civil servant. He had earned his pension from the navy, so that £125 ss. represent the pecuniary valuation at which the good and laborious work of a faithful servant is assessed. In an evil hour, the medical officer to whom I refer joined the convict department from the half-pay list of the Royal Navy, from which, by continued service, he would long since have enjoyed a pension of £450 *per annum*, or he might have attained a higher rank. A glance at the Blue-book, issued annually, will show the amount of professional work done by the doctor of each prison; and his contumelious treatment is visible even in these reports, for they are often mutilated, and of late, even bereft of the writer's name. The ultra-humanitarian school in which some of the young visitors under the new system of prison management are pupils, has given rise to increased and vexatious work in the medical department. Prisoners are now invited to state their complaints; and the surgeon on whom the accusations are eagerly made to rest is required to waste his time by explanations that, in the great majority of cases, only lay bare the frivolous and often groundless nature of the convict's statements, and yet the medical officer has no redress. Petitions to the Home Secretary and letters to friends are now liberally permitted, and they are rarely free from some reference to the petitioner's health or treatment. These documents also require the surgeon's confirmation or refutation; in short, the medical officer of a convict prison has plenty of work to occupy his time for many hours daily, if he do no more than sit at his desk and write official letters and reports. His work is not only arduous, and often irritating, but it is ill required, and he stands in the position of a man who is always in an attitude of self-defence. If he have the misfortune to be ill, every hour on the sick-list is noted by a clerk, and deducted from the short period of leave granted to him annually; and in this matter the medical officer is treated with exceptional harshness. There are notorious instances of a recent date, in which the executives, from the rank of chairman to that of deputy governor and lady superintendent, have been on the sick-list for many months, and have even taken voyages to the Antipodes; whereas a medical officer's absence for a month brings a warning to him that, if he do not recover quickly, he shall have the usual notice to wardens, viz., a month, to withdraw from the service. The aspersions on the character of the medical officer of Chester prison illustrate the eagerness with which the doctor is made the scape-goat whenever anything goes wrong, either in or out of his department; and should act as one more danger signal to candidates who seek employment in the miserably paid and thankless office of a prison surgeon.—I am, sir, your obedient servant,
H. L.

FAVUS CRUSTS.

SIR,—I shall be greatly obliged to any member of the profession who will assist me to obtain fresh favus crusts for cultivation experiments.—I am, etc.,
22, Queen Anne Street, W. G. THIN, M.D.

EXAMINATION OF LEAVES OF VEGETABLES.

SIR,—Seeing at page 803 of our JOURNAL for May 27th, 1882, a statement as to a new method of examining microscopically the leaves of vegetables, I wish to point out to our members that, while I cannot dispute the possibility of the plan there advised rendering a leaf transparent, I must still observe that my own experience of the use of strong mineral acid has been, that the vegetable tissue is altered or even destroyed, unless great care be used. I have many leaves and sections prepared by a process devised by the late Dr. George D. Peaky of Baltimore, U.S.A., in which a solution of chlorinated soda is the bleaching agent; I have found this much less destructive to the tissues than the strong acid. The process is fully described in *Science Gossip*, 1875, page 5. Leaves are by it rendered so entirely transparent, that the cuticle, the several layers of cells, spiral vessels, raphides, etc., are all seen under the microscope in their natural relations to each other.—Yours very truly,
Ealing, May 27th, 1882. GEORGE D. BROWN.

UNINTELLIGIBLE.

"THE BRITISH MEDICAL JOURNAL," says a Cincinnati journal, "reports an ear of corn discharged through the chest. The assailant must have used a cannon, or, at least, a pistol with an abnormally large meatus. But the 'friend at our elbow' suggests that our British cousins (or grandparents) say *corn* when they intend *wheat*; and that the patient fired his own charge, after having thus loaded himself to the muzzle." Thus do languages change. Our Cincinnati reader apparently does not understand that we use the word "corn" to denote sundry cereals; while the Americans apply it to the "Indian corn".

PROVIDENT DISPENSARIES.

SIR,—I observed in the JOURNAL of the 29th ultimo the report of a meeting held at the Mansion House, at which it was decided to institute a Preliminary Expenses Fund in support of the "Metropolitan Dispensaries Association". I think it behoves all medical men, general practitioners especially, to seriously consider what will be the result, if this Association should raise sufficient funds to establish dispensaries in the various districts of London.

I myself fail to see how it can benefit young practitioners who have not already secured a connection sufficient to enable them to pay their way. London and its environs are already surfeited with a number of dispensaries (in many instances worked by unqualified men), where fees are accepted which a prescribing druggist would reject. These dispensaries injure practitioners by making it almost impossible to obtain the ordinary fee for advice and medicine. Another and a much more serious evil to contend with, is the indiscriminate relief given at the out-patients' departments of the various hospitals, where people can be counted by scores who are perfectly well able to pay a general practitioner his fee of 2s. 6d. or 3s. 6d., or even more. I can instance several tradesmen, commercial travellers, their wives and families (all of whom are in good circumstances), who are at the present moment receiving gratuitous advice and medicine at the Brompton Consumption Hospital; and I have no doubt many of your readers could enumerate hundreds of similar cases at the hospitals in their locality.

London practitioners are robbed to a fearful extent in this manner, by the lax way in which relief is given to all applicants without inquiring into their circumstances. The dispensaries will not remedy this state of affairs. The people who are paltry enough to obtain medicine, etc., for nothing, when they are able to pay a doctor his fee, are not the class of people eligible to join a dispensary; and, if they did join, it would be to the loss of the practitioners in the neighbourhood. The only way to remedy the abuse of hospital relief (out-door), is for the authorities to exercise a little discrimination, and make inquiries as to the means and position of the applicant before granting a letter.

Supposing that the dispensaries succeed in checking the abuse of out-door hospital relief, they cannot benefit the practitioners round about. Those on the staff of the dispensary would receive a sum utterly inadequate to the services they had rendered, and would in all probability discover that many of the patients who had hitherto paid them for their attendance in the usual way, were now getting it for a few pence a week as dispensary patients. There are facilities enough for the poor to obtain medical attendance either from the hospitals, free dispensaries, or parish authorities; and those who are only able to pay small fees will find plenty of practitioners moderate in their charges, particularly if the ready money system be adopted. Credit is undoubtedly due to the promoters of an association to provide medical attendance for the working class with large families at a low rate, and it will certainly save medical men the unpleasantness of booking bad debts; but we shall certainly find, when these dispensaries are in working order, that a great number have joined who have no right to do so.

A little consideration, I think, should be shown to young medical men who have embarked in practice, after spending a large sum of money to enter a profession which is overstocked, ill-paid, and grossly imposed on.—Yours faithfully,
A. G.

BINAURAL STETHOSCOPES.—"M. K. Q.C.P." will find a very convenient and portable binaural stethoscope described in the BRITISH MEDICAL JOURNAL of November 10th, 1881. It was introduced by Messrs. Salt and Son, surgical instrument makers, Birmingham.

UNIVERSITY DEGREES.

SIR,—I read with interest a letter on this subject in a late number of your JOURNAL, and I entirely agree with your correspondent's opinions. From the unexampled conduct of our universities in excluding applicants from medical degrees, it follows that nearly all our medical graduates have obtained them elsewhere. Most of the consulting practice in England is in the hands of Scotch graduates, not a few of them natives of that country, who thus gain the advantage over us conferred by the M.D. degree. Everyone knows the prestige this diploma carries with it, not only among the public, but also among medical men (even when the latter are aware they have undergone examinations of equal or greater severity). It seems to me unaccountable that English universities should so disregard the wish of Englishmen, often and widely expressed. Why might not Oxford, for instance, confer its degrees on the holders of English diplomas, after one or more examinations? or could anything short of a miracle induce the London University to adopt a similar course?

I fully agree with your correspondent that it is high time the matter were taken out of their hands. It has been far too much and too long neglected already.—I remain, sir, yours obediently,
M.R.C.S.E.

PETROLEUM AS HAIR-OIL.

MR. STEVENS, a British consul, states (*Oil and Drug News*) that a former servant of his, prematurely bald, whose duty it was to trim his lamps, had a habit of wiping his petroleum-besmeared hands in the scanty locks which remained to him; and after three months of lamp-trimming experience and practice of his dirty habit, he found he had a much finer head of black glossy hair than he ever possessed before. Mr. Stevens therefore tried the remedy with wonderful success on two retriever spaniels that had become suddenly bald. During the summer of 1875, his attention was called to several cases of sudden baldness of bullocks, cows, oxen, and the loss of tails and manes among horses. His previous experience induced him to suggest the use of petroleum; and it was found that, while it stayed the spread of the disease among animals in the same sheds and stables, if effected a quick and radical cure on the animals attacked. Mr. Stevens says that the petroleum should be of the most refined qualities, and should be rubbed in vigorously and quickly with the palm of the hand. It should be applied six or seven times in all, at intervals of three days, except in the case of horses' tails and manes, when more applications may be requisite.

LIEUT. E. P. S.—The pamphlet is a well known disgraceful quack production, and one of which it would be very satisfactory that the public prosecutor should take notice.

PAPAIN IN CHRONIC ECZEMA, ETC.

SIR,—Will you kindly allow me brief space to answer several correspondents who have written to me privately about papaine? It is to be procured from Messrs. Christy and Co., 155, Fenchurch Street, E.C. The parts under treatment should be washed with soap and water once daily, but care should be taken not to use too much friction, as the skin is apt to become tender. I am now using the drug with considerable benefit in a case of severe warts. I find it also of use in softening hard corns.—I am, sir, your obedient servant,
63, Montagu Square, W., May 26th, 1882. MALCOLM MORRIS

HISTORICAL SKETCH OF THE BRITISH MEDICAL ASSOCIATION,

From its foundation in 1832 to the present time.

THE subjoined historical sketch of the proceedings of the BRITISH MEDICAL ASSOCIATION, during each year from its foundation in 1832, by Sir Charles Hastings, as the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION, has been compiled from the records in the *Transactions* and *JOURNAL*. The proceedings of the Association in regard to Medical Reform, of the Medical Reform Committee, of the Committee on Parliamentary Bills, and of the Joint Committee on State Medicine of the British Medical and Social Science Associations, will be given in separate chapters.

FIRST YEAR: 1832-33.

The Association was founded on July 19th, 1832, on which day more than fifty medical men, at the invitation of Dr. CHARLES HASTINGS, assembled in the board-room of the Worcester Infirmary. Dr. Edward Johnstone, of Birmingham, was unanimously called to the chair, and among those present were, Dr. Kidd, the Regius Professor of Physic in the University of Oxford; Dr. Barlow, Physician to the Bath United Hospital; Dr. John Conolly, then of Warwick; Dr. W. Conolly, of Cheltenham; Dr. Corrie, of Birmingham; Dr. T. Evans, jun., of Ross; Mr. Joseph Hodgson, Surgeon to the Birmingham General Hospital; Mr. W. Sands Cox, of Birmingham; Mr. Soden, of Bath; Mr. Helling, of Bristol; and most of the medical men residing in Worcester and the neighbouring towns.

Dr. HASTINGS, addressing the gentlemen present, congratulated them that the day for forming a Provincial Medical and Surgical Association had arrived: an Association which, he trusted, was destined to exercise no inconsiderable influence on the future of medical science. He had long felt the disadvantages under which the prosecutors of medicine in English provincial towns had laboured in consequence of the want of any system of co-operation, and he hailed the day as one likely to lead to most important results. The benefits arising from the association of men for the benefit of science had long been acknowledged; and this was especially shown by the recent establishment of the British Association for the Advancement of Science.* It might be inferred, from the avidity with which the proposal to form such a society as was contemplated had been received, that the desire for a combination of forces in the medical profession, though dormant, had existed. The facilities of communication between distant towns,† both personally and by letter, had become so much greater, that distance would afford but a slight barrier to the undertaking.

Dr. Hastings said that, while he was far from thinking lightly of the influence of provincial medical men in society, he believed that they did not hold the rank in the community to which they might attain, and to which it would be the effort of the Association to stimulate them to aspire. To this end, it was important to maintain a dignified attitude before the world. Considering the attempts made in some quarters to bring about feelings of hostility between the cultivators of the different branches of medicine, the time had come when the friends of peace and harmony should declare themselves. He hoped that, in the society, no opportunity would be allowed to escape of cultivating friendly intercourse, and of exalting, as far as possible, those favoured sons of science whose example, reputation, and acquirements, were calculated not only to stimulate their brethren to exertion, but also to raise admiration of the medical art in the public mind.

There might, Dr. Hastings said, be some who, though they allowed the scheme of an association for the advancement of medical science in the provinces to be excellent in itself, yet did not admit that it could be made practically available, in consequence of the dearth of willing labourers. In refutation of such an objection, he referred to the success which had attended the publication of the *Midland Medical and Surgical Reporter*, which commenced in the year 1828, and had been edited by Dr. Hastings, with the co-operation of Dr. Malden, Mr. J. P. Sheppard, and Mr. J. Rayment, of Worcester; Dr. Darwall of Birmingham, and Dr. Burne of London. The success which had attended that

journal had led to the belief that there was no reason why a society of provincial physicians and surgeons might not be formed, to collect and publish valuable information; and the proposition had been made to associate the provincial medical practitioners of England in a comprehensive co-operating institution, which, by collecting the results of individual experience, and bringing the energies of many minds to bear on unsettled points, might contribute to give medicine more precision and certainty than it possessed.

Having expressed gratification at the manner in which the proposition had been received, Dr. Hastings said that a committee had been for some time engaged in endeavouring to take advantage of the suggestions made by numerous correspondents, and had drawn up a prospectus in which the principal objects of the Association were stated to be—

1. Collection of useful information, whether speculative or practical, through original essays, or reports of provincial hospitals, infirmaries, or dispensaries, or of private practice.
2. Increase of knowledge of the medical topography of England, through statistical, meteorological, geological, and botanical inquiries.
3. Investigation of the modifications of endemic and epidemic diseases, in different situations and at various periods, so as to trace, so far as the present imperfect state of the art will permit, their connection with peculiarities of soil and climate, or with the localities, habits, and occupations of the people.
4. Advancement of medico-legal science, through succinct reports of cases occurring in provincial courts of judicature.
5. Maintenance of the honour and respectability of the profession, generally, in the provinces, by promoting friendly intercourse and free communication of its members; and by establishing among them the harmony and good feeling which ought ever to characterise a liberal profession.

Dr. Hastings said that, as one great means of carrying out these objects, it was proposed to hold an annual meeting of the members at some one of the provincial towns, changing the place of meeting each year. This meeting would not only be instrumental in producing friendly intercourse between the members of the Association, but it would also be dedicated to the promoters of medical science, as one of the members would be annually appointed to give a history of medicine during the past year, or an oration on some subject connected with medical science, or a biographical memoir of some eminent cultivator of medical sciences in the provinces. It had also been suggested, by Dr. Conolly, that a certain number of members should be appointed each year to report on the state of medicine in the several foreign countries with which the Association had literary communication.

Speaking of the objects to which the attention of the members might be directed, Dr. Hastings said that there was scarcely a branch of physiological or pathological investigation, which might not be undertaken by means of essays; and he pointed out several subjects on which knowledge was required, both in physiology and in pathology, and with regard to the action of medicines. In proof of the value of essays, he referred to the various *Transactions*, etc., published in London and Edinburgh, and also to the *Memoirs of the Manchester Society* and the *Midland Medical and Surgical Reporter*. He also pressed on the attention of the members the necessity of publishing the results of hospital and dispensary practice throughout the kingdom. The *Midland Medical and Surgical Reporter* had afforded valuable reports of the Birmingham Town Infirmary and Eye Infirmary, and of the Worcester Dispensary; and it was much to be desired that this line of inquiry should be assiduously followed up.

Regarding medical topography, much less had been done by the English than by their continental brethren, many of whom had contributed more or less to the formation of national medical topographies of their respective countries. The medical periodical press in England had repeatedly endeavoured, but without much success, to awaken the profession to the necessity of cultivating this branch of the knowledge; and the *Edinburgh Medical and Surgical Journal* had contained a very able sketch of a plan for memoirs of Medical Topography. The *Midland Medical and Surgical Reporter* had contained accounts of the medical topography of Worcester and of Birmingham. Dr. Hastings referred also to the value of the writings of Dr. Hawkins on Medical Statistics, Dr. (Sir James) Clark on Climate, Mr. Thackrah on Trades, and Dr. Darwall on the Diseases of Artisans.

The advancement of medico-legal science was of the highest importance. The superiority of continental medical men over the British in their knowledge of forensic medicine had long been painfully felt, and had been specially commented on by Dr. Christison. Dr. Hastings expressed his belief that, by a moderate degree of industry, succinct reports might be published by the Association of instructive cases occurring in the provincial courts of justice.

* When the formation of the Association was first contemplated by Dr. Hastings, he was not aware of the existence of the British Association.

† It must be remembered that, when this address was delivered, railway travelling was in its infancy, while the penny post and the telegraph were things of the distant future.

With regard to Medical Ethics, Dr. Hastings remarked that, with the exception of a few essays, no attempt had been made to establish a code for the guidance of those needing such direction. In a well organised profession, there could be no difficulty in adapting to its exigencies the doctrines of general ethics, the principles of which existed in every well governed mind, and were identical in all circumstances, however variously they might be applied.

He further remarked that the organisation of the profession which obtained was not what it ought to be; the whole system of medical polity in this country was both defective and erroneous. Opinions differed widely as to the evils and remedies, but few commended the existing state of things. This subject was closely connected with the advancement of science; for, if the profession were constituted as it ought to be, the harmony that would be established could not fail to be a direct means of more cordial and efficient co-operation in extending the science and improving the practice of medicine.

Having described the proposed provisional constitution of the Association, Dr. Hastings presented his eloquent and impressive address in the following words:

"Gentlemen, you will, at any rate, admit that the objects I have thus hastily introduced to the notice of the meeting are worthy of deep meditation. The contemplation of them appears to me, indeed, to open to us a vast and unbounded prospect, and to beget high and lofty thoughts of our future proceedings. I may be sanguine in my expectations; but I cannot help indulging the gratifying, the cheering, the delightful thought, that, if we engage in this undertaking, as we are bound to do by the obligations which our profession imposes on us, with the zeal and alacrity of men anxious for the good of mankind, the Association must be of some use; must have a direct tendency to extend the empire of knowledge, and to increase our power over disease. *Valeat quantum valere debet.*"

It was unanimously resolved that a Provincial Medical and Surgical Association be formed: and a code of laws for its management was agreed on. It was decided that the affairs of the Association should be arranged by a President, two Secretaries, and a Council, to be appointed annually: that a Report of the State of the Association should be presented each year: that, at the annual meeting, a member should be appointed to give an account of the state or progress of medical science during the past year, or an oration on some subject connected with medical science, or a biographical memoir of some eminent cultivator of medical science who may have resided in the provinces: that the office of President should be honorary, and conferred on some physician or surgeon of eminence resident in any of the provincial towns comprised in the circle of the Association.

A vote of thanks was unanimously given to Dr. Hastings for the indefatigable trouble he had taken in forming a Society which owed its existence to his suggestion: and for the able, eloquent, and learned discourse with which he had opened the proceedings of the day. It was further ordered, that the address form the introductory article to the first volume of the *Provincial Medical and Surgical Transactions*.

Dr. Edward Johnstone was chosen President for the year 1832-33. Dr. Hastings and Mr. J. P. Sheppard were appointed Secretaries, and the duty of editing the *Transactions* was intrusted to them.

The number of members at the time of the meeting was 140.

SECOND YEAR: 1833-34.

The first annual meeting of the Association was held on July 10th, 1833, at the Bristol Infirmary, under the presidency of Dr. Andrew Carrick, Senior Physician to the Infirmary. The number of members had increased from 140 to 316, of whom nearly 200 were present at the meeting.

A Retrospective Address was delivered by Dr. Edward Barlow, of Bath.

In their report, the Council suggested that the example of the British Association for the Advancement of Science should be followed, by appointing one of the members to deliver reports on the branches of medical science. It was then, as usual, the subject of the meeting was resolved—

"That Dr. Robert of Northampton, and Mr. Turner of Manchester, be requested to draw up a report on the present state of our knowledge of Anatomy, and present it to the next annual meeting."

"That Dr. Charles Henry of Manchester, and Mr. Jennings of Leamington, be requested to draw up a report on the present state of our knowledge of the Chemistry of the Animal Fluids, an illustrative of Pathology, and present it to the annual meeting for 1834."

At the suggestion of the Council, and that members of the Association, a Committee was appointed, with authority to collect and promulgate information, for the purpose of collecting information regarding the present state of medicine in the several countries, their medi-

cal institutions, medical topography, etc. It was also recommended that the foreign practitioners with whom correspondence was carried on should be honorary members of the Association. In accordance with these suggestions, the following gentlemen were appointed foreign correspondents: Dr. Conolly for America; Dr. Lomax Bardsley for France; Mr. Webb for Holland; Dr. John Forbes for Italy and Spain; Dr. J. C. Prichard for Germany. The Council were also empowered to make additions to the number. Subsequently, two of the corresponding members—Dr. Forbes and Dr. Prichard—declined to take office: and Dr. James Clark was appointed by the Council corresponding member for France, Germany, Switzerland, and Belgium.

A series of questions on Vaccination had been proposed by Dr. Baron of Cheltenham; and the Council recommended that they should be circulated among the members of the Association and the profession at large. A committee was appointed to draw up a report founded on the replies to the questions, consisting of Dr. Baron of Cheltenham; Dr. John Conolly of Warwick; Dr. R. Bevan of Monmouth; Dr. Hebb of Worcester; Dr. Malden of Worcester; and Dr. Evans of Gloucester, who acted as Secretary.

Certain proposals made by Dr. Baron for the establishment of a Library and of a Benefit Fund were ordered to be printed and circulated.

It was resolved: "That the Secretaries of the Association be directed to address to the Committee appointed by the House of Commons to inquire into the state of Parochial Registers, a letter expressing the great satisfaction felt by the Association that the improvement of this important branch of statistics had been taken into consideration by the Legislature, and respectfully submitting to the Committee that great benefit might be expected to accrue to medical science, and consequently to the community at large, if arrangements could be made for recording the causes of death in the provincial registers of mortality."

Reference was made in the Report of the Council to the propriety of establishing an annual prize. The Council did not feel justified in applying any of the money of the Association to the purpose; but they called attention to a liberal proposal made by Dr. Thackeray of Chester, who had sent £5, and had promised to give £15 in addition if nineteen other members would give £20 each. It was resolved by the meeting:

"That a subscription be opened for creating a fund to enable the Association to give prizes for essays connected with medical subjects; the said fund to accumulate until £500 be subscribed, after which time the yearly interest shall be devoted to the above-mentioned object."

This endeavour met with but little response from the members. During the year, three liberal subscriptions were received: one of £25 from Dr. Thackeray, one of £10 from Mr. Jennings of Leamington, and one of £5 from Mr. Gwynne Bird of Swansea. After this, there appear to have been no further contributions, and the attempt was for a time abandoned.

THIRD YEAR: 1834-35.

The second anniversary meeting of the Association was held at the Philosophical Institution in Cannon Street, Birmingham, on July 18th, 1834. Dr. John Johnstone of Birmingham presided, and more than 250 members were present.

The number of members of the Association had increased to 450.

Dr. Darwall of Birmingham had been appointed at the previous annual meeting to deliver the Retrospective Address. In the interval, however, he died, and the task was undertaken by Dr. John Conolly.

Mr. Jennings presented a report on the Chemistry of the Blood as illustrated by Pathology, and Mr. Thomas Turner read a valuable report on the Present State of our Knowledge of Anatomy.

In accordance with a recommendation of the Council, a Committee, consisting of Mr. Walsby, Mr. Parsons, and Mr. Baynham, all of Birmingham, and Dr. Baron of Cheltenham, was appointed to take into consideration Dr. Baron's proposal for forming a Library, and to report to the next anniversary meeting.

The Council, in their report, recommended that a Committee should be appointed for the purpose of considering the practicability of establishing a Medical Benevolent Society, which had been proposed by Dr. Baron. In accordance with this suggestion, the following resolution was adopted by the meeting:

"That the following members be a Committee to take into consideration the practicability of connecting a Benevolent Society with the Association; and that they be requested to confer with the Birmingham Medical Benevolent Society, with a view of extending the benefits of that Society to the members of the Association; and that they com-

municate the result to the next anniversary meeting: Dr. Jeffreys of Liverpool; Mr. Wickenden of Birmingham; Mr. Wilson of Manchester; Dr. Baron of Cheltenham; Mr. Ransome of Manchester; Dr. Evans, Dr. Booth, and Mr. Williams, all of Birmingham."

No report was presented from the Committee on Vaccination. It was explained that the subject was a very wide one, and required much time and labour for its investigation.

Dr. Malden and Dr. Streeten, of Worcester, were requested to draw up, for the next annual meeting, a report on the Physiology of Alimentation; Dr. Booth and Dr. Evans of Birmingham, a report on the Pathology of Dropsy; and Dr. Conolly of Warwick and Mr. Hettling of Bristol, a report on the Rise and Progress of Provincial Medical Schools.

The first reference to the formation of Branches occurs in the report of Council presented at the annual meeting in 1834, in the following paragraph:

"The Council would recommend that, in towns where many members of the Association reside, occasional meetings of such members should take place, for the promotion of the general objects of the Association; namely, the free communication of professional knowledge, and the cultivation of good feeling among the members."

FOURTH YEAR: 1835-36.

The third anniversary meeting was held in the Radcliffe Library, Oxford, on July 23rd, 1835, under the presidency of Dr. Kidd, the Regius Professor of Physic in the University. Previously to the meeting, Dr. Buckland, the Professor of Mineralogy in the University, gave an interesting demonstration of many of the fossil remains in his museum; and Mr. Costello performed lithotomy—then a novel operation in England—on a patient, in the Town hall, before a large assembly of members. The meeting was attended by more than three hundred persons.

The number of members of the Association was reported to be 500.

The Retrospective Address for the year was delivered by Dr. J. C. Prichard of Bristol. A paper on the Autumnal Fevers, Epidemic Scarlatina, and Small-pox, which prevailed at Amsterdam during the year 1834, by Dr. Niewenhuys, was also read.

Dr. John Forbes of Chichester and Dr. Bullar of Southampton were appointed to draw up a report on the actual state of knowledge of the Pathology of Continued Fever; and Dr. Thomson of Stratford, a Report on the Clinical and Therapeutical Properties of Iodine and its compounds.

It was announced at the meeting that the reports on Vaccination, on the Physiology of Alimentation, on the Pathology of Dropsy, and on Provincial Medical Schools, were not yet ready for presentation.

The Committee appointed to consider the practicability of establishing a Benevolent Society in connection with the Association presented their report. They had added to their number Dr. J. Lomax Bardsley of Manchester, and Dr. Brandreth and Dr. Scott of Liverpool. An endeavour had been made, but without success, to induce the Birmingham Medical Society to unite with the Association. The Committee had at first wished to be able to recommend to the Association a plan embracing not only a Benevolent Fund, but also an Annuity and Life Assurance Society, under the management of one or more committees. On consideration, however, they determined to confine their recommendation to the formation of a Benevolent Fund, and submitted a plan of which the following were the principal provisions:

"It is recommended that a Society be formed, to be called the Provincial Medical Benevolent Society; and that a fund be accumulated by subscriptions and donations, applicable to the following purposes:

1. To the relief of contributors who may be unable, through sickness or casualty, to continue in the performance of their professional duties;
2. To the relief of the widows and children of contributors;
3. To afford relief under temporary and unavoidable difficulties;
4. As temporary loans at the discretion of the Committee.

That the fund be under the control of a Primary Managing Committee, situated in some central town, which may be agreed on by the Association, consisting of a President, Vice-President, Secretaries, Treasurer, and ordinary members. That local committees be also formed in at least four of the larger towns. That these committees have certain districts assigned to them. That applications for relief by contributors residing within the districts be transmitted to the local committee, and by them investigated and reported to the primary Committee. That, in cases of emergency, the local Committees shall have the power of granting immediate relief, to such amount as the Association may determine. That no person be entitled to relief who has not contributed at least £1 is. annually for five years preceding his application. That a discretionary power in the admission of contributors be vested in the local Committee. That the benevolent fund be not brought into operation till

such a sum has been accumulated as may appear to the Managing Committee sufficient to enable them to commence in a satisfactory and efficient manner. That a statement of the operations and accounts of the Society be submitted to the Association at each anniversary meeting."

In accordance with the suggestions of the Committee, it was resolved "That the Benevolent Committee be re-appointed, with unlimited power to form sub-committees in the several towns, so as to enable them to carry into effect their recommendations; and that they be requested to report their proceedings to the next anniversary meeting. That the following towns be nominated as fit places for the formation of Committees: Cheltenham, Bristol, Bath, Oxford, Reading, Manchester, Hereford, Worcester, Liverpool, Birmingham, Warwick, Chichester, and Monmouth; and that Cheltenham be fixed on as the town where the Central Committee shall be formed. That subscriptions be forthwith entered into. That Dr. William Conolly of Cheltenham be appointed Treasurer *pro tempore*."

The Committee appointed to consider the proposal for the formation of a Library reported that "from a consideration of the expense attending the formation and care of a valuable library, the impracticability of finding a suitable place for depositing the books, and the insurmountable difficulty of rendering the institution available to the majority of members, they were induced not to recommend the establishment of a library in connection with the Provincial Medical and Surgical Association."

At the meeting of Oxford, the subject of Poor-law Medical Relief was for the first time taken into consideration. Allusion was made in the Report of Council to the new Poor-law Act; and it was remarked that "the guardians of the poor have great power, and, as respects the medical attendance of the poor, they seem inclined to exercise that power in a manner greatly objected to by a large portion of the present respectable class of general practitioners." The appointment of a Committee on the subject was recommended. Accordingly, a committee consisting of Dr. A. W. Davies of Presteign, Mr. N. Rumsey of Beaconsfield, Mr. T. T. Griffith of Wrexham, and Mr. H. L. Smith of Southam, was appointed "to consider the best means of affording medical relief to the sick poor, and more especially with reference to the operation of the new Poor-law Act." In connection with the subject, Mr. Rumsey read a communication showing the necessity for amendment of the system of medical relief of the sick poor; and Mr. H. L. Smith read a paper in which he advocated the formation of "Self-supporting dispensaries."

In September 1835, an Eastern Provincial Medical and Surgical Association was formed at a meeting held at Bury St. Edmunds, by members of the medical profession residing in Cambridgeshire, Norfolk, Suffolk, and Essex. A committee was appointed to prepare a plan for effecting a junction with the Provincial Medical and Surgical Association instituted at Worcester.

FIFTH YEAR: 1836-37.

The fourth anniversary meeting of the Association was held at the Royal Institution, Manchester, on July 20th and 21st, 1836, under the presidency of Dr. Edward Holme. The number of members of the Association was reported to be 600.

The Retrospective Address was delivered by Mr. John Green Crosse of Norwich. Dr. Kidd read a paper on the Anatomical and Physiological Works of Galen.

A deputation from the Eastern Provincial Medical and Surgical Association attended the meeting; and a committee of six members was appointed to consider whether a junction of the two societies was desirable, and, if so, on what terms it should take place. The Eastern Association proposed that its members should pay to the Parent Association two-thirds of the annual subscription of one guinea; that they should receive the publications of the Association; that papers written by them should be published in the *Transactions* of the Parent Association; that a meeting of the two societies should be held once in every five or six years in a town in the six eastern counties; and that the list of officers and members should be published in the *Transactions*. The consideration of the subject was postponed to the next year; and a vote of thanks was given to the members of the Eastern Association who had attended. Not long afterwards, the Eastern Association expressed to the Council their desire to dissolve as a separate body, and to become members of the Provincial Association; reserving the right to hold meetings in the Eastern Counties, and to consider themselves a Branch of the Association. The Council readily complied with this suggestion. Subsequently, in the course of the year, Branches were formed at Wells, Bath, and Southampton.

The Committee appointed at a meeting in 1835 to consider the establishment of a Benevolent Society, presented a report, in which

they stated that they had found it impossible to carry out the recommendations sanctioned at Oxford, inasmuch as these involved two distinct schemes—a Benefit Club, stipulated payments securing certain advantages; and a Benevolent Fund “having for its object the relief of distressed medical men and their families, irrespective of all claims but their misfortunes.” The Committee recommended that the former scheme should be abandoned, and that the Association should limit itself to the formation of a Benevolent Fund. The report was adopted, and the Central Committees and Local Committees were reappointed. A suggestion was made in the report of the Committee, that a portion of the surplus funds of the Association might be employed in promoting the objects of the Benevolent Fund. This was objected to by Dr. Hastings, on the ground that the general fund was expressly to be applied to scientific purposes; and also because, “in order to give a character of permanence to the British Association, he was desirous hereafter to see a portion of its surplus revenues invested in the public securities, and thereby to give means of usefulness to the Association independent of its subscriptions.”

The Committee appointed “to consider the best means of affording Medical Relief to the Sick Poor, more especially with reference to the operation of the New Poor-law Act,” presented a most able and elaborate report, which occupies thirty-six pages of the fifth volume of the *Transactions* of the Association. It was signed by A. W. Davis, M.D. (Preston); T. T. Griffith (Wrexham); H. L. Smith (Southam); N. Rumsey (Beaconsfield); C. B. Nankivell (Coventry); T. Workman (Basingstoke); T. Brayne (Banbury); G. Fletcher (Croydon); R. Ceely (Aylesbury); G. May (Reading); and H. W. Rumsey (Chesham). The introductory portion of the report contained some excellent observations on the question “Who are the parties that are bound to provide medical relief for pauper?”

“The legislature has wisely and humanely determined that no person shall perish for want of the necessities of life. Among these necessities it has invariably reckoned medical and surgical relief; and it has created, by means of the poor rates, a fund for this, among other purposes.”

“The question is, therefore, already decided—that one portion of the community must provide another portion, when sick, with medical attendance. No one has a right to say that the duty of providing for these necessities shall fall exclusively, or in undue proportion, on the medical profession. Medical men, as private individuals, contribute their quota of the public burdens; they cannot, therefore, be required to bear, in addition to their own, that share of these burdens which belongs equally to the rest of the community.”

“Your Committee are aware that the vast amount of gratuitous medical assistance that has been at all times afforded to the needy by all grades of the profession throughout the country (an amount that could not be conceived by those who were not informed on the subject) has been productive, at least, of one very injurious effect; it has induced the unthinking portion of the public to conclude that there was some sort of conventional, if not legal, obligation on the medical profession to attend, without reward, to the ailments of the poor. This kind of misconception, or ignorance, of the real state of the case, has doubtless been the source of many recent grievances.”

It is, therefore, worthy of consideration, whether it does not become the duty of the profession to prove the fallacy of this popular notion, by more limitation and greater discrimination in the supply of their services; by restricting all attempts to convert their spontaneous benevolence into a formal enactment; and by demanding a proper remuneration from those who are bound, not only by the dictates of a rational humanity, but by the laws of the country, to provide the necessary assistance for the destitute sufferers.

There is yet another reason for respecting the real advantages of the gratuitous services of our body; viz., the evil which is thereby produced on the poor themselves. It cannot be denied that a great proportion of the attendance afforded by the medical charities of this country tends to perpetuate the deplorable habit of dependence upon others for the supply of necessities which, by timely forethought and frugality, the working classes might procure for themselves; and it is no less evident that the relief which was intended for the relief of the indigent is frequently applied for the assistance of those who do not need it, and who have no legitimate claim on the unreserved services of medical practitioners. Your Committee are, therefore, of opinion that a well-regulated supply of medical relief, the cost of which should be defrayed from the legalised provision for the relief of the poor, is, on the whole, the most unobjectionable mode of satisfying the proper wants of the indigent community.

After a careful examination of the subject, the Committee, in view of the above considerations, and the following recommendations:

“Your Committee believe that, in the present state of the medical profession, and with the parochial authorities as at present constituted, no amelioration can be effected without the intervention of some third party. It will be readily granted that a fair remuneration ought to be given for the duties which professional men are called on to perform; the amount, however, of such remuneration should not be determined either by those who pay or by those who receive it; nor should it be settled by these parties jointly, at their own discretion, in every separate locality. To speak more plainly, the commissioners and guardians should not have the power of deciding what is a “fair” remuneration, for they are interested in reducing it below par; on the other hand, the medical body should not have the power of fixing it, for they are interested in raising it above par. And, further, the guardians and the medical men of every separate union should not be allowed to arrange it at their pleasure; for (as it has been proved), the former, by requiring “tenders” from the latter, or by threatening the introduction of an adventurer, may, at any time, under present circumstances, reduce the remuneration to their own notions of adequacy. The rate of remuneration should, therefore, be fixed by legislative enactment. It should be sufficient in its details, or in the aggregate, to remunerate the medical officer reasonably and justly for his time, his skill, and his expenses.”

“Your Committee have no hesitation in recommending that, wherever it is practicable, a dispensary should be fitted up for the supply of medicine to the sick paupers of all the parishes within a reasonable distance, at their joint expense, unless a more convenient arrangement for this purpose can be effected; whilst the medical officers should be paid only for the duties which they perform—viz., for attendance, with a graduated charge for journeys, according to the distance and the number of patients.”

“Your Committee have reason to believe that the places containing a duly qualified resident practitioner are comparatively few, where some opportunity might not also be afforded for providing the drugs from a distinct source. Where, however, this is not the case, the practitioner might be paid separately for the medicines at the druggist’s price.”

“By the adoption of such a principle, all the ordinary temptations to neglect the poor would be very much guarded against; and the medical officer, without pain to his best feelings, without compromise to his professional respectability, and without direct expense, would be enabled to attend the poor, and to indulge those benevolent impulses which find their highest gratification in removing or alleviating human suffering.”

“Your Committee are of opinion that the whole of the arrangements for pauper medical relief should be under the control of competent authorities, chosen from the medical profession, and fully qualified for so important an office by a practical acquaintance with every variety of medico-parochial duty.”

“Your Committee would also point out the great advantages which would accrue to medical statistics, and to the science of medicine in general, from a compilation and annual publication of the official returns of parochial surgeons.”

It was decided by the meeting to publish the report of the Poor-law Committee in the *Transactions*, and also to print it separately for circulation. It was also resolved

“That a petition from the members of the Association, and others assembled at the anniversary meeting, stating the evils arising out of the administration of the Poor-law Amendment Act, as regards medical relief, and praying for redress, be immediately presented to both Houses of Parliament; that to the Lords by Lord Melbourne, and that to the Commons by Lord John Russell.”

The petition stated that “a remuneration calculated to ensure proper attendance; a mode of appointment not derogatory to the profession; regulations for the prompt supply of medical relief to the destitute sick; and a general supervision of the medical department of the Poor-law administration by competent persons—were essential to the interests and welfare of all parties concerned.”

It was also resolved to forward a copy of the petition to the College of Physicians, the College of Surgeons, and the Society of Apothecaries, and to ask for their cooperation.

Subsequently to the meeting, the Committee sent a printed appendix to the report to every member of the Council; and afterwards, published the entire report and appendix for sale. On the suggestion of the Committee, the Council also addressed a circular letter to every town in the Kingdom, recommending persons to be sent to Parliament praying for an alteration in the system of parochial medical relief. As a result, numerous petitions were presented. The first presented at Manchester became the Council report for the following year, an authority on the subject of the medical relief of the poor.

A Committee was also appointed "to investigate and report on the various modes of extending medical relief to the sick poor, not dependent on parochial aid. The Committee consisted of the following members, with power to add to their number: Dr. John Forbes (Chichester); Dr. Walker (Huddersfield); Dr. J. Conolly (Warwick); Dr. Barlow (Bath); Mr. H. L. Smith (Southam); Mr. H. W. Rumsey (Chesham); and Mr. Nankivell (Coventry). A series of questions as to hospital relief, sick clubs, etc., was subsequently drawn up and circulated by the Committee.

SIXTH YEAR: 1837-38.

The fifth anniversary meeting of the Association was held at the Literary and Philosophical Institution, Cheltenham, on July 19th and 20th, 1837, under the presidency of Dr. Henry C. Boisragon.* The number of members had increased from 600 to 940.

An address expressive of dutiful homage and allegiance to Her Majesty Queen Victoria, who had in the previous month proceeded to the throne, was unanimously adopted, and was ordered to be presented to Her Majesty by a deputation consisting of Dr. Boisragon (President); Sir A. Cooper, Bart.; Dr. Kidd (Vice-President); Dr. James Clark; Dr. Hastings (Secretary); Dr. Barlow and Dr. John Conolly, the mover and seconder of the address.

The Retrospective Address was delivered by Dr. J. Lomax Bardsley of Manchester.

The Council reported the satisfactory arrangements which had been made with the Eastern Medical Association; and submitted to the general meeting a series of regulations for the general construction of Branches, which were approved. They provided that the General Council should provide suitable instructions for the guidance of those desirous of instituting Branches; that the initiatory proceedings and the by-laws should be submitted to the Council for approval; that all members appointed to offices by the District Branches should be forthwith enrolled as members of the General Council; and that the expenses of the Branches might be defrayed from the general fund, provided they did not exceed one-seventh of the guinea—power being reserved to the General Council to raise the allowance to one-fourth of the guinea in exceptional cases.

The Committee of the Benevolent Society reported that they had been enabled to bring the fund into operation, and to afford relief in two cases of distress. They urged the importance of supporting the fund; and suggested that a large number of contributions of as small a sum as five shillings would at once give the Society a considerable income. They suggested, also, that the smaller subscriptions might be collected with the subscriptions to the Association. The report was ordered to be adopted and printed; and the following resolutions were passed.

"That the Association do take this opportunity of expressing their thankfulness that the Benevolent Fund has been rendered useful to some of their suffering brethren; and that the suggestions contained in the report for increasing and collecting the contributions be earnestly recommended to the consideration of every member of the Association. That the central and other Committees, appointed for carrying on the business of the Benevolent Fund, be requested to continue their services. That the rules and regulations of the Benevolent Fund be printed with the account of the *Transactions* of this meeting."

A letter was read from Dr. Thackeray of Chester, offering £50 as a prize for the best essay on a medical subject to be fixed on at the meeting at Cheltenham. A Committee, consisting of Dr. Barlow, Mr. Crosse, Dr. John Conolly, Dr. Lyon, Mr. Helling, Mr. Soden, and Dr. Forbes, was appointed to select a subject, and report the next day. They, however, obtained an extension of the time to two months.

A series of questions having been issued by the Council respecting the spread of the late epidemic of influenza, a committee, consisting of Dr. Malden, Dr. Feild, Dr. Streeten, and Mr. W. Addison, was appointed to draw up a report on the replies. The report, which bears the names of Dr. Streeten and Mr. Addison, was published in the sixth volume of the *Transactions* of the Association.

* In the volume of the *Transactions* which contains the report of this meeting, appears a notice of an interesting discussion which took place in the Council respecting the place of meeting. After stating that Bath had been selected as the place of meeting in 1838, the report says:

"A good deal of incidental conversation took place relative to a plan, which is much favoured by several influential members of the body, of holding the Septennial Anniversary, in July 1839, in the metropolis. It was remarked that the members are desirous, in every way, of suppressing all invidious feelings between themselves and their brethren in the metropolis; and it was considered that, by holding a meeting in London, and thus coming into immediate communication with each other, the best possible understanding might exist. Besides, as several metropolitans of distinction were members of the Provincial Association, there was, on that ground, a strong inducement to meet in London. Of course, no arrangement could be made on this subject, which remains for future discussion."

With reference to matters affecting the Public Health, the following resolutions were adopted by the meeting.

"That it appears desirable to this meeting that the members of the Association, in their several localities, should urge upon the members of the Legislature the importance of an enlightened consideration of the questions touching the public health, pending in Parliament."

"That this meeting suggests to the members generally the propriety of lending their aid to carry into effect the Act which has recently passed the Legislature, to procure an improved registration of births, deaths, and fatal diseases."

"That, as the Association feels persuaded that an extensive series of observations, made in the various sanitary institutions of the kingdom, would contribute essentially to the progress of medical science, a Committee be appointed to draw up tabular forms for statistical records of disease."

A Committee, which may be considered as the first Medical Reform Committee of the Association, was appointed at the meeting in Cheltenham, by the following resolution:

"That, at the present juncture, in which it is probable that important changes may take place, it is highly expedient to watch over the interests of the profession at large; and that a Committee be appointed, consisting of the following members, with power to add to their number, whose duty it shall be to suggest to the Council, from time to time, such measures as may appear to them necessary to meet circumstances as they arise: Dr. Barlow, Mr. Crosse, Dr. Rumsey, Mr. Soden, Dr. Streeten, Mr. H. W. Rumsey, Dr. Forbes, Mr. Jordan, Mr. W. Addison, Mr. Ceely, and Mr. Souby."

The Poor-law Committee presented a second report, containing a series of recommendations for legislative enactment, and recommending "that personal and written communications be made by members of the Association, in every locality, to their respective representatives in Parliament; also that petitions be presented immediately on the opening of Parliament, praying for a special, full, and impartial inquiry into the subject of medical relief for the poor, and for the production of official returns of all medical contracts made under the new law, of the number of practitioners appointed to the sick poor compared with those under the former system, of the extent of districts entrusted to medical officers, of the amount of their salaries, the number of patients attended, and visits performed by each medical officer; lastly, that a plan for an amended system be prepared and placed in the hands of some influential members of the Legislature, who might be disposed and able to undertake the management of the question in both Houses of Parliament." In accordance with the recommendation of the Committee, the meeting adopted a petition, deprecating the present system of Poor-law medical relief, and praying for a special inquiry. A vote of thanks was given to the Poor-law Committee, especially to Mr. Rumsey, for their important and valuable services.

SEVENTH YEAR: 1838-39.

The sixth anniversary meeting was held at the Bath Literary Institution, on July 18th and 19th, 1838, under the presidency of Dr. Edward Barlow, Senior Physician to the Bath United Hospital. The number of members had risen to 1,080.

The Retrospective Address was read by Dr. Jonas Malden of Worcester. Dr. J. Aitken of Poole read a paper on the Use of Fucus Esculentus or Tangle in Cases of Stricture of the Rectum and Urethra.

An application was received from the Southern Branch, asking for a larger allowance towards defraying local expenses than the three shillings voted by the Association. It was decided that the meeting was obliged with regret to refuse the request of the Southern Branch; but that a larger allowance for expenses than that settled by the Association at Cheltenham could not, with prudence or propriety, be conceded to the Branches.

Since the last meeting, two Branches had been formed: the Newton (now the Lancashire and Cheshire) Branch, and the Shropshire and North Wales Branch.

The Council reported that they had publicly announced that a Thackeray prize of £50 would be awarded to the author of the best essay "On the sources of the common continued fevers of Great Britain and Ireland, and the uncertainty of the circumstances which favour the diffusion of these diseases, and also those circumstances which may have a tendency to render them communicable from one person to another." The President, Vice-Presidents, Dr. Forbes, and Dr. Conolly, were appointed a committee to adjudicate the prize.

The Council also reported that, in compliance with the prayer of the petition sent by the Association to Parliament in the previous year, a Select Committee of Inquiry into Poor-law Medical Relief had been appointed by the House of Commons. The Council had appointed "the indefatigable Mr. Farr" as a delegate to urge their opinions on

"That the thanks of the meeting be given to the members forming the Vaccination Section, for the trouble they had taken in arranging the numerous answers to the queries sent out, and for their very able report, and that the same be printed and its recommendations adopted."

A carefully prepared petition on the subject of vaccination was laid before the meeting and agreed to. It asked that the practice of small-pox inoculation by ignorant and illiterate persons should be suppressed, and that it should only be permitted to persons duly qualified to practice medicine or surgery; and that provision should be made for the vaccination of the poor, by "appointing regularly educated vaccinators, with suitable salaries, in districts sufficiently numerous to embrace the whole of the poor population of the country, who shall offer gratuitous vaccination at stated periods to all within their bounds, keeping accurate registers of their proceedings, and communicating regularly with the National Vaccine Establishment."

NINTH YEAR: 1840-41.

The eighth anniversary meeting was held at the Audit House, Southampton, on July 22nd and 23rd, 1840, under the presidency of Dr. George Stead, Senior Physician to the South Hants Infirmary.

The number of members in the Association was stated in the report of Council to be 1,020.

Immediately after the delivery of the President's address, the meeting unanimously adopted addresses to the Queen, Prince Albert, and the Duchess of Kent, congratulating them on the preservation of Her Majesty from the attempt recently made on her life by an insane individual.

The adjudication of the Thackeray prize of £50, offered two years previously, was made. Eight essays had been sent in; and were examined by Dr. John Forbes, Dr. Jeffreys (the ex-president), and Dr. John Conolly. The author of the successful essay was Dr. Davidson of Glasgow.

A Report on the Progress of Surgery during the past year was read by Mr. Dodd of Chichester; and Dr. Scott of Liverpool read a Retrospective Address in Medicine. Several papers were read, by Dr. Arnold of Jamaica, Mr. Costello, Dr. Oke, Mr. Bottomley, Dr. Aitkin, Dr. Streeten, Mr. Fuge, and other members.

Dr. Hastings read to the meeting a letter which had been sent by Sergeant Talfourd to Mr. H. W. Rumsey, of Gloucester, with reference to the additions which it would be desirable to make in any Bill which might be introduced for amending the laws for the relief of the poor. The clauses proposed by Sergeant Talfourd contained the following provisions: 1. A Medical Commissioner to be appointed in addition to the three Poor-law Commissioners; 2. The Medical Commissioner to settle the extent and boundaries of medical districts throughout England and Wales within three years, and to submit a scheme to be laid before Parliament; 3. The Medical Commissioner and the Poor-law Commissioners to make orders and prescribe limits to the remuneration of medical officers, with power to suspend or vary such orders; 4. Every medical officer to make an annual district report, and transmit the same to the Medical Commissioner, the Medical Commissioner to make a general current report, to be annexed to the report of the Poor-law Commissioners and laid before Parliament; 5. Guardians to determine the amount of remuneration to be received by medical officers, subject to the order of the Commissioners, but not to advertise for or seek to obtain tenders; 6. Medical officers to have both medical and surgical qualifications, and not to be eligible before having been three years in practice; 7. The expense of medical relief to be a parochial charge. The following resolutions were unanimously passed.

"That the report of the Poor Law Committee be adopted and printed; that the thanks of this meeting be given to them for the zeal and energy manifested by them on this subject; and that they be reappointed, to watch the still further proceedings of Parliament, and that the Council be requested from time to time to take such measures as may appear to them to be necessary to meet the circumstances as they arise; that the Association entirely approves of the clauses which Mr. Sergeant Talfourd proposes to bring forward in the House of Commons when the Bill for the amendment of the Poor Law is under discussion, and recommends the members generally to endeavour at the proper season to support the learned Sergeant in his laudable exertions, by petition or otherwise."

"That the thanks of the Association be given to Mr. Sergeant Talfourd for his zealous and unwearied endeavours to amend the present system of parochial relief, and especially for having, at much pains, prepared the foregoing clauses, to propose for the adoption of the House of Commons."

The Vaccination section were thanked for their services, and were reappointed. A resolution was adopted, on the proposal of Mr. Dodd and Dr. Forbes, calling the attention of the public, and particularly

the Committee of Superintendence of schools for the education of the poor, to the benefit of vaccination, and to the fact that its neglect was almost entirely composed of the lower classes; and suggesting that a certificate of vaccination, signed, after examination, by a medical man, should be required from every candidate for admission to a public charitable school, whether for infants, children, or adults.

The Committee appointed to watch over the interest of the profession presented a report, advocating especially uniformity of qualification, and as a subsequent object, the amalgamation of the medical profession. The report was adopted; the committee was thanked and reappointed, and it was resolved:

"That the Central Council be empowered to act on behalf and in the name of the Association until the next annual meeting, in presenting petitions to Parliament or in such other procedures as circumstances may render necessary."

It was also agreed, on the proposal of Dr. George Webster, seconded by Dr. Barlow,

"That it is highly important that further steps should now be taken to obtain medical reform on the principles of an uniform test of qualifications, and a representative system of government."

A second report was presented by the Committee on empiricism. It referred to the evils resulting from empirical practices, and from the sale of patent medicines; some of which could only be remedied by well directed penal restraints, while the removal of others must principally depend on the establishment of a more uniform standard of education, and in the cultivation of a higher tone of morality among the members of the medical profession.

"This last most desirable result your Committee believe the Provincial and other Associations well calculated to promote. They must tend insensibly to form a standard of conduct and feeling to which the majority will by inclination happily conform; the few, from motives of self-interest and necessity. Strict moral integrity will be regarded as more and more essential to membership, and all conduct of individuals adverse to the collective interests of the body to which they belong should be visited with public reprobation and expulsion from our ranks. If, after all our precautions, black sheep will intrude into the fold, let it at least be seen that, when discovered, they are not regarded or treated as lawful members of the flock. Your Committee would also suggest the propriety of appropriating a part of the funds of the Association in obtaining trustworthy analyses of many of the more popular and injurious quack medicines. Mystery is the great secret of empirical success; and familiarity with the composition of a nostrum would go far in the public mind to divest it of its imaginary virtues. Small tracts might be circulated for this purpose, and the aid of other societies obtained, as well as of some portions of the press, for their still more extensive and rapid diffusion. They would also urge upon the members of the Association individually the importance of exerting their moral and medical influence by means of lectures, publications, and private intercourse, in their respective localities; and by calm statements of the *truth*, and a stern refusal to connive at quackery themselves, or to sanction it in others, they could not fail to enlist on their side the thinking portion of the community, and through their means gradually influence the mass."

Dr. Cowan, who presented the report, said that, as evidence of the benefit produced by the agitation on the subject, the Liverpool Apothecaries' Company, in which many of the shareholders were medical men, had within the last year discontinued the sale of patent medicines. A druggist in Cheltenham had also given up their sale, having become convinced of its impropriety. The report was adopted, and the Committee were requested to continue their services.

The Committee of the Medical Benevolent Fund presented a report, in which regret was expressed at the imperfect support which it received. The subscriptions for the year had not been sufficient to meet the calls on the fund.

TENTH YEAR: 1841-42.

The ninth annual meeting was held at the Museum, York, on August 4th and 5th, 1841, under the presidency of Dr. Goldie, Physician to the Dispensary.

The number of members in the Association was reported to be 1,250.

An Address in Medicine was read by Dr. Streeten of Worcester, and papers were read by Dr. Fisher, Dr. Black, Mr. Newnham, and other members. Among the communications was one from Mr. Ceely, containing further observations on *Variorum Vaccinæ*, illustrated by coloured drawings.

The meeting was attended by deputations from the following bodies: The British Medical Association, represented by Dr. G. Webster, Dr. Marshall Hall, and Mr. Bottomley; the North of

England Association, by Dr. Brown of Sunderland; and the Irish Association, by Dr. Maunsell and Professor Williams.

The Council reported that, on the occasion of the birth of the Princess Royal, they had presented congratulatory addresses to the Queen, H.R.H. Prince Albert, and H.R.H. the Duchess of Kent.

In the Report of Council, allusion was made, in the paragraph relating to the *Transactions*, to the means taken for the establishment of a weekly journal.

The Committee on Medical Reform presented a report, embodying a memorial to the Home Secretary in favour of the question of Medical Reform being taken in hand by the Government. After discussion, it was resolved:

"That the report of the Reform Committee be received; that the thanks of the meeting be given to them for the able manner in which they have watched over the interests of the profession; and that the Committee be reappointed."

A very elaborate report was presented by the Poor-law Committee, containing a careful criticism on the Report of the Parliamentary Committee. It was resolved:

"That the Report of the Poor-law Committee be received and printed, and that the thanks of the meeting be given to the Committee for the zeal and energy manifested by them on this subject; and that they be reappointed, to watch the further proceedings of Parliament, and to suggest to the Council from time to time such measures as may appear to them necessary to meet circumstances as they arise."

The Benevolent Fund Committee reported that they had been unable to afford any relief during the year, it having been decided that a debt of £60 18s. 7d. due to the Donation Fund should first be paid off, and that the sum of £100 should be in the hands of the Treasurer for the purpose of affording relief to distressed members.

The section on Medical Topography reported that printed circulars had been issued to the members of the Association, embracing several topics of inquiry, and particularly having reference to the comparative prevalence and mortality of Consumption. Several of the circulars had been filled up and returned, in some cases accompanied with valuable remarks. "But the principal object," the report stated, "for which these queries were made has been realised by the very important annual reports from the Registrar-General's office, and by the still more valuable (in a medical point of view) appendices affixed to them, containing the results of the labour and talent of Mr. Farr. To this gentleman, the thanks of the Association are due for the care and ability he has shown in the arrangement and calculation of the various difficult and complex tables, and for the labour he has devoted to the subject of medical statistics generally."

A report was presented from the Committee on Empiricism, in which they commented on some of the most frequently urged objections against legislative restrictions on quackery; and recommended, as means for its suppression, the abolition of the sanction of stamps and patents; the limitation of the practice of medicine to legally qualified persons; and the prohibition of the advertisement of nostrums unless their value and safety be previously ascertained by competent authority. They also recommended that all institutions for the cure or relief of diseases should be declared illegal, unless conducted or inspected by legally qualified medical men. The report was received, and the Committee were thanked and reappointed.

It was resolved unanimously:

"That, the attention of this Association having been called to the present state of the law as it affects female criminals under sentence of death, it desires to record its strong feeling of repugnance to a statute which permits the woman who has quickened to plead pregnancy in bar of execution, while the same individual, though equally the mother of a living child, but not having quickened, must suffer the extreme penalty of the law; thus making a distinction where there is no difference, and fatally, though ignorantly, sacrificing an innocent life with that of the guilty parent. And, though not prepared on the present occasion to take any decided steps, it fully recognises its obligation to adopt, at some future time, such measures as will, it trusts, lead to the abrogation of a law partial and cruel in its effect, inconsistent with the progress of knowledge and civilisation, and consequently revolting to the feelings and conscience of humanity."

A motion was proposed to incorporate the pathology of cancer, consisting of the following gentlemen, with power to add to their number: Dr. Fisher (London); Mr. A. T. S. Dodd (Oxford); Mr. D. Nott (Manchester); Mr. Drewry Otley (Exeter); and Mr. Henry Jackson (London).

ELEVENTH YEAR: 1881-82.

The tenth annual meeting was held at the Adelphi, London, on August 2nd and 3rd, 1881. Mr. J. H. James, Surgeon to the Devon and Exeter Hospital, being President.

The number of members was reported to be 1350.

A Retrospective Address in Medicine was read by Dr. J. Black of Manchester. An Address in Surgery was to have been delivered by Mr. Sands Cox of Birmingham, but he was prevented, by being detained as a witness in a case of infanticide. Papers were read by Mr. W. Collins, Dr. Wallis, Mr. W. Addison (on the corpuscles of the blood and the formation of tubercle), Dr. W. Budd (on symmetrical lesions), and several other members.

A letter from Dr. Branson of Cambridge was read, in which the formation of a publishing society was suggested for the consideration of the members. It was resolved "That the meeting offer their thanks to Dr. Branson for his suggestions relative to a medical publishing society, and the members would be happy to find that such a society could be supported by the profession."

The Medical Reform Committee presented a report of the proceedings of the past year.

The thanks of the general meeting were given to the Poor-law Committee, for the zeal and energy manifested by them on the subject of Poor-law medical relief. In February 1843, the Central Council and the Branches memorialised the Secretary of State on the remaining defects in the administration of medical relief, referring, *inter alia*, to the absence of specific directions for the regulation and increase of medical salaries, the inefficiency of the new regulations respecting the extent of medical districts, the continuance of the system of contracts for the services of medical practitioners (in regard to vaccination), and the proposed establishment of medical clubs in unions.

The Committee of the Benevolent Fund—of which Dr. Baron was president and Dr. William Conolly secretary and treasurer—presented a report, in which they expressed regret at the inadequate support which the fund had received, and appealed for increased aid. They noticed with satisfaction, that the regulations for the management of the Fund had been adopted almost *verbatim* by the Medical Benevolent Fund Society of Ireland, an institution lately formed, and which appeared to be taken up with great spirit and energy by the members of the profession in the sister country. It was resolved:

"That the report of the Benevolent Committee be received and adopted, and that the thanks of this meeting be given to them for the exertions they have made to increase the funds of this important Branch of the Association."

A special vote of thanks was given to Drs. Hennis Green and Streeten, for the liberal arrangements made by them for the weekly supply of the *Provincial Medical and Surgical Journal* to members of the Association.

TWELFTH YEAR: 1843-44.

The eleventh anniversary meeting was held on August 2nd and 3rd, 1843, in the hall of the Philosophical and Literary Society at Leeds, under the presidency of Mr. William Hey, surgeon to the General Infirmary, and lecturer on surgery in the School of Medicine. Before the expiration of his year of office, this excellent member of a family celebrated in the annals of surgery died.

The number of members was 1,628, including honorary and corresponding members.

Retrospective Addresses were read, in Medicine by Dr. Shapter, and in Surgery by Mr. William Hey, junior. Papers were read by Mr. T. P. Teale, Mr. Nunneley, Mr. J. H. James, Mr. Estlin, Mr. Newham, and Mr. W. Addison; and Mr. Sibson exhibited and explained his contrivance for making mechanical diagrams of the positions of the organs of the chest and abdomen in health and disease.

Dr. Hastings and Mr. Sheppard retired from the office of Secretary. It was decided to appoint a permanent President of Council, who would also act as Treasurer; and Dr. Hastings was elected by acclamation to the joint office. Dr. R. L. N. Streeten was appointed Secretary, with a salary of £100 *per annum*.

The Report of Council contained an account of the proceedings which had taken place during the past year with reference to medical reform.

The Committee of the Benevolent Fund presented a report to the annual meeting, in which they announced with satisfaction that, after having been enabled, from want of sufficient support, to suspend their operations for more than two years, they had been enabled since the last meeting to give relief to twenty cases of distress; the sum of £247 being thus expended. The report was received and adopted, and the thanks of the meeting were given to the Committee for the exertions they had made to increase the funds.

A vote of thanks was given at the meeting to Dr. Green and Dr. Streeten for the liberal arrangements made by them for the supply of the *Provincial Medical Journal* to the members of the Association.

THIRTEENTH YEAR: 1844-45.

The twelfth anniversary meeting was held at the County Hall, Northampton, on August 7th and 8th, 1844, under the presidency of Dr. Archibald Robertson, F.R.S., Physician to the General Infirmary.

The Council reported that 219 members had joined the Association during the year, and that the total number of members was 1,784.

A Retrospective Address on Anatomy and Physiology was delivered by Dr. William Budd, of Bristol; and a retrospective Address in Medicine by Dr. C. Cowan, of Reading. Papers were read by Mr. Newnham of Farnham, Dr. Faircloth, Mr. E. Daniell, and other members.

The following motion, with reference to the late President, was proposed by Dr. Favell of Sheffield, seconded by Mr. J. S. Soden of Bath, and carried unanimously.

"That this meeting is deeply sensible of the loss which the Association has sustained, since the last anniversary, in the decease of the President, Mr. Hey; and that they are desirous of recording, on this occasion, their feelings of esteem and veneration with which his memory must ever be regarded, and of offering to his family the sincere expression of their condolence and sympathy."

A deputation from the Taunton and West Somerset Medical Association attended the meeting, offering to join [the Provincial Association. On the proposal of Dr. Hastings, it was resolved that the members of the Taunton Association be admitted and enrolled members of the Provincial Medical and Surgical Association, and constituted a Branch under the ordinary rules.

The report of the Council contained an account of the proceedings which had ended in a change of the management of the JOURNAL. In the course of the meeting, a proposal was made to raise the annual subscription to one guinea and a half. This met with no support; and a Committee was appointed "to take into consideration whether it be expedient for the Association to continue the publication of a weekly medical periodical".*

The subject of the establishment of schools of preliminary education of sons of medical men, on the principle of co-operation, was brought before the meeting by Mr. Thomas Martin of Reigate. He proposed the following motion, which was seconded by Dr. Forbes, and carried:

"That the following gentlemen do form a committee, with power to add to their number: Mr. Martin (Reigate), Dr. Hardwicke (Kensington), Mr. Nunneley (Leeds), Dr. Edwards (Chester), Dr. Heygate (Derby), Dr. W. Budd (Bristol), Dr. Hodgkin (London), Mr. Hodgson (Birmingham), Dr. Forbes (London), Mr. Daniell (Newport Pagnell), to consider the best means of establishing a school for the comprehensive and liberal education of the sons of medical men, and to report on the same either to the Council of the Association, or at the next anniversary."

With regard to Poor-law Medical Relief, the Council reported that, since the last anniversary, the whole subject had undergone an investigation before a Committee of the House of Commons, presided over by Lord Ashley. Much of the information afforded to the Committee was derived from the valuable reports published by the Association; and additional facts had been supplied by gentlemen who forwarded replies to a series of questions circulated by the Council. On the appointment of Lord Ashley's Committee, the Council, at the instance of the eminent surgeon Mr. Guthrie, who had taken much interest in the matter, nominated Mr. Robert Ceely of Aylesbury and Mr. H. W. Rumsey of Gloucester to represent the Association before the Committee. These gentlemen submitted a plan of which the following were the heads.

1. That the provision of medical aid for the poor be separated from the administration of the Poor-laws, with the reservation of certain powers to the Poor-law Commissioners and the Boards of Guardians.
2. That the administration of medical relief be combined with the regulation of the sanitary condition of the labouring population, and be committed to authorities, central and local, to be constituted expressly for the management of that department.
3. That the expenses of this public provision of medical and sanitary care be defrayed out of funds, distinct from the poor-rates, and to be raised for the purpose in every locality.
4. That an adequate remuneration, equitably adjusted, be paid to a sufficient number of medical officers, appointed to take care of the poor, in conveniently arranged districts.
5. That medicines be supplied to the sick poor by the proposed authorities, the cost thereof being defrayed out of the funds before mentioned; and that, in places where the separate provision of medicine may be impracticable, the

medical officers be paid at a fixed rate for the supply of the same. 6. That the poor, when sick or hurt, be provided freely and promptly with aid, no official check being interposed between them and the relief they need; and that the receipt of medical relief shall not constitute them paupers.

The Committee of the Benevolent Fund reported that there had been a very satisfactory increase in the amount both of subscriptions and of donations; and that thirteen cases had been relieved at a cost of £105.

Beyond a statement of the events of the past year, scarcely any allusion was made to Medical Reform at the annual meeting. The subsequent proceedings of the Association with reference to this matter will be found in a future page.

FOURTEENTH YEAR: 1845-46.

The thirteenth anniversary meeting was held at the Cutlers' Hall, Sheffield, on July 30th and 31st, 1845, under the presidency of Dr. Charles F. Favell, Physician to the Infirmary. Dr. Corden Thompson had been nominated at the previous annual meeting as president-elect, but declined to accept office, on the ground that he differed from some members of the Association on the subject of medical protection. Dr. Favell was, therefore, elected president at the meeting.

The number of members of the Association was stated to be 1,927.

A Retrospective Address in Medicine was delivered by Dr. Edward Charlton, of Newcastle-on-Tyne; and a Retrospective Address on Surgery by Mr. T. Pridgin Teale, of Leeds. A resolution was passed, that fifty copies of the Retrospective Addresses should in future be presented to their authors, at the expense of the Association.

A motion was proposed, that the sum of £100 should be paid from the funds of the Association to the Medical Benevolent Fund. After discussion, however, it was withdrawn. The Report of the Benevolent Fund showed that £220 had been distributed to twenty-four applicants. It was resolved:

"That a committee be appointed to consider the best means of improving the efficiency of the Benevolent Fund, and the various plans which had been prepared for that purpose, and to report on the same at the next anniversary meeting."

Mr. Daniell, of Newport Pagnell, brought forward a proposal for the establishment of an Annuity Fund for decayed members of the Association, and the widows and orphans of members. A committee was appointed to discuss and arrange the preliminary steps for its formation.*

A special report on a claim made by Dr. Hennis Green, for compensation for losses sustained in connection with the JOURNAL, was presented by the Council; and it was decided to raise the amount required (£516 11s. 4d.) by a voluntary subscription. It was also decided to reduce the size of the JOURNAL in order to lessen the expense.

The Committee appointed to consider the subject of establishing schools for the sons of medical men presented a report. Subscriptions to the amount of £1,610 only had been promised, and the Committee therefore requested a more efficient patronage of the plan, so that they might be enabled to invite a meeting of subscribers with a view to further proceedings.

A report was read from the Committee on Medical Reform, advocating uniformity of examination as essential. The report was adopted, and the Secretary was directed to send a copy at once to Sir James Graham, with reference to his Bill.

FIFTEENTH YEAR: 1846-47.

The fourteenth anniversary meeting of the Association was held at St. Andrew's Hall, Norwich, on August 19th and 20th, 1846, under the presidency of Mr. John Green Crosse, Senior Surgeon to the Norfolk and Norwich Hospital.

The number of members was stated in the report of Council to be 1,856.

A Retrospective Address in Medicine was read by Dr. W. Harcourt Ranking, of Bury St. Edmunds. Several papers were read, among which was one by Mr. Firth, referring to the presence of arsenic in the soil of various parts of the county of Norfolk, and the importance of this in medico-legal investigations. Mr. Avery, of the Charing Cross Hospital, showed instruments devised for examining the larynx, urethra, and other internal parts of the body. The President gave an account of some curious ancient documents relating to the practice of medicine and surgery in Norwich, which had been

* The following Committee was appointed: Dr. Budd (Bristol), Dr. Toogood (Bridgwater), Dr. Cowan (Reading), Mr. Soden (Bath), Mr. Estlin (Bristol), Mr. Smith (Southam), Dr. Black (Manchester), Mr. Wickham (Winchester), Mr. Newnham (Farnham), and Dr. Favell (Sheffield).

* The Committee consisted of Dr. Robertson, Mr. H. Terry, Mr. R. Faircloth, Dr. Kerr, Dr. Mackness, Mr. Ceely, Mr. H. W. Ramsey, Mr. Henry Jackson, Mr. J. P. Garlick, Mr. J. Haxworthy, Mr. B. Greenwood, Mr. Thomas Paget, Mr. J. G. Crosse, and Mr. J. G. Appleton.

discovered by Mr. Goddard in investigating, by order of the authorities, the records of the city.

The Council reported that the amount of the subscriptions hitherto received on account of the fund proposed to be raised for the payment of the award made by the arbitrators in the claim of Dr. Hennis Green had fallen short of what had been anticipated; and therefore a part of the general funds of the Association had been applied towards defraying the claim. The management of the publications of the Association was again considered; and a Committee on the subject was appointed.

At the meeting at Norwich, it was proposed to raise a fund among the members of the Council for the purpose of offering prizes, and in other ways promoting scientific investigations; and the appropriation of the sum collected was entrusted to a committee.

With regard to Medical Reform, regret was expressed in the Report of the Council that a Medical Reform Act had not been passed. The Council, however, expressed an opinion in favour of a Registration Bill; and a Committee was appointed to petition in favour of such a measure.

Reference was made in the Report of Council to the intention announced on the part of Her Majesty's Government, to take the payment of the salaries of the Poor-law medical officers partly into the hands of the Government. Attention was also directed to the cases of Mr. Cantrell of Wirksworth, who had complained, but without effect, of the insufficient salary paid for his work, and Mr. Martin of Evesham, who had been refused a fee for a surgical operation. A Committee was appointed to consider the conduct of the Poor-law authorities with reference to these cases, and to take such steps as they might deem necessary. The Committee consisted of Mr. Bree (Stowmarket); Mr. Daniell (Newport Pagnell); Mr. Rumsey (Gloucester); Mr. Ceely (Aylesbury); and Dr. Toogood (Torquay). It was also recommended in the resolutions that a memorial to the Home Secretary should be prepared and signed by the President on behalf of the meeting. There is, however, in the account of the meeting in the *Provincial Medical and Surgical Journal*, no record of this having been done, or of any report having been made by the Committee.

A paragraph in the Report of Council called attention to the subject of the public health. It was remarked that, in the extensive measures contemplated for the improvement of the health of towns, there were many proposed provisions which could neither be properly estimated nor effectively carried out without the co-operation of medical practitioners; and therefore that the Association should have its attention directed to the subject.

The Committee appointed to consider the proposal for the establishment and organisation of a school for the sons of medical men reported that, notwithstanding the general assent with which the proposition was at first met, it had been received with such general indifference, and the amount of contributions was so inadequate, that they thought the scheme must be abandoned. At the same time, they hoped that the project might be revived at some future day under happier auspices and with a better result. The total amount promised had amounted to only £1,625; whereas it had been estimated that at least £10,000 would be required. The report was adopted; and Mr. Martin was thanked for his able advocacy of the matter.

The report of the Benevolent Fund showed that £155 had been distributed among seventeen claimants.

A report of the Committee appointed at the last meeting to carry out the project of establishing a General Medical Annuity Fund was presented by Mr. Daniell, who moved that the report of the Committee should be approved, and that the Fund should be considered an integral part of the Association. After some discussion, however, an amendment was carried: "That the Annuity Fund be not considered an object of the Association." A vote of thanks was unanimously given to Mr. Daniell, whom all acknowledged to have been stimulated in his exertions by the purest benevolence and kindness.

SEVENTEENTH YEAR: 1847-48.

The fifteenth anniversary meeting was held in the Town Hall, Derby, on August 4th and 5th, 1847; the President being Dr. James Hayslett, Physician to the Derbyshire General Infirmary.

The number of members was reported to be 1838.

An Address in Surgery was delivered by Mr. J. H. Walsh, Worcester, the subject being "the Inhalation of Sulphurous Ether." Dr. Stewart of Edinburgh delivered the Address in Medicine; it was "A Retrospective Sketch of the Advances made in the Detection and Treatment of some of the Principal Diseases of the Chest, with a glance at the progress made in the Surgery of these diseases." Mr. Stewart stated his new instrument for ascertaining the comparative movements of the chest in respiration; and several papers were read by members.

A motion was carried, on the proposal of Mr. Soden, seconded by Dr. Hastings, for the appointment of a Committee "to consider the expediency of making some alterations in the laws of the Association; especially with regard to the admission of members, the manner of dealing with those who offended against ethical laws, and the subject of arrears." The Committee consisted of Dr. John Conolly (Hanwell); Mr. Soden (Sunbury); Mr. T. Paget (Leicester); Mr. Nunneley (Leeds); and Mr. Martin (Reigate). On the following day, the Committee recommended that notice of alterations in the laws should be given for the next annual meeting.

Reports were presented from the Committee on the publications of the Association, stating their opinion as to the best means of giving them the highest possible character. The reports were unanimously approved. In accordance with the recommendation of the Committee, Dr. W. H. Ranking, Editor of the *Half-Yearly Abstract of the Medical Sciences*, was appointed foreign editor. A series of questions on the medicinal action of Arsenic was issued, of which Mr. Hunt was appointed to receive the answers; and Mr. D. W. Crompton of Manchester was appointed to draw up a report on Burns and Scalds, embodying, as far as possible, the experience and opinions of the profession.

The report of a meeting of Poor-law medical officers and other medical men, held at Matlock Bath on July 28th, 1847, to consider the question of remuneration and other matters, was read to the meeting by Mr. Cantrell of Wirksworth, who had acted as chairman. The resolutions adopted at the meeting were to the effect that the remuneration of Poor-law medical officers was unequal, and in most cases inadequate; and that the treatment which they received from Boards of Guardians and Poor-law Commissioners tended to lower the status of the profession; that the medical department of the Poor-law could only be carried out satisfactorily by medical men practically acquainted with the sanitary condition of the poor and the duties required of the medical officers; and that illegal practice had increased to so serious an extent as to demand abolition. After a long discussion, the following members were appointed a committee to consider the subject: Dr. Hodgkin, Dr. Hutchinson, Mr. Eddison, Mr. Sibson, Mr. Borough, Mr. Martin, Mr. Tasker, and Mr. Price. This committee drew up a remonstrance, addressed to Sir George Grey, the Home Secretary; and it was decided that the President of the Association, with the members of the committee, should form a deputation for the purpose of presenting it.

In October, the members of this committee, in conjunction with other medical men, summoned a meeting of Poor-law medical officers, which was held at the Hanover Square Rooms, and at which a committee was appointed (including the President of the Association, Dr. Hodgkin, and others), to promote reform in the administration of Poor-law medical relief. In November, the committee, of which Dr. Thomas Hodgkin was appointed chairman, sent a circular letter to the medical officers of unions, requesting answers to a series of questions on population, acreage, number of sick, salary, extras, etc.; and asking opinions as to (a) payment per case; (b) a fixed salary based on the number of cases attended and the mileage; (c) payment for extra cases exclusive of midwifery; (d) fixed payment founded on the number of population and area. In April 1848, a deputation from the general committee of Poor-law medical officers had an interview with Mr. Buller, the President of the Poor-law Commission, and presented a series of resolutions in favour of fixed salary, extra payment for midwifery and important surgical cases, payment of the whole medical attendance of the poor from the consolidated fund, the appointment by Government of a director-general and inspectors-general of Poor-law medical practice, permanence of appointment of medical officers, and the granting of medical relief as a loan in cases of temporary destitution. On May 30th, a deputation of Poor-law medical officers, with representatives of the Provincial Medical and Surgical Association, and also the President and other members of the Royal College of Surgeons of England and the Master and Wardens of the Society of Apothecaries, had an interview with Sir George Grey, and urged on his consideration the claims of the medical officers.

The proceedings of the past year with respect to Medical Reform were summarised in the Report of the Committee; and, at the annual meeting, it was resolved "That the Committee be empowered to take such proceedings to advance the progress of Medical Reform as to them may seem necessary; and, that in any case of difficulty which may arise they be requested to consult the following gentlemen: Dr. Lyon (Manchester), Mr. Soden (Sunbury), Mr. Martin (Reigate), Dr. Chambers (Cardiff), Mr. Bree (Stowmarket), Dr. Radford (Manchester), and Mr. Norton (Bath)."

In 1848, on the promulgation of a proposed Charter of the Royal College of Physicians, the Council called the attention of the Physicians in England residing in the provinces to the bearing of the charter on

their rights and privileges; and, in April, in a memorial addressed to the College, they pressed on that body the alterations which had been suggested. With one exception (*viz.*, a proposal that Doctors of Medicine of British Universities, whose degrees dated from 1848, and were in general practice might at any time hereafter be admitted to the College on retiring from such practice, without examination, and on payment of a fee), the recommendations of the Council were adopted by the College, and embodied in the draft of the new Charter. Early in the year, a conference was held between the Medical Corporate bodies and a local society of general Practitioners called the National Institute of Medicine, Surgery, and Midwifery; and the heads of a measure of medical legislation were agreed on, including the appointment of a General Council, registration of practitioners and of students, reciprocity of practice, etc. On the publication of this document, the Council appealed to the members of the College of Surgeons in general practice, and residing in the provinces, for an expression of their opinion, but did not receive any communications which rendered it necessary to adopt measures on the subject.

The report of the Medical Benevolent Fund, presented at the annual meeting in Derby, showed that relief to the amount of £155 had been afforded in seventeen cases during the year. Dr. William Conolly resigned, on account of failing health, the joint office of secretary and treasurer, which he had held from the institution of the fund; and Mr. William Newnham of Farnham was appointed in his room.

The Council reported that the proposal made at the previous annual meeting to raise a prize fund had been so far successful, that they had been enabled to offer £50 as a prize for the best report on "The Cerebral Affections of Infancy."

In compliance with a recommendation in the report of Council, the following gentlemen were appointed, at the annual meeting, a Committee to watch the progress of any sanitary measures which might be brought forward in Parliament: Dr. J. Conolly (Hanwell); Dr. Soulby (Dover); Dr. Duncan (Liverpool); Dr. Hodgkin (London); Mr. Nunneley (Leeds); Mr. Soden (Sunbury).

SEVENTEENTH YEAR: 1848-49.

The sixteenth anniversary meeting was held at the Assembly Rooms, Bath, on August 16th and 17th, 1848, under the presidency of Mr. George Norman, Senior Surgeon to the Bath United Hospital. It had been decided in 1847 that the meeting should be held at Taunton; but the illness, and subsequent death, of the President-elect, Dr. Macmullen, led to a proposal that the meeting should not take place in that town, but at Bath. Accordingly, the Council of the Association availed themselves of the opportunity of summoning the Association to meet a second time in that city.

The number of members of the Association was reported to be 1,795.

Dr. William Davies of Bath delivered the Address in Medicine, the subject being "Maculated Fever". A biographical memoir of the late Dr. Holme of Manchester, a vice-president of the Association, written by Dr. Charles Henry, was read by Dr. Hastings. Mr. Spry of Truro communicated a case, in which he had produced local anaesthesia by chloroform, in the removal of a tumour from the foot; Dr. Hastings communicated a case of paralysis, following the continual use of arsenic in small doses; Dr. Barham of Truro read suggestions for an inquiry into the Medical Topography of England; and papers were also read by Dr. Tunstall of Bath, Mr. W. Jackson of Sheffield, Dr. Cowan of Reading, and other members.

For the Prize of £50, offered by the Council, for the best essay on the Cerebral Affections of Infancy, there were two competitors. The judges, Dr. Heygate of Derby and Dr. Robertson of Nottingham, reported that both essays were of a very high order of merit. The prize was awarded to Dr. Alexander Duke, of Great Brunswick Street, Dublin.

Dr. George B. Wood, Professor of Materia Medica in the University of Pennsylvania, was present at the meeting as a delegate from the American Medical Association. Dr. Wood was appointed a honorary corresponding member; and was requested to convey to the American Association the thanks of the Provincial Medical Association, with an expression of reciprocity of fraternal sentiments.

The Committee on the Amendment of the Laws brought up a report, recommending for adoption two new laws: one providing for the removal of members found to have been guilty of professional impropriety in their conduct, by the vote of the majority at a general meeting; and another providing for the payment of the subscription of one guinea in advance, and the withholding of the publications of the Society from members who had not paid at the end of the year. The suggestions of the Committee were approved, and the regulations proposed by them were ordered to be incorporated with the laws of the Association.

The report of the Medical Benevolent Fund stated that, though the number of cases relieved had been less than in the previous year, the amount of subscriptions had not been sufficient to enable the committee to afford adequate succour.

Dr. William Budd called attention to a recently passed by-law of the Royal College of Surgeons of England, and pointed out the injustice which it inflicted on the provincial schools. He moved the following resolution, which, after discussion, was carried with only one dissentient.

"Having observed that, according to one of the by-laws of the College of Surgeons, regulating the course of study required of those who desire to become candidates for the Fellowship, three years of that course must necessarily be passed in attendance on London schools or hospitals, the Association begs most earnestly to protest against such regulation, as introducing a principle hitherto unknown in the by-laws of the College. Up to this time, persons presenting themselves for examination to the College have not had any questions put to them, as to whether their educations were obtained in London or in the country; and the Association would beg respectfully to impress upon the Council of the College how desirable it is that the same spirit should continue to govern the regulations to be observed by all persons who present themselves for examination, whether for the Membership or Fellowship—the examination the candidate may be able successfully to undergo being, as heretofore, the test of qualification."

The Committee on Poor-law Medical Relief presented a report of the proceedings of the past year, and the following resolution was adopted on the proposal of Dr. Cowan (Reading), seconded by Dr. Wallis (Bristol):

"That this meeting, having fully considered the present false position of Poor-law medical officers, is of opinion that the interests of the profession, of the sick poor, and of the ratepayers will be essentially advanced by the plan of amended legislation, deduced from a return of facts and suggestions received from Poor-law medical officers throughout the country, and appended to the memorial recently presented to Sir George Grey by the Convention of Poor-law Medical Officers. It therefore pledges itself to use its continued influence in support of the plan, and to memorialise the Government, in order that it may be embraced in any new measures which may be enacted."

It was also agreed that a memorial in favour of the plan of the Convention should be forwarded to Mr. Charles Buller, the President of the Poor-law Board.

In commenting on the subject of Medical Reform, in their Report, the Council remarked that it was to be hoped that the information collected by the Committee of the House of Commons (appointed in accordance with the proposal of Mr. Wakley) would conduce to the introduction of a Bill into the House at an early period of the next session of Parliament, under such favourable auspices as would insure its passing into a law. No further steps appear to have been taken at the time by the Association; nor did anything of importance in relation to Medical Reform occur during the remainder of the year.

In May, 1869, Dr. Streeten, who had for several years filled the offices of Secretary and Editor, died in the forty-ninth year of his age. At the first meeting after his death, the Worcester Council unanimously passed a resolution expressing their high sense of his merit, and their deep regret that the Association had been deprived of his able, indefatigable, and zealous services, at a period of life which gave promise of many years of usefulness.

EIGHTEENTH YEAR: 1849-50.

The year 1849 is memorable as being that in which the Association visited the place of its birth. On August 1st and 2nd, the seventeenth anniversary meeting was held at Worcester, in the rooms of the Natural History Society, under the presidency of Dr. Hastings, Physician to the Worcester Infirmary, and founder of the Association.

The number of members on the list was reported to be about 1,760.

An Address in Physiology was delivered by Dr. Sibson, of Nottingham; and Dr. C. W. Bell, of Manchester, delivered an address in Medicine.

Mr. J. P. Sheppard, of Worcester who had previously filled the office of secretary to the Association in conjunction with Dr. Hastings, was again elected Secretary, in the room of the late Dr. Streeten.

The President and Vice-Presidents of the Association were appointed a Committee, with power to fill up the vacancy in the office of Editor, the appointment being subject to confirmation or rejection at the annual meeting in 1850. A proposal that the Committee should inquire into the cost of the production of the JOURNAL, and whether it should continue to be printed at Worcester, was lost. In September

Dr. W. H. Ranking of Norwich, and Mr. J. H. Walsh of Worcester, were appointed joint editors.

The following resolution, with regard to the epidemic of cholera then prevailing, was adopted at the annual meeting:

"That the Council be requested to take into their consideration whether it will not be desirable, as soon as the present epidemic of cholera shall have passed away, to issue a series of questions similar to those issued after the close of the epidemic extant in 1837, requesting information respecting the origin, progress, and duration of the epidemic; its symptoms and treatment; the atmospheric phenomena preceding and attending it; together with such other particulars as may be necessary for the elucidation of many questions of interest connected with its appearance."

In pursuance of this resolution, a series of fifteen questions was issued, the replies to which were collected and summarised by Mr. Thomas Hunt, of London, and published in the JOURNAL for 1849 and 1850.

A case in which the professional conduct of a member was seriously involved came before the meeting. A Mr. Blake had some time previously, by means of false certificates, obtained a diploma from the College of Surgeons, and commenced practising. The West Somerset Branch brought the matter before the College of Surgeons, who removed Mr. Blake's name from their list, and deprived him of his diploma. He still, however, continued to practise in Taunton; but the profession there refused to associate with him, or meet him in consultation. Mr. Edwards of Wiveliscombe, on the contrary, had frequently gone to Taunton and consulted with Mr. Blake. In addition to being a member of the Association, Mr. Edwards was the President-elect of the Taunton Branch. The Branch brought the matter before the Worcester Council; and, in accordance with their advice, requested Mr. Edwards to resign the presidency, which he accordingly did. Mr. Edwards's name still remained on the books of the Association; and it was, therefore, necessary to carry into operation the rule framed for the purpose of meeting such cases. Accordingly, the name of Mr. Edwards was removed from the list of members of the Association, "on account of unprofessional conduct in habitually consulting with an unqualified person". A resolution was also unanimously passed, expressing high admiration of the conduct of the West Somerset Branch in acting with so much decision and energy in upholding the dignity and honour of the profession.

A Committee, consisting of Dr. Greenhill, Dr. Robertson, Dr. J. Conolly, Dr. Mackness, and Mr. Flint, was appointed to consider the best mode of bringing the subject of Medical Ethics before the Association, and to draw up a short code of Medical Ethics to be forwarded to the Central Council before the annual meeting in 1850.

The report of the Medical Benevolent Fund showed that thirty-four applicants had received aid during the past year.

The Association at the annual meeting appointed a Committee, consisting of the President of the Association, Dr. Baron, Mr. Ceely, Dr. J. Conolly, and Dr. Forbes, to correspond and co-operate with the Committee formed in London for the erection of a public monument to the illustrious Jenner, the discoverer of vaccination.

Mr. C. F. J. Lord, the Secretary to the Poor Law Medical Convention, attended as a deputation from that body. He thanked the Association, in the name of his Committee, for the support which the Association had given to the cause of the Poor-law medical staff, and asked a further expression of opinion on the subject. It was resolved unanimously to again petition the Poor-law Board, and petition Parliament, to obtain a system of Poor-law medical relief, with regulations relating to medical officers, at once favourable to the poor, just to the medical officers, and reasonable to the ratepayers.

Attention was called at the Annual Meeting by Dr. Sibson, on behalf of Dr. Toogood, of Torquay, who was unavoidably absent, to the circulation of secret notices by arsenic. A Committee, consisting of Dr. Sibson, Dr. Tunstall, and Mr. Fuge, was appointed to draw up a resolution on the subject. The resolution, and a petition, was adopted by the Association, containing the following words:

"That no quantity of arsenic be allowed to sell arsenic without a licence, under a permit. That no person be allowed to sell small quantities of arsenic, or arsenic mixed with some material, the admixture of which with food would at once be detected by the appearance of arsenic. That no person should be allowed to purchase arsenic, unless accompanied by a witness. That the vendor should keep a book, in which he should make an entry of every sale of arsenic, to which the purchaser and his witness should add his name and place of abode, and that this should be witnessed by the vendor."

It is to be regretted that the great importance and practical utility of the above resolution, and the measures suggested thereby, the latter of which were recommended by Mr. Fuge, were not fully appreciated.

NINETEENTH YEAR: 1850-51.

The eighteenth annual meeting was held in the rooms of the Literary and Philosophical Society, Hull, on August 7th and 8th, 1850; Dr. Fewster R. Horner, Senior Physician to the General Infirmary, being President.

Immediately after the delivery of the President's Address, the following resolution was proposed by Mr. Caleb Williams of York, seconded by Dr. John Conolly, and carried by acclamation: "That the members of the Association wish, at the commencement of their proceedings on the present occasion, to express to their esteemed President, Sir Charles Hastings, its founder, their cordial congratulations on the honour recently conferred on him by Her Majesty; and to record the feelings of sincere gratification which it has afforded them, whether regarding it as an honour eminently deserved, or as a most gracious acknowledgment on the part of the Queen, of those accomplishments, exertions, and virtues, which best contribute to adorn and dignify the medical profession."

The number of members in the Association was reported to be about 1,800.

An Address in Medicine was delivered by Dr. Henry Cooper of Hull, the subject being Secondary and Associated Diseases. Papers were read by Dr. Radcliffe Hall, Dr. Sibson, Dr. Paxton, and other members.

The appointment of Editors, made by the Central Council, was approved; and a Committee, consisting of Dr. Robertson, Mr. Soden, Dr. Conolly, Dr. Lyon, and Sir Charles Hastings, was appointed to consider whether any and what improvements could be effected in the publications of the Association.

The report of the Arsenic Committee was presented; and the following resolution was adopted:

"That a petition against the indiscriminate sale of poisons be presented to both Houses of Parliament, similar to that presented in March last, and that the Branches of the Association be recommended to adopt similar petitions."

The Committee were thanked for their labours, and re-appointed. In the following year, a Bill founded on the recommendations of the Committee was introduced into Parliament, and passed into law.

The Report of the Medical Benevolent Fund stated that £439 had been distributed among 45 applicants. The Committee of the Fund had hitherto sat at Cheltenham; but it was now decided to remove it to London.

A report was presented by the Committee on Cholera; and it was resolved: "That the thanks of the meeting be given to Mr. Hunt, of Bedford Square, London, for having made strenuous exertions to obtain information from the members of the Association relative to the spread of the late epidemic of cholera in this country; and also to Dr. Williams of Worcester, for having made the abstract from the replies, which has been read at the anniversary: and that the same be published in the ensuing volume of *Transactions of the Association*."

A deputation from the Shropshire Branch, consisting of Mr. W. P. Brooks and Mr. Cartwright, attended the meeting for the purpose of soliciting the advocacy by the Association of the claims of the medical officers of the Army and Navy and Militia services. The subject was very ably brought before the meeting by Mr. Brooks and Mr. J. S. Soden (who had accompanied Sir Ralph Abercrombie's expedition in 1801); and a memorial to Lord John Russell, then Prime Minister, praying that the medical officers of the army and navy might be admitted to a share in the distribution of military honours by the Queen, was adopted. A resolution was also passed, thanking Lieutenant-General Sir Howard Douglas and Major-General Sir De Lacy Evans "for their brave description, in the House of Commons, of the peculiar nature of the services rendered by the medical officers of the army and navy; and for their generous and eloquent advocacy of their claims to military honours."

The subject of Medical Topography, to which much attention had been paid in the earlier years of the Association, but which had fallen into abeyance, was brought before the meeting by Dr. Lyon; and it was resolved:

"That in every year, in the district to be visited by the Association, a request be made that the subject be revived, either by adding to the report already published in the Society's *Transactions*, or by some other means, such as may meet the convenience of the party or parties, in whose particular district the subject is to be revived."

Dr. Mackness, of Hull, was nominated to prepare a paper on the

medical topography of the county of Sussex, for the next annual meeting.

The report of Council contained a statement of the proceedings of the year with respect to medical reform. They had requested all the members to consider the subject and repeat their decision to the Council; taking as a basis the principles of uniform and sufficient qualification, equal right to practice, and the representative principle in the formation of the Councils or governing bodies. On the replies received, the Council had forwarded a memorial, which had been presented by the President of the Association, to Sir George Grey.

TWENTIETH YEAR: 1851-52.

The nineteenth anniversary meeting was held at the Pavilion, Brighton, on August 13th and 14th, 1851, under the presidency of Dr. George S. Jenks, Physician to the Surrey County Hospital.

The number of members was stated in the report of Council to be about the same as at the last anniversary.

Mr. B. Vallance, of Brighton, delivered an Address in Surgery; and Dr. W. King, of the same place, the Address in Medicine. Dr. Mackness having died during the year, a lecture on the Medical Topography of Surrey was delivered by Dr. Gideon Mantell. Papers were read by Dr. Malden, Dr. Conolly, Mr. Bree, Dr. Radcliffe Hall, and other members.

The Committee on the publications of the Association presented a report, in which, *inter alia*, they expressed the opinion that the JOURNAL should continue to be published once a fortnight; that the system of conjoint editorship should be continued; that the reviews should be analytical rather than critical; that the editorial or leading articles should be continued; and that prizes should be given for Hospital Reports. The report was approved.

It was stated that, in consequence of various circumstances, the Committee on Medical Ethics, appointed at Worcester, were not yet prepared with a report. The president, in his opening address, alluded to the quackeries and impostures of the day; and the subject was formally brought before the meeting by the appointment of a Committee, consisting of Dr. Cormack, Dr. Tunstall, and Dr. Ranking, to consider the course proper to be adopted with respect to irregular practice. The Committee, the next day, presented a report, embodying a series of resolutions condemnatory of homœopathy.* The report was adopted, and a Committee, consisting of Sir C. Hastings, Dr. Cormack, Dr. Tunstall, Dr. Ranking, Dr. Malden, and Dr. Cowan, was appointed to frame laws on the subject.

A report was presented from the Arsenic Committee, describing their successful operations in getting their recommendations respecting the sale of arsenic adopted in Parliament.

The subject of the income-tax, as it affected members of the medical profession, was brought before the meeting by Dr. Thomas Smith of Cheltenham; and a Committee, consisting of Dr. Smith, Dr. Malden, Mr. Fowler, Dr. Cannon, Mr. Colthurst, and Mr. Lowe, was appointed "for the purpose of investigating the subject of taxation, so injuriously and oppressively affecting the medical profession."

TWENTY-FIRST YEAR: 1852-53.

The annual meeting in 1852 was held on July 21st and 22nd, at Oxford, under the presidency of Dr. J. A. Ogle, Regius Professor

* "1. That it is the opinion of this Association that homœopathy, as propounded by Hahnemann and practised by his followers, is so utterly opposed to science and common sense, as well as so completely at variance with the experience of the medical profession, that it ought to be in no way or degree practised or countenanced by any regularly educated medical practitioner. 2. That homœopathic practitioners, through the press, the platform, and the pulpit, have endeavoured to heap contempt upon the practice of medicine and surgery as followed by members of this Association and by the profession at large. 3. That for these reasons it is derogatory to the honour of members of this Association to hold any kind of professional intercourse with homœopathic practitioners. 4. That there are three classes of practitioners who ought not to be members of this Association, viz., 1st, real homœopathic practitioners; 2nd, those who practise homœopathy in combination with other systems of treatment; and 3rd, those who, under various pretences, meet in consultation, or hold professional intercourse with, those who practise homœopathy. 5. That a Committee of seven be appointed to frame laws in accordance with these resolutions, to be submitted to the next annual meeting of the Association. 6. That the thanks of the Association are eminently due and are hereby given to the Presidents and Fellows of the Royal Colleges of Physicians and Surgeons of Edinburgh for their determined stand against homœopathic delusions and impostures. 7. That the thanks of the Association are also due and are hereby given to the Universities of Edinburgh and St. Andrew's, for their resolution to refuse their diplomas to practitioners of homœopathy; but the Association feels imperatively called on to express its disapproval of any school of medicine which retains among its teachers anyone who holds homœopathic opinions. 8. That these resolutions be printed, and transmitted to all the medical licensing bodies and medical schools in the United Kingdom; and that they likewise be inserted in the *Times* newspaper, the *Morning Post*, the *North British Advertiser*, *Saunders's News Letter*, all the British and Irish medical periodicals, and in such other journals as the Council may sanction upon the recommendation of the Branch Associations."

of Medicine in the University. Manchester had been fixed on as the place of meeting; but, soon after the last anniversary, the venerable Regius Professor of Medicine, Dr. Kidd, who had presided over the Association in 1835, expressed to the Council a wish that the anniversary meeting might take place in Oxford, and recommended Dr. Ogle as President. With the concurrence of the Manchester Council, and also in view of some temporary difficulties which stood in the way of holding the meeting in Manchester, it was determined to hold the meeting in Oxford. Dr. Kidd, however, had not the gratification of again meeting the members of the Association; he died while the necessary arrangements were being completed. The number of members was stated in the report of Council to be 1,625.

The Address in Medicine was delivered by Dr. Eason Wilkinson of Manchester; and that in Surgery by Mr. J. Torry Hester of Oxford. Papers were read by Mr. Hussey of Oxford, Mr. Toynbee of London, and Dr. Hutchinson of Derby.

During the meeting, the honorary degree of D.C.L. was conferred by the University on Sir Charles Hastings, Dr. John Forbes (who was not long afterwards knighted), and Dr. John Conolly.

The report of the Committee on the Property and Income Tax, appointed at the preceding annual meeting, was read by Dr. Thomas Smith of Cheltenham. The hope was expressed in the report that the tax would, in the next session of Parliament, be either materially modified or totally repealed; and the members of the Association were recommended to petition against its continuance.

The report of the Committee on Irregular Practice was read at the annual meeting. It concluded by proposing the following by-laws, which were adopted.

"1. That candidates for admission to the Provincial Medical and Surgical Association shall be required to state, in writing, to the members proposing them, that they neither are, nor intend to become, professors or practitioners of homœopathy.

"2. That, when any member is convicted by the Central Council, or by any of the local councils, of practising homœopathy, or of holding professional intercourse with a homœopathic professor or practitioner, this conviction, along with the necessary proof of its justice, shall be officially reported by the Secretary of the Central Council, or by the Secretary of any of the Local Councils, to the next ensuing anniversary meeting of the Association; that it shall then be competent for the meeting, providing there be a concurring majority of two-thirds of those then present, to direct the president in the chair to erase the name of such convicted member at once from the roll of members; but, that it shall likewise be competent for the meeting, by a simple majority, either honourably to acquit the accused, or to accept from him, in entire satisfaction for his conduct, an expression of regret, and a promise not to repeat it; or to postpone final judgment till the next anniversary meeting."

The draft of a Medical Reform Bill, which had been drawn up by Mr. George Hastings, was considered and approved; and a Committee was appointed to take charge of it, consisting of Dr. Robertson, Mr. Cartwright, Mr. Walsh of Worcester, Mr. Bore of Stowmarket, Mr. Noble of Manchester, and Mr. Bottomley of Croydon.

A change of great importance in its bearing on the welfare of the Association was this year made in the management of the JOURNAL. At the meeting in Oxford, a proposal was brought forward by Dr. Cowan of Reading, who supported it in an eloquent and vigorous speech, that the JOURNAL, instead of being published fortnightly at Manchester, "should be issued weekly, and edited and published in London." After a full discussion, the motion was carried; and a Committee was appointed to carry out Dr. Cowan's proposal, consisting of Dr. Cowan, Dr. James Edwards, Dr. Greenhill, Mr. Thomas Hunt, and Dr. George Webster. The Committee soon afterwards appointed Dr. John Rose Cormack as editor. Dr. Alexander Henry was appointed Sub-editor, and still continues to hold the office. In the beginning of January 1853, the first number of the JOURNAL under the new arrangement appeared in London, under the title of the ASSOCIATION MEDICAL JOURNAL.

In 1852, two prizes of £21 each, offered by the Council for the best reports of medical and of surgical cases, were awarded; that for medical cases to Mr. Arthur Oakes, and that for surgical cases to Mr. W. J. Moore.

TWENTY-SECOND YEAR: 1853-54.

Swansea having been chosen at the meeting in Oxford as the place of meeting for 1853, the members assembled there on August 10th and 11th, under the presidency of Dr. George Gwynne Bird, Physician to the Infirmary. The address in Surgery was read by Mr. Augustin Prichard of Bristol; and that in Medicine by Dr. Radcliffe Hall of Torquay, who chose as his subject "Nature's Modes of Arresting

Tubercular Disease of the Lungs." Papers were read by Dr. Tunstall, Dr. Thomas Williams, and Dr. Sibson.

The report of Council stated that the number of members on the list was 1,853.

An animated debate took place in connection with the reports of the Central Council and of the Journal Committee on the results of the change in the management of the JOURNAL. Sir Charles Hastings and other members expressed their appreciation of the improvement which had taken place in the character of the JOURNAL, but, at the same time, felt alarm at the expense which was incurred, and which was apparently not met by the income. On the other hand, Mr. Michael, Dr. Cowan, and others, held that the financial position was more satisfactory than had been represented by the Central Council; and it was pointed out that much of the difficulty arose from the non-payment of subscriptions, the arrears due at the time amounting to £1,093. Ultimately, the Report of the Journal Committee was received and adopted, and the Committee were requested to continue their labours.

The Committee on Medical Reform presented a report in which they recapitulated the proceedings of the past year, and were reappointed.

The ninth annual report of the Medical Benevolent Fund was presented. It stated that seventy cases had been relieved at a cost of £1,000, and appealed earnestly for extended support.

A rather unpleasant personal matter came under consideration during the meeting. Professor Syme of Edinburgh, who had not long joined the Association, had withdrawn in consequence of some remarks on professional matters in Scotland, contained in the address in Surgery delivered at Oxford by Mr. Hester. After some discussion, the following resolution was adopted.

"That the Association regrets that there should be any misunderstanding between Mr. Syme and Mr. Hester; but that the Association does not hold itself responsible for the sentiments expressed in the papers which may be published in the *Transactions*, and recommended for publication on account of their general merits."

The important subject of Medical Ethics was brought before the annual meeting in 1853, by Mr. W. H. Michael; and the following resolution was adopted in accordance with his proposal.

"That a Committee, consisting of Dr. Cowan, Dr. Sibson, Dr. Cormack, and four other members, along with the secretaries of the District Branches, be appointed to frame a code of ethical laws for the Association, and to report to the next annual meeting."

In March 1854, Mr. J. P. Sheppard of Worcester died. He had rendered valuable service to the Association as Secretary, in conjunction with Dr. Hastings, from its formation in 1832 until 1843; and again as sole Secretary from 1849 up to the time of his death. In a biographical notice by Sir Charles Hastings (JOURNAL, March 17th, 1854), the writer says: "It is not necessary for me to speak of the manner in which he performed these duties. Every member can himself bear testimony to the courtesy, the exactitude, the industry, and the ability he displayed in his prominent and difficult position." Dr. P. H. Williams, physician to the Worcester Infirmary, was appointed by the Council his successor in the office of Secretary.

TWENTY-THIRD YEAR: 1854-55.

The twenty-second annual meeting, held at Manchester on September 13th and 14th, 1854, was presided over by Mr. William James Wilson, Secretary to the Royal Infirmary of that city. Dr. Conolly delivered an address on the "Narcotism System in the Treatment of Disease," and Dr. H. Hall of Manchester delivered an address on "Medicine."

The number of members of the Association was stated in the Report of Council to be 2,007.

The death of Mr. Sheppard, Secretary to the Association, was alluded to in feeling terms in the report; and a special resolution, expressing the general regret of his services, was unanimously passed at the meeting. Mr. Michael stated, Dr. P. H. Williams of Worcester had been appointed *pro tempore*, and the ratification of the appointment of the meeting was carried by ballot. Mr. Michael, as Secretary, was then elected for the year 1854-55, and Mr. Peter Hester of London, as Treasurer, for the same year.

Dr. Michael, in his address, stated that the Association had been founded in 1832, and that it had since that time been engaged in the promotion of the interests of the medical profession, and in the improvement of the medical education of the public. He stated that the Association had been successful in its efforts, and that it was now in a position to undertake more extensive operations.

accounts, collect the subscriptions of members, and assist in the commercial department of the JOURNAL."

The proposal of Dr. Cowan, after a prolonged debate, was adopted by a large majority. After formally accepting the appointment of Secretary to the Association, Dr. Cormack referred to the efficient manner in which Dr. Williams had performed his duties, and proposed a resolution, which was carried unanimously, that the best thanks of the Association should be given to Dr. Williams, and that his salary should be paid up to the end of a year from the date of his appointment.

In connection with the preceding subject, a question arose as to the constitution and powers of the central Council at Worcester. It appeared that the members of the General Council at Worcester had hitherto acted by usage, without any delegation of power from the great body of the Association. After consideration, it was decided—

"That the members of the General Council resident in and within twenty miles of Worcester be requested to act as an Executive Council, and to continue their services as hitherto in furtherance of the business of the Association, to which Executive Council the Editor of the JOURNAL and the Secretary of the Association shall be responsible."

The annual meeting in 1854 witnessed the opening of the discussion of a question of the highest importance to the Association: viz., the change of its name. It had for some time been felt by many members that, as the Association now contained a considerable number of metropolitan members, and as it in fact sought to unite the profession in Great Britain, the name "Provincial Medical and Surgical", by which it had hitherto been known, was no longer appropriate, and that the Society should be called the "British Medical and Surgical Association". A motion embodying this opinion was proposed by Mr. Peter Martin and seconded by Dr. Lankester. After a discussion, however, the motion was withdrawn; and a resolution was adopted,

"That, in the opinion of this meeting, the representative principle ought to be fully adopted in the constitution of the governing Council of the Provincial Medical and Surgical Association; and that a Committee be appointed, consisting of the President, the President-elect, the President of the Council, the Editor and General Secretary, Dr. P. H. Williams, the late General Secretary, and the Secretaries of the Branches, to examine, revise, alter, and amend the laws of the Association, especially those relating to the members of the Council and the constitution of the Branches; and to have the power of conducting their proceedings by letter."

The amended resolution also instructed the Committee to ascertain the opinion of each member of the Association on the whole of the changes recommended; and to submit their report to the next annual meeting, it having been for four weeks in the hands of the members.

The Committee thus appointed, having held several meetings, agreed on a revised code of laws, which was published in the JOURNAL of May 25th, 1855, and discussed at the subsequent annual meeting.

The Report of the Committee of the Medical Benevolent Fund, presented at the annual meeting, showed that relief had been afforded to 67 cases at a cost of £556 12s.; and that there were ten annuitants, receiving £147 a year.

No report was presented at the annual meeting from the Medico-Ethical Committee appointed in the previous year; Mr. Michael, who had been instructed to prepare a report, having been unavoidably prevented from doing so. The Committee was reappointed.

On July 19th, 1855, the Association was deprived by death of its President, Mr. Wilson of Manchester, where he had practised forty years, and had been since 1826 one of the surgeons to the Royal Infirmary.

TWENTY-FOURTH YEAR: 1855-56.

The twenty-third annual meeting was held on August 15th and 16th, 1855, in York; Dr. Thomas Simpson, Physician to the County Hospital, York, being President. The number of members of the Association was stated in the Report of Council to be 2,188.*

The time of the meeting was almost entirely occupied with the discussion of the financial condition of the Association and JOURNAL, and of the new code of laws which had been prepared by the Committee appointed for the purpose, and published in the JOURNAL. At the previous annual meeting, Dr. Bell Salter of Ryde had been appointed to deliver the Address in Medicine, and Mr. Richard Hey of York that in Surgery. Owing to ill-health, however, Mr. Hey was unable to deliver his address; and the entire occupation of the time of the meeting by discussion of business matters prevented both Dr. Salter's address, and some papers which had been prepared, from being read.

The draft code of laws having been read, an important discussion as to the name of the Association took place; and after a long debate, it was decided, by a majority of 50 against 31, that the name "Provincial Medical and Surgical Association" should be retained. The following were some of the most important provisions of the new laws.

The offices of President of the Council and Treasurer of the Association were again conferred on Sir Charles Hastings for life; and it was provided that the offices, when they became vacant, should each be held for three years.

It was decided that the General Council should consist of the President and other officers of the Association, and of members elected by the Branches as follows: in a Branch of less than thirty members, the President as sole representative, with the acting Honorary Secretary if the members amounted to thirty or more, and one additional representative for every complete number of twenty members beyond thirty. A law was also passed, permitting the election at the annual meetings of additional members of Council, in the proportion of one for every twenty members not included in any Branch; and it was provided that all who were members of Council prior to the meeting of 1855 should continue to hold office as long as they remained members of the Association. It was determined that the Executive Council should consist of the President of the Council, the General Secretary, and ten members to be elected by the General Council from their own body, together with one Secretary from each Branch; and they were empowered to delegate their powers to any five members of their body.

The offices of Secretary of the Association and Editor of the JOURNAL which had been at the previous annual meeting conferred on Dr. Cormack, were disjoined by a new by-law, which provided, "That the offices of Secretary and Editor of the JOURNAL shall not be held by the same person." In consequence of the adoption of this by-law, Dr. Cormack resigned the office of Editor of the JOURNAL, as well as that of Secretary.

In the law relating to the JOURNAL, it was provided that the Editor should be responsible for all that appeared in it, except such matter as might be printed by direction of the Executive Council. The occasional publication of *Transactions* was authorised "if the funds of the Association permit."

In connection with the proposed laws, a memorial had been drawn up and signed by 453 members of the Association, for presentation to the annual meeting, recommending the adoption of the title of "British" Medical Association, and the organisation of the Association on the representative principle. In arranging the order of business, however, this memorial, which came late into the secretary's hands, was placed last in the programme; consequently it was not read until it was too late for any effect to be produced by it.

The adoption of the Code of Laws, in which the old name of the Association was retained, and the representative principle imperfectly carried out, produced much disappointment. The newly appointed Executive Council, therefore, at their first meeting, which was held in Birmingham on September 7th, framed for publication in the JOURNAL a "conciliatory address, calling upon the members to combine heartily for the promotion of the great objects of the Association, and imploring them to forego all minor differences of opinion in the desire to advance the progress of medical science, and to maintain peace and harmony among the members of the Association." A great amount of dissatisfaction, however, still prevailed; and a considerable body of members declared their readiness to secede, and form a new British

Medical Association. On the other hand, many who had most strongly advocated a reform in the name and government of the Association were averse to any steps which might lead to a disruption of the Association. Requisitions were signed by members of the Metropolitan Counties, Bath and Bristol, and other Branches, asking the President of Executive Council to convene a special general meeting of the Association, to reconsider the laws. The Executive Council also decided on obtaining by means of voting papers the opinion of each member of the Association as to the change of name.

In pursuance of the requisitions, a special general meeting was held at Birmingham on November 20th, at which Dr. Simpson presided, and about two hundred members were present. Sir Charles Hastings read a document expressing the views of the Executive Council. It stated that nearly 1100 replies to the voting papers had been received, and that there was a decided majority in favour of the change of name; and Sir Charles stated that, as the majority was so decided, he not only withdrew all opposition, but would himself, at the annual meeting in Birmingham, propose the necessary change of law for the alteration of the name of the Association from "Provincial" to "British." Having completed the reading of a graceful and judicious address, Sir Charles Hastings proposed the following resolutions, which agreed closely with the suggestions made in a memorial signed by nearly 500 members of the Association, and presented to the meeting.

"1. That this meeting recommends that the name of the Association be changed to 'British Medical Association' at the next annual meeting. 2. That the Council of the Association be elected on the principle of absolute representation; so that each member of the general body may have, by his representative, a voice in the management of its affairs. 3. That the Branches be requested to consider the best mode in which the election can be conducted. 4. That the Secretary be requested to give due notice, in his official capacity, of the intended alteration in the laws now recommended."

To these were added the following, on the proposal of Mr. Michael, and with the concurrence of Sir Charles Hastings. "1. That the following gentlemen be appointed a Committee to co-operate with, and form part of, the Executive Council, for the purpose of carrying out the foregoing resolutions: W. Budd, M.D. (Bristol); B. W. Richardson, M.D. (London); G. Webster, M.D. (Dulwich); A. P. Stewart, M.D. (London); C. Cowan, M.D. (Reading); C. M. Burnett, M.D. (Alton); H. Dayman, Esq. (Milbrook, Southampton); H. Ansell, Esq. (London); W. Davies, M.D. (Bath); W. D. Husband, Esq., (York); T. Nunneley, Esq. (Leeds); J. R. Cormack, M.D. (London); C. R. Hall, M.D. (Torquay); and T. Shapter, M.D. (Exeter). 2. That this meeting strongly recommends that, in order that the financial affairs of the Association may be placed on a fair basis, the accounts of the Provincial Medical and Surgical Association be closed and audited at the end of the present year; that no part of the income of the ensuing year be applied to the payment of liabilities previously incurred; and that the liabilities for the present year be discharged within six months from the assets of this and previous years; and that any deficiency that may be found to exist at the end of the year be defrayed by a *pro rata* subscription."

These resolutions, several members having spoken in support of them, were carried almost unanimously. In consequence of the decision of the meeting, the members who had expressed their intention to secede from the Association on account of the proceedings at York, promptly withdrew their resignations: and unity was happily restored.

The office of Secretary, which became vacant in consequence of the separation of the office from that of Editor, was filled at the annual meeting by the appointment of Dr. P. H. Williams of Worcester; and Dr. Andrew Wynter was subsequently elected, by the Executive Council, Editor of the JOURNAL in the place of Dr. Cormack, who, as has already been mentioned, resigned his office.

The first meeting of the Committee appointed to revise the laws was held in Birmingham on December 21st. Their first act was to take steps to carry out the resolution of the special meeting respecting the pecuniary liabilities of the Association, by calling on each existing member of the Association to pay a contribution of ten shillings in addition to his annual subscription. This call, before the end of 1856, produced a sum of £442, to which some additions were subsequently made.

The Medical Reform Committee presented to the annual meeting a report, giving an account of its proceedings during the past year, and recommending the taking of steps to reintroduce the Bill of the Association into Parliament. The report was adopted, and the Committee were reappointed, a sum of £50 being voted to them for expenses. The following resolutions were also adopted: "1. That, with a view to an

* This probably included a large number of members in arrears, as the report of Council of the following year stated the number in 1855 to be 2,194.

Pains by subcutaneous Narcotic Injections—a mode of treatment which he had shortly before introduced into practice.

The Medical Reform Committee presented their report for the past year, giving an account of the progress of the Medical Bill—very soon to become the Medical Act—since the last annual meeting. The Committee, in concluding the Report, expressed their thanks to the Right Hon. W. Cowper for his persevering exertions; to the Right Hon. Mr. Secretary Walpole, for his valuable aid during the progress of the Bill; to the Branches of the Association, who had supported the Bill by resolutions and petitions; and to Mr. George Hastings, the Secretary to the Committee. The following resolutions were passed by the meeting:

"That the Report now read be received and adopted, and that the Committee be reappointed under the title of the Committee on Medical Legislation, with the addition of Professor Simpson, Professor E. W. Murphy, and Dr. Forbes Winslow; and that they be specially directed to draw the attention of Government to the necessity of appointing, as the six members of Council to be nominated by Her Majesty, persons really representing the bulk of the medical profession."

"That the thanks of the British Medical Association be given to the Right Hon. W. F. Cowper, M.P., for his able and persevering exertions in the cause of medical reform, which exertions have mainly secured the enactment of the Medical Act just passed; and for his personal courtesy to the representatives of the Association."

An unanimous vote of thanks was also given to Mr. G. W. Hastings for his long, arduous, and valuable services in the cause of medical reform.

When the Medical Council, as provided in the Act, was appointed, Sir Charles Hastings was one of the four members nominated by the Crown for England; the others being Sir James Clark, Mr. William Lawrence, and Mr. T. P. Teale. This appointment naturally gave much satisfaction to the Association, inasmuch as it recognised not only the important part which Sir Charles had taken in promoting medical reform, but also the fact that he, as promoter and leader of the British Medical Association, was the natural and fit exponent of the wishes of a large portion of the medical profession.

The subject of Medical Ethics was brought before the Association by Dr. Barker of Bedford, who proposed the appointment of a Committee to prepare a well-considered expression of the duties of members of the medical profession towards society at large. The proposal was adopted, and a Committee was nominated.

Professional intercourse with homœopaths was again denounced at the annual meeting; and the following resolution was carried by a large majority:

"That the Provincial Medical and Surgical Association having, by resolutions passed at its annual meeting held at Brighton in 1851, and by laws in accordance therewith adopted at its annual meeting held at Oxford in 1852, declared that homœopathic practitioners, and those who consult professionally with them, are not qualified for membership—the British Medical Association do hereby instruct the General Council to prepare a draft, incorporating with the existing code of laws of the British Medical Association the substance of the laws relating to irregular practice, adopted by the Provincial Medical and Surgical Association in 1852, and to report to next annual meeting."

The twenty-third annual report of the Medical Benevolent Fund was presented at the annual meeting. It announced the liberal gift of 500 guineas from Mr. J. Toynbee. The sum of £792 10s. had been expended in the assistance of urgent cases, and £214 in annuities. Mr. Newnham, late of Farnham, was elected an honorary member of the Association, in recognition of his great, disinterested, and long continued labours in promoting the success of the fund.

TWENTY-EIGHTH YEAR: 1859-60.

The Annual Meeting in 1859 was held in the Medical Institution, Liverpool, on July 27th, 28th, and 29th, under the presidency of Dr. James R. W. Vose, Physician to the Royal Infirmary. This was the second meeting of the Association in Liverpool. To the great regret of the members, the infirm state of his health prevented Professor Alison from being present in order to personally retire from the chair, or from even sending an address to be read on the occasion. Within two months afterwards—on September 22nd—this eminent and respected physician died at the age of 69.

It was stated in the Report of Council that the number of members of the Association had increased to 2310, and that a new Branch had been formed in Dublin.

An Address in Medicine was delivered by Dr. Edward Waters of Chester; and an Address in Physiology by Dr. A. T. H. Waters of Liverpool. Papers were also read by Dr. Birkbeck Nevins, Dr. Hibbert Taylor, Dr. R. T. Evanson, and several other members.

In fulfilment of the promise which he made when the laws of the Association were revised in 1856, Sir Charles Hastings tendered his resignation of the offices of President of Council and Treasurer; but, in accordance with the earnest and unanimous desire of the members, he withdrew his resignation.

Special attention was directed in the Report of the Council to the financial position of the Association. Although a debt of nearly £2000 which existed at the end of 1856 had been considerably diminished, the process of reduction was slow; and in the course of the meeting a recommendation from the Council was proposed for adoption: "That, for the liquidation of the debt of the Association, a voluntary subscription by the members be instituted for the next two years, at the rate of five shillings *per annum*." An amendment was proposed, that each member should pay his own postage of the JOURNAL for one year. It was, however, pointed out that a compulsory contribution would be injurious to the Association; that, if members would pay their subscriptions punctually, the amount received would be quite equal to the expenses. The proposal in favour of a voluntary contribution of five shillings was adopted.

It was reported to the annual meeting that the Medico-Ethical Committee appointed in the previous year had not been able to complete a report. The committee was re-appointed with the addition of Dr. Styrup of Shrewsbury, the Secretary of the Salopian Medico-Ethical Society, which had amalgamated with the Shropshire Branch of the Association, the two forming the Shropshire Ethical Branch.

The Medical Reform Committee, under the name of the Committee on Medical Legislation, presented a report, in which the recent issue of the Royal Warrants concerning the medical officers of the army and navy was alluded to with satisfaction. The Committee recommended attention in the coming year to Poor-law medical reform, public vaccination, and the sale of poisons; and in the discussion on the adoption of the report, Dr. Mackesy of Waterford suggested the representation of the medical profession in Parliament as a proper subject for consideration. The following resolution was agreed to:—

"That the Committee on Medical Legislation be re-appointed, with the addition of Richard Griffin, Esq., and Dr. E. C. Seaton; that they be instructed to carefully watch the working of the Medical Act, especially in regard to preliminary and professional education; that they be desired to take into consideration, during the coming year, the subjects of the representation of the profession in Parliament, Poor-law medical reform, public vaccination, and the sale of poisons; and that they be authorised and form sub-committees, if necessary, for the examination of the several subjects, and to consult and co-operate with such individuals and public bodies as may to them seem advisable."

In 1859, the Royal College of Physicians of Edinburgh instituted a licence in medicine, and decided to admit to it qualified medical men already in practice, on the recommendation of two practitioners, without examination, and on payment of a fee. The subject was brought before the Association at the annual meeting in the form of a complaint that the College had admitted as a licentiate a man who had been for many years practising homœopathy. After discussion, it was resolved "That, in the opinion of the members of the Association, the admission of homœopaths as licentiates by the Edinburgh College of Physicians is highly reprehensible; and that the College is bound to make inquiries as to the character and standing of a man not known to any of its members."

The report of the Medical Benevolent Fund stated that there was increase on the amount of subscription, and that a legacy of £3,000 had been left to the fund. The sum of £1,067 had been distributed to ninety-two applicants for temporary aid, and £255 10s. to sixteen annuitants.

TWENTY-NINTH YEAR: 1860-61.

The annual meeting in 1860 was held in Torquay on August 1st, 2nd, and 3rd, Dr. C. Radclyffe Hall, Physician to the Hospital for Consumption in that town, presiding. The total number of members in the Association was announced to be 2,215.

An Address in Medicine was delivered by Dr. Barham of Truro, the subject being "Climate in some of its Medical Aspects". Mr. De la Garde of Exeter delivered an Address in Surgery; and Mr. W. J. Square of Plymouth gave an Address in Ophthalmic Surgery. Papers were also read by Dr. Brown-Séquard, Dr. Wollaston, Dr. W. Budd, Dr. B. W. Richardson, and other members.

At the beginning of 1861, Dr. Markham succeeded Dr. Wynter as Editor of the JOURNAL. From that time, the JOURNAL has been published each year in two volumes, in place of one.

The question of the representation of the medical profession in the House of Commons was again brought forward at the annual meeting

by Dr. Mackesy; and the following resolution was adopted, on the proposal of Sir Charles Hastings:

"That, considering the number, respectability, and special acquirements of the medical profession in these kingdoms, neither are their interests fully attended to, nor their views on sanitary arrangements adequately represented in Parliament."

No report was presented at the annual meeting from the Committee on Medical Legislation. It was proposed:

"That the Medical Legislation Committee be reappointed, with power to add to their number. That it be an instruction from this meeting to the Committee that, in framing an amendment on the present Act, or, if necessary, a new Bill altogether, the Committee shall endeavour to embody the following principles: 1. The removal of all further power from the corporations and universities to institute special and pseudo-medical qualifications; 2. The introduction into the Medical Council of a larger number of members unconnected with the corporations and universities; 3. The suggestion of a plan which shall save the profession from the necessity of individually enforcing the penalties enacted by Section XLVII of the Medical Act against those who illegally assume medical titles."

These resolutions were criticised by Sir Charles Hastings, who regarded the first and second suggestions as impracticable, and pointed out that objection would be made in the House of Commons to increasing the number of members of the Medical Council. He advised that the Committee should be simply instructed to try to obtain an improvement of the Medical Act. The resolutions were adopted by a large majority; whereon Sir Charles Hastings intimated his wish to retire from the Committee.

A scheme for the institution of prizes was brought before the annual meeting, and the following resolution was adopted.

"That a sum of £40 be placed at the disposal of the Committee of Council, to be applied, whenever they shall find it convenient to the funds of the Association, for the promotion of one or two gold medals, as annual prizes for essays or papers to be written by members of the Association; the subjects and awards to be placed under the direction of the Committee."

A discussion took place at the annual meeting on Special Hospitals. A short time previously, several of the leading members of the profession, including Sir Charles Hastings, had published a protest against "the modern practice of opening small institutions, under the name of hospitals, for particular forms of disease, in the treatment of which no other management, appliance, or instruction is required, than is already supplied in the existing general hospitals". It was moved:

"That this Association observes with great regret the difference of opinion in the profession on the subject of special hospitals. That, while it cannot but express the opinion that the existence of special hospitals is impossible until there is a great reform in the public and professional management of the general hospitals."

After discussion, the following amendment was moved by Dr. Mackham, seconded by Sir Charles Hastings, and carried:

"That a committee of twelve be appointed to investigate the whole question of hospital management throughout the country, and to report upon it at the next annual meeting."

After the conclusion of the ordinary business of the meeting, a proposal regarding the formation of a medical diaconate was brought before the meeting, by one of the delegates from Exeter, by the Rev. Chancellor Martin. The speaker, who spoke on the occasion, however, agreed to withdraw his proposal, and the subject was withdrawn, and the discussion concluded with the adoption of a resolution thanking the Bishop of Exeter for the kind invitation to the meeting, and the manner in which he had brought the subject before the meeting.

THIRTIETH YEAR: 1861-62.

The annual meeting in 1861 was held in Canterbury, under the presidency of Dr. Alfred Leitch, Surgeon to the Kent and Canterbury Hospitals. It was held on July 2nd, 1861. The committee of Council for the Association was reappointed.

The following resolutions were adopted: 1. That the Association should be invited to meet in London in 1862, in which year an International Exhibition was to be held, which would be a source of attraction to many members. 2. That the provincial members might object; but Dr. Leitch was able to reply that he had already secured the opinion of Sir Charles Hastings, who thought it would be of the highest benefit that the Association should from time to time meet in London, and that the Metropolitan Branch should take part in the working of the Association.

The resolution was adopted; and on the next year, 1860, a circular invitation from the Metropolitan Branch was presented to the annual meeting in Canterbury, and accepted unanimously. Accordingly, on August 8th, 9th, 10th, and 11th, the members assembled in the Library of the Royal College of Physicians, which had been courteously placed at the disposal of the Association for the occasion. Dr. Charles Leitch was seated in the chair. The business of the meeting was carried on in a very satisfactory manner.

Mr. G. Rigden, Mr. A. B. Steele, Mr. E. Lund, Mr. I. B. Brown, Dr. T. Lewis, Mr. W. Webber, and Dr. G. D. Gibb.

The attitude to be assumed towards homeopathy again came under notice. For some time previously, considerable dissatisfaction had been felt in consequence of Mr. (afterwards Sir William) Fergusson having met a notorious homeopath in consultation, and also in consequence of the appointment of a homeopath to the office of Staff-Surgeon to the Royal Guernsey Militia. The subject was brought before the meeting by Dr. B. W. Richardson, who moved the following resolutions:

"1. That this meeting repeats and confirms the resolutions passed by the Association at the meetings held at Brighton in 1851 and at Oxford in 1852, in all that relates to homeopathy, and to the recognition of its practitioners by members of the medical body.

"2. That this meeting not only declares it contrary to professional honour and honesty, and subversive of science, for legitimate practitioners of medicine to hold professional intercourse with homeopaths, but refuses equally to accept from those who express their disbelief in the homœopathic system any excuses for such professional intercourse, founded on the plea either of mental reservation or of necessity."

These resolutions were, after some discussion, carried without a dissentient vote.

The subject of special hospitals was brought before the annual meeting. The Committee appointed at the previous meeting had not yet been able to prepare a report. A discussion, however, followed on a paper read by Mr. W. Martin, in which the author expressed his opinion that the system of special hospitals was "a necessary consequence of the advance of intelligence, both in and out of the profession", and that it approved "an ever increasing means of adaptation to the wants of humanity". He held also that great improvements in medical sciences and art might be confidently expected from a judicious extension of the system. Various opinions were expressed as to the necessity and merits of special hospitals; but no resolution was adopted by the meeting.

The Report of the Medical Benevolent Fund stated that the sum of £890 had been given in grants to 99 applicants, and that 16 annuitants had received £288.

At the annual meeting, allusion was made in the report of Council to the fact that a Select Committee of the House of Commons was considering the subject of Poor-law Medical Relief. No resolution appears to have been passed by the general meeting; but, at the meeting of the Committee of Council on November 5th, a Committee, consisting of Sir C. Hastings, Mr. Bottomley, Mr. Cartwright, Mr. Bartlett, Mr. Watkin Williams, and Mr. O. Pemberton, was appointed to consider the report of the evidence given before the Select Committee, and to prepare a memorial for presentation to the Committee.

THIRTY-FIRST YEAR: 1862-63.

The annual meeting of the Association in 1862 was held in London. The holding of an annual meeting in London had been contemplated some years previously; but it was felt that, so long as the Association was English in name and in character, such a proceeding would be scarcely appropriate. All objection on this ground was removed when the Association became British; and, at the annual meeting of the Metropolitan Branch in 1860, Dr. Quain proposed that the Association should be invited to meet in London in 1862, in which year an International Exhibition was to be held, which would be a source of attraction to many members. Some apprehension was expressed, that the provincial members might object; but Dr. Quain was able to reply that he had already secured the opinion of Sir Charles Hastings, who thought it would be of the highest benefit that the Association should from time to time meet in London, and that the Metropolitan Branch should take part in the working of the Association. The resolution was adopted; and on the next year, 1860, a circular invitation from the Metropolitan Branch was presented to the annual meeting in Canterbury, and accepted unanimously. Accordingly, on August 8th, 9th, 10th, and 11th, the members assembled in the Library of the Royal College of Physicians, which had been courteously placed at the disposal of the Association for the occasion. Dr. Charles Leitch was seated in the chair. The business of the meeting was carried on in a very satisfactory manner.

The annual report of the Association was reported to the meeting.

Dr. Alfred Leitch delivered the Address on the Medical Profession, in which he alluded to the subject of Mr. James Paget; and the Address on the subject of the Medical Profession, by Mr. James Paget, was read by Dr. W. Martin. The following resolutions were adopted: 1. That the Association should be invited to meet in London in 1862, in which year an International Exhibition was to be held, which would be a source of attraction to many members. 2. That the provincial members might object; but Dr. Leitch was able to reply that he had already secured the opinion of Sir Charles Hastings, who thought it would be of the highest benefit that the Association should from time to time meet in London, and that the Metropolitan Branch should take part in the working of the Association.

Moore, Dr. T. Inman, Mr. J. Higginbottom, Dr. J. Hughes Bennett, Mr. W. Bowman, Dr. E. Cutler, Dr. Wynn Williams, and Dr. G. Harley.

The reading of a paper by Dr. Handfield Jones, entitled "Suggestions for an Inquiry into the Action of Medicines," was followed by the appointment of a Committee for the purpose suggested, consisting of Dr. Handfield Jones, Dr. Acland, Dr. Fleming, Dr. Farr, Mr. Crompton, Dr. Hughes Bennett, Mr. Hodson, Dr. Webster, and Dr. G. Harley, with power to add to their number. This Committee, of which Dr. Hughes Bennett was appointed chairman, presented, on a subsequent day of the meeting, a report in which they proposed a series of subjects for investigation during the ensuing year. The Committee suggested that a schedule for each subject should be drawn up, containing the age, sex, and other points requiring attention; that the schedule for each subject should be prepared by a different member of the Committee, who should arrange for distribution of the schedule, receive the returns, and draw up a report to be presented to the next meeting of the Association. The recommendations of the Committee were adopted by the meeting; the means of raising the necessary funds being left to the Committee of Council.

A charge of professional misconduct, brought by Mr. William Webber against Mr. Spencer Wells, came under the notice of the annual meeting; and a Committee, consisting of Dr. Westall, Mr. Bottomley, and Mr. Huckstall Smith, were appointed to investigate the matter. They reported that they were of opinion that no evidence had been laid before them of any professional misconduct on the part of Mr. Spencer Wells.

A series of resolutions, respecting the registration of births, deaths, and diseases in Ireland, were prepared at the annual meeting by Dr. H. W. Rumsey, seconded by Dr. Richardson, and carried unanimously.*

In reference to this subject, the Committee of Council, at a meeting on November 4th, passed the following resolution:

"That the Council of the British Medical Association is willing to co-operate with the Social Science Association in the presentation of a memorial to Parliament, for the purpose of obtaining a Bill for the Registration of Births and Deaths in Ireland."

THIRTY-SECOND YEAR: 1863-64.

The thirty-first annual meeting was held at the Victoria Rooms, Clifton, on August 5th, 6th, and 7th, 1863, under the presidency of Dr. J. A. Symonds, Consulting Physician to the Bristol General Hospital. The number of members of the Association was reported to be 2,217.

An Address in Medicine was delivered by Dr. William Budd, who took *Varicellæ Ovinae* as his subject. Mr. Augustin Prichard delivered an Address in Surgery, on the treatment of Carbuncle; Dr. W. B. Herapath, an Address in Chemistry in its relation to Medicine and its Collateral Sciences; and Dr. J. G. Swayne an Address in Midwifery.

* The resolutions were as follows. "1. That in any measure of legislation for the registration of births and deaths in Ireland, this Association deems it highly important that the local machinery for such registration should be altogether distinct from that for the registration of marriages; and is happy to perceive that the principle has been recognised in the Bills which have been introduced into the House of Commons during this and the preceding sessions of Parliament. 2. That it is most desirable to introduce into any such measure the principle of local scientific supervision of the returns of births and deaths. 3. That the office of Superintendent Registrar of births and deaths ought to be held by persons well acquainted with the physical and biological sciences, versed in sanitary and vital statistics, and accustomed to make medico-legal investigations. 4. That it is desirable to combine with the superintendence of the registration of births and deaths the registration of all sickness attended in public institutions or at the public expense. 5. That each superintendent registrar should be required to publish, for the information of the local administrative authorities and the instruction of the inhabitants of his district, an annual report of the results of registration, as also a quarterly summary of the deaths and diseases, with their causes, according to forms to be determined by the Registrar-General for Ireland. 6. That, in the local reports of mortality and sickness, it is important to specify age and occupation, to record meteorological observations, and to note local events and circumstances affecting the public health. 7. That it is desirable to require the authentication of the cause or mode of death by a certificate from a legally qualified medical practitioner; and that, where no such certificate is delivered, the subregistrar be required to inform the superintendent, who should forthwith make inquiry into the case. 8. That the registration of births should be compulsory; and that still-births (after the sixth month of utero-gestation), when not certified by a legally qualified medical practitioner, should be subject to the regulation stated in the last resolution. 9. That the boundaries of registration districts and subdistricts ought, as nearly as possible, to conform to the limits of existing districts for the relief of the poor, and for the administration of medical aid (union and dispensary-districts), having due regard to the jurisdiction of local sanitary authorities. 10. That the proposed scientific superintendents, as statistical inquirers and reporters for national purposes, should be made independent of local and party influences, debarred from private medical practice, and paid out of national funds. 11. That the Council of this Association be requested to open communications with the Government, and with the Poor-law Commission of Ireland, for the purpose of laying before them the suggestions of the Association, and of conferring with them as to the best mode of embodying them in a legislative enactment."

Papers were read at the annual meeting by Dr. G. Budd, Dr. B. W. Richardson, Dr. W. O. Markham, Mr. W. M. Clarke, Mr. T. S. Fletcher, Dr. Graily Hewitt, Dr. Gibb, Dr. M. Mackenzie, Dr. A. P. Stewart, Mr. Nunneley, Dr. C. B. Radcliffe, Mr. Erasmus Wilson, and others.

Dr. P. H. Williams, of Worcester, who had held the office of secretary to the Association for eight years, resigned on account of increasing professional engagements; and Mr. T. Watkin Williams, of Birmingham, was appointed his successor. A vote of thanks for his services was given to Dr. Williams.

The Council recommended in their report, that a memorial should be presented to the Royal College of Surgeons of England, requesting them to take into consideration the propriety of altering their by-laws, or, if necessary, obtaining the legal powers for enabling non-resident Fellows of the College to vote by proxy at the annual election of members of Council, in accordance with the principle already advantageously adopted in the Universities of Oxford and Cambridge. This suggestion was approved, and a memorial, signed by the President and General Secretary, was subsequently presented to the President and Council of the College. A reply was received from Mr. Belfour, the Secretary to the College, pointing out that the voting at the election of members of Council was regulated by the charter of the College, and not by the by-laws.

Reference was also made in the report of Council, and the efforts necessary for the improvement of the condition of the medical officers of the army and navy, and on the proposal of Mr. Husband, the meeting adopted memorials to the Secretary of State for War and the First Lord of the Admiralty, relative to the grievances under which the medical officers of the army and navy suffered, through the war-rants establishing their rank with their combatant brethren being virtually set at naught by the commanding officers.

A proposal to establish a Medical Provident Association was brought before the annual meeting by Dr. Richardson, who moved:

"That a Committee be appointed to consider and report on the question, whether it is possible to establish, under the direction of the Association, a Relief Fund, which shall enable the widows of members, or the orphans of members, or members themselves during sickness, to receive pecuniary aid by annuity or otherwise, on the principle of mutual protection and right."

A Committee was accordingly appointed and was directed to report to the next annual meeting of the Association. It consisted of Sir Charles Hastings, M.D., Mr. Edward Daniell, Dr. Henry Day, Mr. George Pound, Dr. J. M. Bryan, Dr. A. P. Stewart, Mr. R. B. Carter, Mr. E. Bartleet, Mr. H. Gramsham, and Dr. B. W. Richardson.

Three members of the Association—Dr. Edward Waters of Chester, Mr. William Adams of London, and Dr. Philbrick of Leamington—had been most unjustly made the subjects of legal prosecutions on account of alleged professional misconduct. A great amount of sympathy with these gentlemen had been expressed by the medical profession; and, at the annual meeting, the following resolution was proposed by Dr. Radclyffe Hall, seconded by Dr. Richardson, and carried by acclamation:—

"That this Association has observed with extreme pain the legal persecutions to which Dr. Waters of Chester, Mr. Adams of London, and Dr. Philbrick of Leamington—all members of the Association—have been so unjustly subjected during the past year; that this meeting offers to each of these gentlemen its profoundest sympathy, and tenders to each of them the expression of its entire conviction that their moral and professional character and position stand unimpeached.

"This meeting also takes the opportunity of deprecating the conduct of any members of the medical profession who render assistance in the legal persecution of their brethren on mere suspicion, or on grounds which have not even the semblance of being substantial."

The latter part of the resolution had reference to the line of conduct which had been followed by certain medical witnesses on the respective trials.

THIRTY-THIRD YEAR: 1864-65.

The thirty-second annual meeting was held in the Senate House of the University of Cambridge, on August 3rd, 4th, and 5th, 1864, under the presidency of Dr. George Edward Paget, Physician to Addenbrooke's Hospital, and Linacre Lecturer in Physic in the University.

The number of members of the Association was reported to have increased to 2,422.

An Address in Medicine was delivered by Dr. E. L. Ormerod of Brighton, who gave a review of the present state of Cardiac Pathology; and Dr. Humphry of Cambridge delivered an Address in Surgery. Important papers were read by Mr. Spencer Wells on Some of the Causes of Excessive Mortality after Surgical Operations; and by Dr.

William Budd on the Rinderpest or Cattle-plague. Papers were also read by Dr. Sansom, Mr. J. V. Solomon, Dr. Routh, Dr. S. Martyn, Dr. C. B. Radcliffe, Dr. H. Dick, Mr. J. Brügger, and Dr. Richardson.

The Hastings Gold Medal was presented for the first time. It was awarded by the adjudicators—Dr. Sharpey, Dr. Richardson, and Dr. A. T. H. Waters—to Dr. J. L. W. Thudichum, for his essay on Urochrome, the colouring matter of the urine.

The proceedings which had taken place regarding the modes of election of Members of Council of the Royal College of Surgeons were reported by the Council of the Association, who recommended that a memorial on the subject should be again presented, and that the Committee of Council should be empowered to take any other steps which they might deem requisite to obtain the desired alteration. Accordingly, a memorial to the same effect as in the previous year was presented in September to the Council of the College, who, in January 1865, replied that, having taken the matter into consideration, they "saw no reason to alter their opinion upon the subject."

In the interval since the previous annual meeting, the cause of the Army Medical Officers had been warmly advocated by several of the Branches of the Association, by whom memorials on the subject had been presented. A deputation of the Metropolitan Counties Branch had also had an interview with Earl de Grey and Ripon, Secretary of State for War. The subject was again brought under the notice of the Association in the report of Council: and a Committee, consisting of Sir C. Hastings, Dr. Radclyffe Hall, Dr. Sibson, Mr. Bartleet, Dr. Falconer, Dr. Richardson, Dr. Routh, and Dr. Stewart, was appointed to consider and report on the subject. This Committee presented a report to the annual meeting; concluding with the following recommendation:—

"The Committee recommend that the collective and individual influence of the Association should be directed towards the restoration in its integrity of the Royal Warrant of 1858, and its subsequent enforcement; and also towards the discontinuance by command of the employment of acting assistant-surgeons without examination. The most obvious means for carrying out this recommendation is the adoption of memorials, by this Association and its Branches, to the Secretary for War, the Commander-in-Chief, the Secretary of State for India, and the Director-General of the Army Medical Department. But they attach the greatest importance to the thorough discussion of this question by both Houses of Parliament; and, with this view, they recommend the adoption of petitions to the legislature, and the communication to individual members of the fullest information as to a question so closely related to the welfare and efficiency of the British and Indian armies."

The report was adopted, and it was resolved by the meeting that memorials be prepared and presented in accordance with the recommendation.

The report of the Medical Benevolent Fund, presented to the annual meeting, showed that relief had been afforded in seventy-eight cases at an expense of £538; and that £140 had been paid in annuities.

The Committee appointed at the previous annual meeting to consider the desirability of establishing a Medical Provident Fund, presented a report to the meeting in 1864. It was based mainly on the advice given by Mr. Tidd Pratt, who had been consulted by the Committee. They advised that the proposal to grant annuities and to make provisions for widows and children should be abandoned, and the fund devoted entirely to payments to members during sickness; and they expressed a strong opinion that the obtaining of a charter of incorporation would both strengthen the Association and would place the Relief Fund in a favourable position. They recommended:—

"That the Relief Fund might be commenced forthwith, from the nominal date of the 1st of July last past; and that the subscribers should be eligible to receive benefit from the 1st of July 1865, after payment of their second annual contribution."

"That, in order to carry out the project, a Board of Directors should be constituted in the following manner: to wit, one director to be appointed by the Members of Council of every Branch; or, in the case of very large Branches, two or even three directors, in proportion to the numerical strength; three or five directors to be appointed by the Committee of Council on account of members not represented by Branches; a chairman to be elected by the annual meeting from the body of the Association; the committee thus formed to have power to appoint their own officers, and to determine their remuneration. They shall present the annual report at the time of the annual meeting of the Association."

After the meeting, the report of the Committee was adopted; and Dr. Richardson was appointed chairman of the Board of Directors. It was also resolved:

"That the first directorate be requested to consider carefully the question, whether it ought not to be necessary for each member of the Board, and each member entitled to vote at the election of members of the Board, to be a member of the Provident Fund."

THIRTY-FOURTH YEAR: 1865-66.

The annual meeting in 1865 was held at the College, Leamington, on August 1st, 2nd, 3rd, and 4th; Dr. Samuel J. Jeaffreson, Physician to the Leamington and Warneford Hospital, presided. The number of members of the Association was reported to be 2,368.

An Address in Medicine was delivered by Professor Stokes of Dublin; and an Address in Surgery by Professor Syme of Edinburgh.

A new feature was introduced at this meeting; viz., discussions on subjects connected with scientific medicine. A discussion on the question "Are there any Antecedent Conditions influencing the Production of Cancer?" was opened by Mr. C. H. Moore, Surgeon to the Middlesex Hospital. At the end of the discussion, the following resolution was adopted:

"That, the subject of cancer and its origin having been discussed by this Association, and there appearing to the Association to be evidence that the disease may depend upon local or social causes, the Association respectfully requests the medical officer of Her Majesty's Most Honourable Privy Council to appoint a medical and surgical commission to investigate the subject in relation to England, and to publish the results of the inquiry in his annual report."

Dr. B. W. Richardson introduced a discussion on the question "Is there any Foundation for the Hypothesis of the Origination of Disease by Zymosis or Ferment?"

Dr. Symonds opened a discussion on the question "What Measures should be advocated by the Association for securing an Improved Position to Medical Scientific Witnesses in Courts of Law?" After the discussion, it was resolved:

"That a Committee be appointed to take into consideration the present position of medical practitioners in respect to medico-legal investigations, and to confer as to the expediency of pressing on the legislature the appointment of State physicians, whose duties might embrace both medico-legal inquiries and the care of the public health; that the Committee be requested to present their report at the next annual meeting of the Association, or to report to the Committee of Council; that the Committee of Council be requested to devote a sum not exceeding £20 for the purpose of carrying out the objects of this resolution; and that the following gentlemen be requested to serve on the Committee now appointed: Dr. Jeaffreson, Sir Charles Hastings, Dr. Richardson, Dr. A. P. Stewart, Dr. T. H. Barker, Dr. Radclyffe Hall, Dr. Acland, T. Heckstall Smith, Esq., Dr. Tindal Robertson, Dr. Westall, and Dr. Harrington Tuke." The names of Dr. Symonds and Mr. H. W. Rumsey, the mover and seconder of the resolution, were also added. A grant of £10 was subsequently made to the Committee by the Committee of Council.

Dr. Tindal Robertson also opened a discussion on the question "Why are Sanitary Measures not always followed by a Decrease of Mortality?"

Papers were also read at the meeting by Mr. Jonathan Hutchinson, Mr. Furneaux Jordan, Mr. J. K. Spender, Mr. T. P. Teale, jun., Dr. Marion Sims, Dr. W. Budd, Dr. A. Fleming, Dr. J. G. Davey, Dr. Roek of Christiania, Mr. J. V. Solomon, Mr. Nunneley, Dr. Gibb, Dr. Morell Mackenzie, Dr. C. B. Radcliffe, and Dr. Hitchman. Ophthalmic instruments were shown by Mr. J. Z. Laurence; and preparations of iron, etc., by Dr. Richardson.

A proposal to obtain a charter of incorporation for the Association was brought before the annual meeting. During the year, a Subcommittee of the Committee of Council had been engaged in considering the subject, and had published a report, with a draft of the charter, in the JOURNAL. After discussion, it was resolved:

"That this meeting approves of the principle of obtaining a charter of incorporation, and that the Committee of Council be instructed to continue their efforts to obtain a charter."

The Hastings medal was awarded by the adjudicators, Dr. Acland, Dr. Paget, and Dr. Parkes, to Dr. T. Herbert Barker of Bedford, for an essay on Decolorisation and Disinfection, and was presented to him at the annual meeting.

A report was presented by the Board of Directors of the Medical Provident Society. After discussion, Dr. Richardson was re-elected Chairman, and Mr. John Clay, Vice-Chairman; and a special vote of thanks was given to Mr. Falsen, the emigrant secretary, for the valuable service which he had gratuitously rendered in the preparation of the tables of annual payments.

A proposal was made to the meeting that the BRITISH MEDICAL JOURNAL should be discontinued, and be replaced by a less expensive journal, directed with a view to increase knowledge, and to promote

better legislation on questions of public hygiene and state medicine. As an amendment to this, the formation of an Editorial Committee from the Council was suggested, to which the paid Editor should refer for counsel and assistance in especial cases of doubt or difficulty, and more especially in all cases involving questions of a personal or social character. A further amendment was moved, and was carried almost unanimously in a largely attended meeting: "That it is inexpedient to disturb the existing arrangements with regard to the JOURNAL: (a) because Dr. Markham has proved himself quite equal to the responsibilities devolving upon him; (b) because the tone and management has gone on improving; and that general support and sympathy from the members of the Association, especially of those connected with the public medical and surgical institutions of the kingdom, are alone wanted to make the JOURNAL an organ suited to carry out the principles upon which the Association is founded."

A proposal was made that a Committee should be appointed to promote the election of medical representatives in the House of Commons. It did not, however, meet with the approval of the meeting, and was withdrawn.

Dr. Ransome of Manchester, called the attention of the meeting to the importance of the Registration of Disease, and moved "That a Committee be appointed to encourage the Registration of Disease, and to devise the best means of obtaining the evidence of members upon medical questions having a practical bearing."

This motion, which was seconded by Dr. Philipson of Newcastle-on-Tyne, was unanimously adopted, and a Committee was appointed as follows: Dr. Acland, Dr. Hughes Bennett, Mr. S. Crompton, Dr. W. Farr, Dr. A. Fleming, Dr. G. Harley, Dr. Hodgson, Dr. Handfield Jones, Mr. R. C. Browne, Dr. J. E. Morgan, Dr. W. Ogle, Dr. Philipson, Dr. Ransome, Dr. Stewart, Dr. Sibson, Mr. T. Turner, Dr. E. Waters, and Dr. Eason Wilkinson. A grant of £10 was afterwards made to this Committee by the Committee of Council.

The President asked the opinion of the meeting on the question: "Whether it be consistent for physicians or surgeons of hospitals to sign, by order of the Managing Committee, a return of the time they enter on their duties each day of attendance, the time of leaving, and the amount of professional labour performed." It was unanimously decided: "That such regulation is inconsistent with the function and dignity of members of the medical profession."

Attention was drawn by Dr. Stewart to a series of biographies of living medical men, which was being published; and to the fact that, eleven years previously, the practice had been strongly condemned at a large meeting of the medical profession in London. He moved:

"That this meeting sees no reason to deviate from the strong and very general verdict of condemnation, which was pronounced in 1854 on the practice of publishing the biographies of living members of the medical profession."

The resolution was carried almost unanimously.

A memorial was again adopted for presentation to the Council of the Royal College of Surgeons, in favour of the use of voting papers in the election of members of Council. A memorial was accordingly presented, together with about fifty memorials on the same subject, obtained by the General Secretary of the Association, and signed by a large number of Fellows of the College resident in the provinces. A counter-memorial was also presented to the Council of the College. The reply of the Council of the College was that, having deliberately considered the memorial, they did not think it expedient to apply to Government for a new or supplementary charter to carry out the request contained in the memorial.

Memorials to the First Lord of the Admiralty and to the Secretary of State for War, respecting the position of medical officers, were also adopted at the annual meeting. The memorials asked for the restoration of the Warrant of 1858 in its integrity, as regarded the army; and of the Warrant of 1859, in the case of the navy. The memorials were referred to a committee, which had been appointed by Government to inquire into the condition of the army and navy medical officers.

THIRTY-FIFTH YEAR: 1866-67.

The thirty-fourth annual meeting was held in the Music Hall, Chester, on August 7th, 8th, 9th, and 10th, 1866, under the presidency of Dr. Edward Waters, Physician to the Infirmary.

A short time previously to the annual meeting, the Association was deprived by death of its most respected founder, Sir Charles Hastings. For some time, Sir Charles had suffered from serious illness; and, at a meeting of Committee of Council held on July 5th, 1866, at which he was unable to be present, he tendered his resignation of the office of Treasurer. This was accepted with much regret; and the hope was expressed that he might be able to continue the duties of President of Council. He died on July 30th, in the seventy-third year of his age.

He had been present at every meeting of the Association from its commencement; and had, in the positions of Secretary, Treasurer, and President of Council, shown an unwearied interest in its welfare. Before proceeding to the ordinary business, the members, on assembling at the annual meeting, unanimously adopted the following resolution, proposed by Dr. Jeaffreson (the retiring President), and seconded by Mr. Carden of Worcester.

"That the British Medical Association, assembled at the general meeting at Chester, desires to express its deep sorrow at the loss the Association has sustained in the death of its much loved and highly esteemed Founder, President of Council, and Treasurer, Sir Charles Hastings, who, from the period of its establishment to the present time, has, with singular courtesy and fidelity, exerted his highest powers for the promotion of the best interests of the Association; and that a copy of this resolution be forwarded by the President to the family of the late Sir Charles Hastings, with the condolence of the Association in the bereavement they have sustained."

On a subsequent day of the meeting, Professor Stokes moved, Dr. Jeaffreson seconded, and it was unanimously resolved:

"That this meeting cannot separate without taking some steps towards a lasting testimony to the memory of their much loved Founder, President, President of Council, and Treasurer, Sir Charles Hastings; and, in order to extend and perpetuate his memory, it is desirable that in future the Hastings Medal be awarded for distinguished labours in medical science to any member of the profession, of any country; and that this prize, now provided by the funds of the Association, be provided and supplemented by a sum of money, the produce of a special fund, to be established by subscription, and called the Hastings Memorial Fund; this resolution to be referred to the Council, to be carried out in detail."

Mr. George W. Hastings, the son of Sir Charles Hastings, who had for many years acted as the adviser of the Association in regard to Medical Reform, was unanimously elected an honorary member of the Association, "in recognition of his own distinguished merits, and of his father's long and invaluable services to the Association". The existing law of the Society as to the formalities to be observed in the election of honorary members was suspended for the occasion.

The number of members of the Association was stated, in the Report of Council presented at the annual meeting, to be 2,462.

An Address in Medicine was delivered by Professor Hughes Bennett of Edinburgh, and an Address in Surgery by Mr. W. Bowman of London. In his address, Dr. Bennett recommended the appointment of a Committee by the Association to investigate the value of different modes of treatment of disease. To the usual vote of thanks to Dr. Bennett for his address, the meeting unanimously added an instruction to the Committee of Council to consider the practical suggestions which he had made. The Committee of Council, at a meeting held on October 4th, granted a sum of £25 from the funds of the Association to a Committee to be appointed by and under the direction of Professor Hughes Bennett, to investigate the Action of Mercury upon Animals.

Special discussions, for which arrangements had been previously made, were held on the following subjects: The Influence of Hospitals on Health and Mortality (Dr. Sibson and Mr. Holmes); Is the Expectant Treatment to be relied on in any Form of Acute Disease? (Dr. Stewart); Are there any trustworthy Facts as to the Origin of Pyæmia? (Mr. Alfred Baker).

Papers were read by Mr. Nunneley, Mr. A. B. Steele, Mr. Zachariah Laurence, Mr. I. B. Brown, Dr. H. Dick, Dr. Broadbent, Dr. Thorburn, Dr. Henry Day, Dr. Birkbeck Nevins, and Mr. T. T. Griffith. Dr. W. Rutherford of Edinburgh exhibited and described Du Bois Reymond's Myographion; and Mr. Christopher demonstrated, in the Infirmary, the use of Desormeaux's Endoscope, as modified by Dr. Cruise.

Dr. Sibson of London was elected President of Council, and Dr. Falconer of Bath, Treasurer; each for three years, in the room of Sir Charles Hastings. Mr. Watkin Williams was re-elected Secretary; and, Sir Charles Hastings having, in a letter to Dr. Jeaffreson, expressed a hope that his remuneration might be increased, it was referred to the Committee of Council to consider how this might be done.

The subject of a Charter of Incorporation for the Association was again brought before the annual meeting. A draft of the proposed Charter had been published in the JOURNAL under the direction of the Committee of Council; and a resolution was passed, approving it and directing the Committee to obtain it. Subsequently, however, it was pointed out that the subject was one which required more discussion; and it was resolved to suspend the resolution already passed, and to refer back the Charter to the Committee of Council, with the understanding that the subject should be specially discussed at the next gene-

ral meeting of the Association. It appears, however, that no further steps were taken in the matter.

A report was presented from the Directors of the Medical Provident Society; and the Chairman and Vice-Chairman were reappointed. Before the next annual meeting, the Society was dissolved in consequence of not meeting with adequate support; all contributions to the Society, and a large proportion of the donations to the auxiliary fund, being returned to the respective contributors and donors.

The Hastings Gold Medal was presented to Mr. Furneaux Jordan of Birmingham—to whom it had been awarded by the adjudicators, Mr. Carles, Mr. Hilton, and Mr. Southam—for an essay on Shock after Surgical Operations and Injuries.

Dr. Mackesy of Waterford proposed at the annual meeting a resolution in favour of representation in Parliament being granted to the Medical Profession in its collective capacity, and of endeavouring to obtain this by means of memorials to the Government and petitions to Parliament. Objections to any proposal for the Parliamentary representation of a profession as a whole were pointed out by several members; and the resolution was withdrawn.

In consequence of the course taken by the Council of the Royal College of Surgeons regarding the use of voting-papers in the election of members of Council, the Council of the Association recommended that a deputation should be appointed to bring the subject under the notice of the Home Secretary. They also recommended that a deputation should wait upon the Home Secretary, at the proper time, in support of an amendment of the Medical Act. It was decided by the meeting to leave the appointment of those deputations in the hands of the Committee of Council.

In pursuance of the instructions thus given, the Committee of Council, through the President of Council, intimated to the General Medical Council their determination to assist them in obtaining an amendment of the Medical Act, by petitions to both Houses of Parliament, and by representations to Her Majesty's Government. The President of Council also addressed to the Secretary of State for the Home Department a letter on the same subject. The Committee of Council also appointed a Subcommittee, consisting of Dr. Waters of Chester, Dr. Simpson, and Mr. Southam of Manchester, Mr. Husband of York, and Mr. Nunneley of Leeds, to consider and report on the best mode to be followed in obtaining a fuller representation of the profession on the General Medical Council.

A report was presented from the Committee on the Registration of Disease.

Dr. Markham, who had very ably edited the JOURNAL from the commencement of 1861, in August 1866 was appointed a Medical Inspector under the Local Government Board, and in consequence thereof resigned his editorial duties. The Committee of Council appointed Mr. Ernest Hart as his successor; and at the same time nominated a "Journal Reference Committee," consisting of the President of the Association, the President-elect, the President of Council, Dr. Markham, and Dr. Stewart.

THIRTY-SIXTH YEAR: 1867-68.

The year 1867 is memorable as being the first in which the Association met in Ireland. Cordial invitations had been received at the previous annual meeting from the authorities of the University of Dublin, of the King and Queen's College of Physicians, and of the Royal College of Surgeons in Ireland; and accordingly the thirty-fifth annual meeting was held in Trinity College, on August 6th, 7th, 8th, and 9th, under the Presidency of Dr. William Stokes, Regius Professor of Physic in the University.

The number of members of the Association was stated in the Report of Council to be 1,362.

An Address in Medicine was delivered by Sir Dominic Corrigan, Bart., and an Address in Surgery by Professor R. W. Smith. A discussion on State Medicine in Great Britain was opened by Dr. H. W. Farr; and at its conclusion the following resolutions were adopted:

"That the Association desires to express its decided approval of the plan proposed by Dr. Farr; namely, the appointment of a registration medical officer in every registration district, a group of districts, with medical and surgical functions, and places itself to support that measure, by the appointment of a committee and organization for purposes of registration; and that the Committee of Council be instructed to present their early and special attention to the amendment of the existing laws touching the registration, for the end, of the Council of the National Association for the Education of School Teachers; and through the influence of this Association to promote the same improvement by legislation, by representation to individual members of Parliament, and, if need be, by deputations to her Majesty's Govern-

ment." "That a Committee be appointed, consisting of Dr. Acland, Dr. Symonds, Dr. Falconer, Dr. Lankester, Dr. Rumsey, Dr. Burke, Dr. Mapother, Dr. A. T. H. Waters, Dr. Tindal Robertson, Dr. Gairdner, Mr. Ransome, Dr. J. E. Morgan, Dr. Philipson, and Dr. Stewart, to collect information, in such manner as they may think best, on the subjects brought before the Association by Dr. Rumsey; and that the Committee of Council be empowered to make such pecuniary grant as the funds of the Association will permit towards the expenses of this inquiry."

The scientific business of the meeting was for the first time arranged in sections, of which there were four, viz., Medicine, Physiology, Surgery, and Midwifery. Various papers were read and discussed in each section.

Another innovation introduced at this meeting was the issuing of a "daily journal" of the proceedings. This course has since been followed at each annual meeting, with great convenience to the members.

The University of Dublin conferred the honorary degree of M.D. on Dr. Acland of Oxford, Mr. W. Bowman of London, Dr. Paget of Cambridge, Mr. Rumsey of Cheltenham, Dr. Sibson of London, Sir James Simpson, Bart., of Edinburgh, Mr. Syme of Edinburgh, and Mr. T. P. Teale, of Leeds. The King and Queen's College of Physicians, at a *conversazione*, conferred the honorary diploma of Fellowship on Dr. A. P. Stewart of London, Dr. J. Hughes Bennett of Edinburgh, Dr. E. Waters of Chester, Dr. R. W. Falconer of Bath, Mr. Lockhart Clarke of London, Dr. W. O. Markham of London, Dr. G. T. Gream of London, Mr. Spencer Wells of London, and Dr. Giovanni Polli of Milan. The honorary Fellowship of the Royal College of Surgeons of Dublin was conferred on Mr. Syme and Mr. Bowman.

On the recommendation of the Council, Mr. Ernest Hart was appointed the authorised representative of the Association in the International Medical Congress, about to assemble in Paris.

The Committee on the Observation and Registration of Disease presented a Report. They stated that a specimen schedule for the use of contributors to the returns had been sent to each member of the Association, and had been adopted by the medical officers of health for St. Marleybone and Birmingham, and by the Sanitary Association of Manchester and Salford, and they expressed approval of the proposal made by Dr. Farr, that a registration medical officer should be appointed in each superintendent registrar's district; they again urged the desirability of appointing, in each Branch of the Association, honorary registrars for the purpose of obtaining the evidence of members on practical medical questions. The report was adopted.

An application having been made by the Committee on Parliamentary Bills, appointed by the Metropolitan Counties Branch, for a grant towards the payment of expenses, it was agreed that the sum of £10 should be allowed, and that the Committee should be increased by one member from each Branch of the Association*.

THIRTY-SEVENTH YEAR: 1868-69.

The Association met, for the third time, at Oxford, on August 4th, 5th, 6th, and 7th, 1868, under the presidency of Dr. H. W. Acland, Regius Professor of Physic in the University. The general meetings, and the meetings of the Sections, were held in the University buildings.

The number of members of the Association was stated in the report of Council to be 3,027.

There were four Sections: Medicine, Surgery, Physiology, Midwifery, and Public Medicine.

Alterations in the laws were made, providing that it should be necessary for each candidate for membership of the Association to have the vote of three-fourths of the members present at the meeting of committee of Council or Branch Council at which he might be proposed, and also regulating the admission of honorary members to the Association.

A Committee, consisting of Dr. Sibson, Dr. Russell Reynolds, Dr. W. T. Cairdner, Mr. Southam, and Dr. William Roberts, was appointed to consider the mode of electing the General Council. The Committee reported that they had agreed on the following proposal:

"1. That the Committee of Council be empowered to propose to the first general meeting, at each annual meeting, a list of persons to serve on the Council for the ensuing year, to be chosen among the members who do not reside in London, where the Branches exist.

"2. That the number of persons so proposed shall be in the

proportion, as nearly as possible, of one to every twenty such members.

"3. That it be permitted to members residing in localities where no Branches exist to nominate (if they so choose) representatives to serve in the Council in the proportion of one to twenty of their number, in which case the Committee of Council shall not nominate for such locality."

The report was adopted, and was referred to the Committee of Council for execution.

A motion was proposed by the Rev. Dr. Bell, to the effect that the subscriptions of the members should be paid to the Treasurer and not to the General Secretary, and that lists of paid subscriptions in the JOURNAL might take the place of separate receipts, was referred to a Committee consisting of the Rev. Dr. Bell, Dr. Falconer, Dr. H. Marshall, Mr. T. T. Griffith, Mr. Ernest Hart, and Dr. S. Gibbon. They reported that the Treasurer's accounts were so admirably arranged as not to require any suggestion. They recommended that receipts for the annual subscriptions be given on a form of printed receipt issued by the General Treasurer; that the moneys received by the General Secretary from the local Secretaries should be paid direct into the Treasurer's banking account; that the counterfoils of the receipts upon all such annual subscriptions be included in the audit; and that the auditors should have before them the means of ascertaining the greatest number of JOURNALS issued during the year. It was resolved that the report of the Committee, with Dr. Bell's resolution, be referred to the Committee of Council, to carry out the recommendations if practicable.

The honorary degree of D.C.L. was conferred by the Vice-Chancellor of the University on Sir Charles Locock, Sir William Jenner, the Rev. Samuel Houghton, M.D., Dr. Gull, Mr. James Paget, Mr. John Simon, and Mr. Syme.

A new and interesting feature of the meeting of the Association was the Annual Museum. It originated in a suggestion made by Mr. Jonathan Hutchinson, viz., that an exhibition of objects invented or collected during the year—a museum which should, in fact, show "the cream of the year's progress" in medicine and surgery—could hardly fail to be of great practical value to visitors attending the meeting. The local officers of the Association at Oxford immediately took up the suggestion; and their efforts, aided by the prompt and active co-operation of Mr. Hutchinson himself, resulted in a fairly successful realisation of his scheme. The exhibition was held in one of the lecture-rooms of the University Museum. Every specimen was labelled with a clear, concise description. The objects contributed from various quarters on this occasion came under four heads:—1. Pathological Drawings, Preparations, Wax models, etc.; 2. New Instruments and Appliances in Medicine and Surgery; 3. Drugs and Articles of Medical Diet; 4. New English and Foreign Medical Works. The Museum has since proved an interesting accessory of each annual meeting.

An Address in Medicine was delivered by Dr. W. W. Gull, and an Address in Physiology by Dr. Rolleston. The Rev. Dr. Houghton, of Dublin, read a paper on the Sources of Vital and Mechanical Force derived from Food, and its Influence on Medical Practice.

Dr. Hughes Bennett read the first part of a report on the Action of Mercury on the Liver, in which he dealt with the history of the subject. In pursuance of the resolution passed at the meeting at Chester in 1866, he had formed a Committee in Edinburgh, consisting of Professor Christison, Professor Douglas Maclagan, Dr. James Rogers, Dr. W. Rutherford, Dr. T. R. Fraser, and Dr. Arthur Gamgee, for the investigations, which had special relation to the action of mercury as a chologogue. The physiological, materia medica, and medico-legal laboratories of the University had been placed at the disposal of the Committee. The question of making further pecuniary grants to the Committee was referred to the Committee of Council.

A letter having been received from the Poor-law Medical Officers' Association, asking for the co-operation of the British Medical Association, it was resolved at the annual meeting that a Committee be appointed to confer with the Council of the Poor-law Medical Officers' Association, and to co-operate in promoting the interests of Poor-law Medical Reform.*

† The Committee on State Medicine, which had been conjoined with a Committee of the Social Science Association, presented a report embodying an elaborate expression of their opinions with regard to the

requirements of sanitary legislation. The report was adopted, and a Public Health Committee was appointed.*

A report was presented by the Committee on Parliamentary Bills. It contained an account of the proceedings of the Committee with regard to the Vaccination Bill, the Artisans' Dwellings Bill, the Medical Practitioners (Colonies) Bill, the Poor Relief Bill, the Pharmacy Bill, and Baby-farming. The Committee was reappointed, with the addition of several members.†

In the spring of 1869, Mr. Ernest Hart retired from the management of the BRITISH MEDICAL JOURNAL, which he had held since 1866; and the Committee of Council appointed Mr. Jonathan Hutchinson as his successor.

At the annual meeting in 1868, it was decided to present a petition to Parliament on the subject of Secondary Education, which had been under the consideration of a Royal Commission. Accordingly, in the Parliamentary Session of 1869, a petition was presented, in which it was stated "that the Association has reason to fear that, notwithstanding the regulations of the medical corporations and universities of the United Kingdom which have been designed to secure the preliminary general education of medical students, some of them have great difficulty in maintaining a sufficient standard of acquirement, owing to the inefficient state of secondary education in the schools of the country;" and praying that Parliament would "allow but little time to elapse before such laws shall be enacted as will remedy existing defects in endowed schools, and otherwise place the secondary education of the country in a satisfactory state".

THIRTY-EIGHTH YEAR: 1869-70.

The thirty-seventh meeting of the Association was held in the Philosophical Hall, Leeds, on July 27th, 28th, 29th, and 30th, 1869. The President was Dr. Charles Chadwick, Physician to the Leeds Fever Hospital and General Infirmary. Unfortunately, he was prevented from being present during the greater part of the meeting, in consequence of a severe domestic bereavement, which evoked a feeling of deep sympathy on the part of the members. His place was taken, first by Dr. Sibson, and then by Mr. Husband, Presidents of Council. The number of members in the Association was reported to be 4,095.

Dr. Sibson retired from the office of President of Council, the three-years' term of office to which he was appointed in 1866 having expired; and Mr. W. D. Husband was elected his successor.

Mr. Watkin Williams was re-elected Secretary of the Association, and his salary was fixed at £300 *per annum*.

A proposal was made that an alteration should be made in the laws, providing that the number of elected members of Committee of Council should be increased from ten to twenty. An amendment to this was proposed, to the effect that a Committee should be appointed to consider whether the laws relating to the constitution and powers of the Committee of Council, or any other laws of the Association, required amendment. After discussion, both the motion and the amendment were rejected.

An Address in Medicine was delivered by Sir William Jenner, Bart.; an Address in Midwifery by Dr. T. E. Beatty; and an Address in Surgery by Mr. Nunneley. There were five sections, viz.: Medicine, Surgery, Midwifery, Physiology, and State Medicine.

Advantage was taken of the opportunity offered by the erection and recent occupation of the new Infirmary at Leeds, to bring before the meeting the question of the construction of hospitals, especially in its medical aspects. The subject formed the chief topic of the opening address of the President, Dr. Chadwick; and on a subsequent day, an address on the same subject was given at the invitation of the President of Council, by Captain Douglas Galton, C.B., an authority whose experience in the matter is well known. The delivery of Captain Galton's address was followed by a discussion.

A report of the Medical Benevolent Fund was presented, in which it was stated that 106 cases of distress had been relieved at a cost of £853. There are twenty-seven annuitants.

The Committee on Registration of Disease presented a report, in which it was stated that a system of registration of cases of disease occurring in public practice was still carried on at Manchester and Sal-

* The members of the Committee were: Dr. Acland, Dr. Arlidge, Mr. T. J. Dyke, Dr. Gairdner, Dr. Alfred Hill, Dr. Mapother, Dr. Maudsley, Dr. Paget, Dr. A. Ransome, Dr. Rumsey, Dr. Strange, Dr. A. T. Waters, Dr. Burke, Dr. Falconer, Mr. Ernest Hart, Dr. Lankester, Sir J. Ranald Martin, Dr. J. E. Morgan, Dr. Philipson, Dr. Tindal Robertson, Mr. Heckstall Smith, Dr. J. A. Symonds, and Dr. A. P. Stewart.

† The members added were: Sir Dominic Corrigan, Bart. (Dublin), Dr. W. Mac Cormac (Belfast), Rev. S. Houghton, M.D. (Dublin), Dr. R. Macnamara (Dublin), Dr. Aquilla Smith (Dublin), Dr. R. McDonnell (Dublin), Dr. G. H. Porter (Dublin), Dr. Mapother (Dublin), Dr. Gairdner (Glasgow), and Dr. Hughes Bennett (Edinburgh).

* The Committee consisted of the following gentlemen, with power to add to their number: Dr. Sibson, Dr. Falconer, Dr. Stewart, Dr. Heslop (Birmingham), Dr. Newnham (Wolverhampton), Mr. Fleischmann (Cheltenham), Mr. Heckstall Smith (St. Mary Cray), Mr. Ernest Hart, Mr. Edwin Chadwick, C.B., Mr. Charles Neate, M.P., Dr. Armstrong (Cork), Dr. Beatty (Dublin), Dr. T. L. Mackesy (Waterford), Dr. Macnamara, Dr. Quinan, Mr. Tuffnell, and Dr. Mapother (Dublin), Dr. Gairdner (Glasgow), and Dr. Hughes Bennett (Edinburgh).

ford, St. Marylebone, Birmingham, Newcastle-on-Tyne, and Gateshead. The Committee also called attention to a proposal made by Dr. Farr in the last report of the Registrar-General, for the appointment of a Registration Medical Officer in each Superintendent Registrar's district; and recommended that the Association should urge the importance of this proposal on the Secretary of State. The report was adopted, and it was further agreed "That it is desirable that the report of the Committee be forwarded to the Right Honourable the Chairman of the Royal Sanitary Commission; accompanied by a request that the Commission will be pleased to examine a member of this Committee, Dr. Sibson, F.R.S., or some other, on the subject, with a view to pointing out to the said Commission the great importance to the public and to science of the registration of diseases."

The Committee on the representation of the profession on the Medical Council presented a report, which was adopted. The following resolution, proposed by the Rev. Dr. Haughton, was also carried by a large majority: "That the British Medical Association are of opinion that the graduates and licentiates of the Universities and Medical Corporations should have the power of electing their own representatives into the Council."

It was objected by some members that, if the Committee were strictly bound by this resolution, it would interfere materially with the promotion of the object which they had in view—the direct representation of the profession; and subsequently the following resolution was adopted: "That the Committee on the direct representation of the profession in the Medical Council be reappointed, with the addition of the Rev. Professor Haughton and Dr. Sibson, with power to carry out the resolutions of the general meeting, or such parts of them as the Committee may be able; that Dr. E. Waters be chairman and convener."

A report was presented from the Joint Committee on State Medicine. Appended to the report was a memorial to the Secretary of State and the Chancellor of the Exchequer, praying that the inquiries of the Royal Sanitary Commission might be extended to the metropolis, to Scotland, and to Ireland, the approval of which was recommended by the Committee. The Report was received and adopted; and the Committee of Council was empowered to make such grant of money as they might see fit for defraying the necessary expenses of the Committee. The Committee was reappointed. At a subsequent meeting of the Committee of Council, the sum of £10 was voted towards defraying the expenses of the Committee.

A letter was read, which had been written by Dr. Gross to Dr. Acland, inviting the Association to send representatives to the meeting of the American Medical Association to be held the following year in Washington. It was decided by the meeting that the Committee of Council should be instructed to endeavour to obtain those representatives. The Government of the United States had deputed Dr. Norman Pinkney, of the American Navy, to attend the meeting and give a report of the proceedings. He was also appointed a delegate to the meeting by the American Medical Association. Through a misunderstanding, however, at the time of the meeting in Leeds, he did not arrive until the following week.

In compliance with a recommendation made by the Section of Physiology, it was resolved:

"That it be recommended to the Committee of Council to decide on a series of annual investigations, and to appoint a Committee to conduct such investigations, and to report at the next annual meeting; the Committee of Council to be empowered to grant such sum as may be considered necessary for carrying on the investigation and the expenses connected therewith."

In compliance with this resolution, the Committee of Council appointed Dr. Hughes Bennett, the Professor of Chemistry in the University of Edinburgh, and three Assistants, to be a Committee to investigate the effects of strychnine and of opium, and present a report to the Association. At a subsequent meeting of the Committee of Council, on December 3rd, 1880, the Therapeutical Investigation Committee was appointed, to consist of Dr. Hughes Bennett, Dr. Rogers, Dr. McAdam, Mr. Smith, and Dr. Macdonald; and it was decided that £100 be paid to the members at the conclusion of the transaction.

A report was presented from the Committee on Parliamentary Bill; but, through a misunderstanding in the course of the business, no steps were taken for its consideration or the reappointment of the Committee, which consequently lapsed. The report contained an account of the

proceedings of the Committee with respect to the Pharmacy Act Amendment Bill, the Medical Officers (Ireland) Superannuation Bill, the Medical Acts Amendment Bill, the Metropolitan Poor Act (1867) Amendment Bill, the Hospitals, etc., Rating Exemption Bill, the County Coroners' Bill, the Adulteration of Food and Drink Act Amendment Bill, the Bills for amending the Contagious Diseases Act and the Vaccination Acts, etc.

On May 15th, 1870, a special meeting was held to consider a Bill to amend the Medical Act of 1858, which had been introduced into the House of Lords by Earl de Grey and Ripon, President of the Privy Council. On the following day, a deputation of a large number of members of the Association waited on the Lord President, and submitted to his consideration a clause providing for the introduction of direct representatives of the profession into the General Medical Council.

THIRTY-NINTH YEAR: 1870-71.

The thirty-eighth annual meeting of the Association was held at Newcastle-on-Tyne, under the presidency of Dr. Edward Charlton, Senior Physician to the Infirmary. The general meetings were held in the lecture-room of the Literary and Philosophical Society. The Mayor, Sheriff, and Under-Sheriff, in their robes of office, were present at the opening meeting. This was the first time in the history of the Association that the municipal authorities had officially shown their interest in the proceedings of the Association.

The number of members of the Association was stated in the Report of Council to be 4,258.

An Address in Medicine was delivered by Dr. Sibson, who chose as his subject the influence of Rest and Ease in the Treatment of Acute Rheumatism. Dr. G. Y. Heath delivered an Address in Surgery.

There were six Sections for the reading and discussion of papers: viz. Medicine, Surgery, Physiology, Midwifery, Public Medicine, and Pathology.

The honorary degree of D.C.L. of the University of Durham was conferred on Dr. Charlton, Dr. Chadwick, Dr. Falconer, Dr. Sibson, Dr. Acland, Dr. Paget, and Dr. Stokes.

A motion for an inquiry into the constitution and operation of the Committee of Council was brought forward, but was negatived. Dr. R. Elliot also proposed the annual publication of a volume of *Transactions*, but, after some discussion, withdrew his motion.

The Committee on the Registration of Disease presented a report, in which they recommended that a deputation from this Association should seek an interview with Mr. Goschen, and that the gentlemen constituting it should be instructed to state:—1. The importance to the public and to science of such a registration of disease; 2. The success of the scheme adopted by this Association, and its employment for ten years in Manchester and Salford and St. Marylebone; for five years at Birmingham; for four years at Newcastle-on-Tyne; and for fifteen months at Preston; 3. That the method of registration proposed provides for a uniform schedule of disease; 4. That it might be performed by the resident medical officers of public institutions and by the few few medical officers, who should be fairly remunerated for their labours; 5. That the appointment of "Registration Medical Officers" would not only facilitate the registration of disease, but would greatly improve other services of State Medicine.

The report was adopted, and it was resolved that a deputation, consisting of Dr. Ross, Dr. Sibson, Dr. A. P. Stewart, Dr. Morgan, and Dr. Paget, should seek an interview with the President of the Poor Law Board, to represent to him the views of the Association with respect to the registration of disease.

The Parliamentary Bill Committee having fallen into abeyance, authority was given at the annual meeting to the Committee of Council to take steps for its reconstitution.

The following resolution, on the recommendation of the Section of Public Medicine, was adopted by the general meeting:

"That the Committee of three Associates, appointed at Oxford in 1868, for the purpose of considering the subject of Medical Relief to the Poor in Great Britain and Ireland, and of co-operating with the Poor Law Officers Association, shall be reappointed, with power to add to their number."

On October 14th, a joint meeting of the two Committees was held, at which a series of important resolutions were agreed on.

The following resolutions were adopted:—1. That the Committee of three Associates, appointed at Oxford in 1868, for the purpose of considering the subject of Medical Relief to the Poor in Great Britain and Ireland, and of co-operating with the Poor Law Officers Association, shall be reappointed, with power to add to their number. 2. That the Committee of three Associates, appointed at Oxford in 1868, for the purpose of considering the subject of Medical Relief to the Poor in Great Britain and Ireland, and of co-operating with the Poor Law Officers Association, shall be reappointed, with power to add to their number. 3. That the Committee of three Associates, appointed at Oxford in 1868, for the purpose of considering the subject of Medical Relief to the Poor in Great Britain and Ireland, and of co-operating with the Poor Law Officers Association, shall be reappointed, with power to add to their number.

Dr. Hughes Bennett having presented to the Physiological Section an interim report from the Committee on the Action of Medicines, the Committee adopted the following resolution, which also received the approval of the general meeting:

"That the Physiological Section, having heard the interim report (by Professor Bennett, the chairman) of the Committee appointed at the Leeds meeting of the British Medical Association in 1869, to investigate the antagonism of medicines, etc., and recognising the importance of the results which have been obtained both to science and to practical medicine, wish strongly to urge on the Council of the Association the desirability of aiding in every way in its power the prosecution of those investigations."

Mr. Jonathan Hutchinson having resigned the office of editor of the BRITISH MEDICAL JOURNAL, Mr. Ernest Hart was re-elected editor at a meeting of the Committee of the Council held at Newcastle during the annual meeting.

A report was presented from the Direct Representation Committee, giving an account of the proceedings with respect to the Medical Bill which had been introduced into Parliament. Its adoption having been moved, Dr. Acland moved the following amendment, which was seconded by Dr. Embleton:

"That this meeting learns with regret—1. That a Committee of this Association has refused, in the name of the Association, the offer of Mr. Forster, Vice-President of the Privy Council, to grant a Committee of the House of Commons at the next session of Parliament to inquire into the question of direct representation in the Medical Council. 2. That, in consequence of this refusal, the Government declined to proceed with the Medical Bill, on which Lord de Grey, Lord President of the Privy Council, has bestowed great labour and attention, in connection with the Council and its Executive Committee, containing representatives from England, Scotland, and Ireland. 3. That hereby much valuable time has been lost to the public in the settlement of various important measures affecting medical education, as well as the hearty co-operation of a Government truly anxious to promote the best interests of every branch of the medical profession."

After considerable discussion, the report of the Committee was adopted by a large majority, and the following resolution was also passed:

"That the following gentlemen be appointed a Medical Reform Committee, with full power to take such steps as they deem necessary to secure the adoption of the principles of medical reform advocated by the Association in any Bill which may be brought before Parliament, viz., the President of the Association, the President-elect, the President of the Council, the Treasurer, Dr. Edward Waters, Dr. Chadwick, Mr. Southam, Dr. Sibson, Dr. A. P. Stewart, Mr. W. H. Michael, the Rev. Dr. Haughton, Mr. Heckstall Smith, Dr. Davey, Dr. Hughes Bennett, and the General Secretary."

The adoption of the report of the Committee was soon afterwards followed by the secession from the Association of three of its Vice-presidents—Drs. Acland, Paget, and Stokes; also of Drs. Embleton and Rumsey; all of whom were members of the General Medical Council.

The following resolution was also passed in the Public Medicine Section, and approved by the meeting.

"That, in future sanitary legislation, the smoke-nuisance and other

important part) with great benefit, not only to the sick poor, but also to the public health and the control of pauperism; and that, in every district, medicines and other remedial appliances be provided, under inspection, at the cost of the local authorities. 3. That, in order to secure efficient treatment of the sick poor, and adequate remuneration to their medical attendants, it is important that the area and population of medical districts, and the salaries of the medical officers, be resettled (as far as practicable) on a uniform basis, by a code of regulations or general orders, having statutory force; no local exemptions being permitted without the sanction of the central authority. 4. That the position, the tenure of office, the qualifications, and the duties of the medical officers be determined and regulated by the same code of regulations; and that the salaries of the medical officers be defrayed either wholly out of the consolidated fund, or partly from that fund and partly from a county rate. 5. That a general registration of disease be instituted; and that all new cases of sickness, etc., coming under treatment at the public cost, whether in union districts and workhouses, or in public and charitable institutions, be returned every week or oftener in times of pestilence (according to an uniform system of nomenclature and record), by the resident medical officers of such institutions, and by the Poor-law medical officers, who should be fairly remunerated for this addition to their labours. 6. That the above returns of disease be collected and revised by a registration medical officer, or by a medical officer of health acting as such, in every superintendent registrar's district or group of districts, so as to constitute a register for the use of local authorities; and that a copy thereof be forwarded at stated intervals to the central authority. 7. That certain preventive duties relating to the sanitary condition of the poor be performed by the Poor-law medical officers, as deputy health-officers; and that they be paid for such sanitary duties on a scale to be determined by the central authority. 8. That, in order to rectify and prevent abuses, the medical and sanitary care of the poor in districts and workhouses be subjected to periodical inspection, either by the proposed chief officer of health, debarred from private practice, or by medical inspectors under the central authority, or by both. 9. That, in any rearrangement of sanitary organisation resulting from the inquiry of the Royal Sanitary Commission, it is desirable that the foregoing propositions should be embodied."

gaseous pollutions of the atmosphere should be dealt with by compulsory measures, to be carried into effect by authorities independent of the district, and instructed by local inspectors, unfettered by local interests and feelings."

At the annual meeting, it was announced in the report of the Council that the adjudicators of the Hastings Medal—Dr. Charlton, Dr. A. P. Stewart, and Dr. A. T. H. Waters—had not yet been able to come to a decision as to the merits of the essays presented for competition. They subsequently awarded the medal to Dr. J. Milner Fothergill, for his essay on "Digitalis: its Mode of Action and its Use."

FORTIETH YEAR: 1871-72.

The thirty-ninth annual meeting of the Association was held in Plymouth on August 8th, 9th, 10th, and 11th, 1871, under the presidency of Mr. John Whipple, Consulting-Surgeon to the South Devon and East Cornwall Hospital. The general meetings took place in the Plymouth Royal Hotel, except on one day, when a meeting was held at the Town Hall in Devonport.

Addresses of welcome were presented to the Association by the Mayors and Corporations of Plymouth and Devonport.

The number of members of the Association was reported to be 4,403.

An Address in Medicine was delivered by Dr. George Johnson, who chose as his subject "Nature and Art in the Cure of Disease." Professor Lister delivered an Address in Surgery, the subject being "The Antiseptic System of Treatment." The Sections were: Medicine; Surgery; Midwifery; and Public Medicine.

The mode of conducting the business of the Association was brought under the notice of the meeting in the report of the Council, in which an account was given of two inquiries conducted in the previous year by the Committee of Council; and it was recommended that the General Secretary should in future reside in London. In accordance with the recommendations of Council, an alteration was made in the laws, by which it was provided that "there shall be one paid Secretary, who shall reside in London, and devote his whole time to the business management of the Association and of the JOURNAL office; and it was decided that he should not be an *ex officio* member of the Council or of the Committee of Council. Mr. Watkin Williams was requested to act as Secretary up to the end of the year; and it was resolved that he be presented with £200, in place of the usual salary (£300 *per annum*). He was also thanked for his zealous services during the eight years in which he had held the office of Secretary. At a meeting of the Committee of Council, held on October 31st, Mr. Francis Fowke was elected General Secretary of the Association and Manager of the JOURNAL Office, and entered on his duties at the beginning of 1872.

Several other changes in the laws of the Association were also made. The President-elect and the Vice-Presidents were added to the Council. It was decided that candidates for the membership of the Association must make application in writing, and be recommended by three members; and that members might be admitted on and after July 1st in each year, the subscription to the end of the year being half a guinea.

A proposal was made to omit the Secretaries of Branches from the Committee of Council, and to increase the number of elected members from ten to twenty-five. This was strongly opposed, and was withdrawn. A motion that members of Council desirous of seats on the Committee of Council should make a formal declaration to that effect, and be nominated by six members of the Association, was negatived.

A report was presented at the annual meeting by the Committee on the Observation and Registration of Disease. Appended to it was an extract from the Report of the Royal Sanitary Commission, which contained arguments in favour of a registration of disease, apparently identical with that proposed by the Association. The Committee recommended that a memorial should be presented to the Government praying that provision might be made, in any measure of sanitary reform, for the registration of disease, and for allowing health-officers to make immediate use of the returns of disease before their transmission to the Government. It was resolved:

"That this Association, whilst it gratefully acknowledges the favourable reception accorded to its views on the subject of the registration of disease, both by the Government and the Royal Sanitary Commission, desires to urge the importance of making the returns accurate, and immediately so available in the localities from which they are procured; and therefore points out the need of a superior health-officer in every area of sufficient size, by whom, amongst other duties, the returns could be collected, and immediately applied to the wants of the district. Also that the Committee on the Observation and Registration of Disease be reappointed."

The Parliamentary Bills Committee, which had been recently re-constituted, presented a report of proceedings with respect to the Coro-

In April 1874, a series of recommendations were agreed to by the Committee.

An important change in the constitution of the Association was entered on this year. The question of its incorporation by Royal Charter had been contemplated; at one time, the proposal was brought seriously before the general meeting, and appeared likely to be carried out; it was, however, abandoned, in consequence of the expense that would attend the obtaining of a charter. In 1873, it was announced in the Report of Council that the difficulty had been overcome by the changes made in the Public Companies' Act, which enabled scientific associations to obtain all the benefits of a charter at a comparatively slight cost; and that the legal adviser of the Association, Mr. Upton, had taken the preliminary steps for carrying out this object. In view of the incorporation of the Association, the Council recommended a revision of the laws.

FORTY-THIRD YEAR: 1874-75.

In 1874, on August 11th, 12th, 13th, and 14th, the Association met a second time in Norwich; the President being Dr. Edward Copeman, Physician to the Norfolk and Norwich Hospital. The number of members in the Association was reported to be 5,443.

An Address in Medicine was delivered by Dr. J. Russell Reynolds of London; an Address in Surgery by Mr. William Cadge of Norwich; and an Address in Obstetric Medicine by Dr. J. Matthews Duncan, then of Edinburgh. The subject of Mr. Cadge's address was Renal and Vesical Calculus; and that of Dr. Duncan was Puerperal Pyæmia. There were four sections, viz.: Medicine, Surgery, Obstetric Medicine, and Public Medicine.

The name of Dr. Paget of Cambridge, who had seceded from the Association, as already mentioned, in 1870, and had lately rejoined it, was, in accordance with a recommendation of the Council, replaced on the list of Vice-Presidents.

The incorporation of the Association, referred to at the meeting in 1873, was carried into effect in 1874. At Norwich, a special meeting was held on one of the days to consider the subject. Mr. Upton, the Solicitor to the Association, explained that, under the Joint Stock Companies Acts of 1862 and 1867, a body could be incorporated by license of the Board of Trade. This had a great advantage in point of expense over incorporation by Royal Charter; and while alterations in the Articles of Association under a charter could only be made through an expensive proceeding, an alteration under the Board of Trade could be made in a very simple way, and the by-laws could be altered at any time. He pointed out that incorporation was necessary to protect the property of the Association, and to give it power to recover debts. The liability of the members would be limited to one guinea annually. It was resolved: "That it is expedient that the members of the British Medical Association be incorporated, pursuant to the provisions of the Joint Stock Companies' Acts (1862 and 1867)." "That the Memorandum and Articles, as prepared and explained by the Solicitor, be approved and adopted; and that the Association be incorporated pursuant to the terms and provisions thereof." "That every member of the unincorporated body be recommended to become a member of the corporate body, and that the Secretary be requested to obtain forthwith the necessary assent from members for that purpose."

A code of by-laws had also been prepared, but, as it was found that some of them were not quite in accordance with the present rules of the Association, the consideration of them was therefore deferred.

In consequence of the Articles of Association requiring that the first general meeting of the incorporated Association should be held before the end of 1874, a meeting was held at Birmingham on November 4th, under the presidency of Mr. Southam, President of Council. The days for the next annual meeting were fixed; and the consideration of the by-laws was referred to the Committee of Council. In accordance therewith, the Committee of Council appointed a Sub-Committee consisting of Mr. Southam (President), Dr. Falconer (Treasurer), Dr. Steele, Mr. Husband, Mr. Wheelhouse, and Mr. Nicholson, to consider and form the by-laws.

A recommendation was made in the report of Council presented at the annual meeting, that £200 should be applied to the purpose of making grants in aid of researches in medical science and collateral subjects; and that a Committee should be appointed to advise the Committee of Council as to the distribution of the proposed grants. The proposal was approved by the meeting; and the Committee of

Council was authorised to appoint a Grant-in-aid Committee in accordance with the recommendation of the Council. In consequence of this instruction, the Committee of Council, at a meeting held on November 4th, decided that the Committee for reporting on scientific grants should consist of ten members; viz. five members of the Committee of Council and five non-members, with the President of Council and Treasurer as *ex officio* members. The members of the Committee of Council appointed were Mr. Wheelhouse, Mr. A. Baker, Dr. Wade, Mr. Callender, and Dr. Sibson. To these were added Dr. Charlton Bastian, Dr. Michael Foster, Dr. Sharpey, Dr. Wilks, and Mr. Ernest Hart. Dr. Sibson was appointed Chairman, and Mr. Hart Secretary.

Dr. Hughes Bennett laid before the meeting a paper giving the results of the researches carried on by the Committee appointed to investigate the Antagonism of Medicines. It embraced the results of experimental inquiries extending over five years, into the antagonistic properties existing between—1. hydrate of chloral and strychnia; 2. sulphate of atropia and Calabar bean; 3. hydrate of chloral and Calabar bean; 4. hydrochlorate and meconate of morphia and Calabar bean; 5. sulphate of atropia and meconate of morphia; 6. meconate of morphia and theine; 7. meconate of morphia and caffeine; 8. meconate of morphia and guaranine; 9. meconate of morphia and infusion of tea; 10. meconate of morphia and infusion of coffee; 11. extract of Calabar bean and strychnia; 12. hydrate of bromal and atropia. This report was published in full in the second volume of the BRITISH MEDICAL JOURNAL for 1874.

The Medical Reform Committee, in reporting their proceedings during the past year, stated that, although in the existing circumstances it had not been thought advisable to press forward the Bill of the Association in Parliament, the measure had been prepared. The report was approved, and the Committee was reappointed, Dr. Wade and Dr. Balthazar Foster being substituted for Dr. Charlton and Mr. Nunneley, both deceased; and Dr. Philipson of Newcastle and Dr. Copeman of Norwich being added to the Committee. It was also decided that copies of the report should be sent to the members of the Medical Council and of the Councils of the licensing bodies.

The Committee on Registration of Disease presented a report at the annual meeting, in which they called attention to a proposal for the compulsory notification of all cases of infectious diseases, made first by the Manchester and Salford Sanitary Association, and approved by the joint Committee on State Medicine. They also recommended that, further, medical officers should be paid at the rate of twopence or threepence for each case recorded, or should receive a sum varying from two to four guineas *per annum* in consideration of satisfactory weekly returns of new cases of disease, such as might be deemed needful by the Local Government Board.

The Joint Committee on the State Medicine reported that a large number of circulars had been issued in order to obtain information as to the working of the Public Health Act of 1872, and that much valuable information had been received; but that there had not been sufficient time to arrange them and found resolutions on them. The report was adopted, and the Committee was re-appointed.

The Parliamentary Bills Committee presented a report of their proceedings with regard to the proposed scheme of the Obstetrical Society for the education and examination of midwives, the condition of the medical officers of the army and navy, the Sanitary Acts Amendment Bill, the Registration of Births and Deaths Bill, and the Irish Public Health Bill. With regard to the last-named measure, the Committee had corporated with the Joint Committee representing the Dublin Medical Colleges and Corporations, and the Sanitary Associations of Dublin. The report was adopted, and the Committee were thanked and reappointed.

The Committee on Qualification in State Medicine presented a report embodying certain recommendations. It appeared, however, that the report had not been finally adopted by the Committee as a whole; and in place of being adopted, it was referred to the Committee of Council, who appointed a Subcommittee, consisting of Dr. A. Carpenter, Mr. Callender, and Mr. Wheelhouse, to reconsider the matter. In accordance with the advice of the Subcommittee, they adopted recommendations comprising the suggestion, that every corporation legally entitled to grant negotiable qualifications should also have power to grant a diploma in State Medicine, capable of being registered under the Medical Act; the qualification to include an adequate knowledge both of legal medicine or medical jurisprudence, and of preventive medicine or public hygiene, comprehending medical police, and the management of medical institutions supported by national or local taxation. It was also recommended that the General Medical Council should be empowered and required to prepare a scheme for an examination in State Medicine. The scheme to

Michael, Dr. J. T. Arlidge, Mr. Robert Ceely, Dr. R. MacDonnell, Dr. H. W. Rumsey, and Dr. J. W. Tripe (Secretary); with power to add to their number. The following gentlemen were afterwards added to the Committee: Mr. John Liddle, Dr. T. W. Grimshaw, Dr. W. T. Gairdner, Dr. Corfield, Dr. J. W. Moore, Mr. T. J. Dyke, Dr. F. T. Bond, Dr. W. S. Trench, Dr. R. Elliot, and Dr. M. W. Taylor.

specify: (a.) The number, qualifications, duration in office, duties, and remuneration of the examiners; (b.) The subjects of examination; (c.) The nature and methods of examination; (d.) The forms of diploma or certificate to be granted by any board of qualified examiners; (e.) The fees, if any, to be paid by candidates for examination; (f.) The places and times for holding the examinations; also that each licensing body should be empowered to grant the diploma in State Medicine to qualified medical men now holding office of a certain standing, and to medical officers of the army and navy after a practical examination.

It was announced at the annual meeting, that Dr. Seguin of New York had been appointed a delegate to England and France, to press for the appointment of a Commission, and to prepare an uniform plan of instruments, scales, and tables of observation. The subject was referred to the Committee of Council.

During the meeting in Norwich, M. Magnan of Paris performed experiments on two dogs, for the purpose of bringing before the profession in England the results at which he had arrived from his researches on the action of alcohol and absinthe. In consequence, proceedings were instituted at Norwich by the Royal Society for the Prevention of Cruelty to Animals against M. Magnan, and Messrs. H. S. Robinson, J. B. Pitt, R. W. White, and H. Turner, members of the Local Committee, for that they "did unlawfully ill-treat, abuse, and torture certain animals—to wit, two dogs—contrary to the statute." The magistrates dismissed the case, as it was not proved that the English defendants took any part in the experiments; but they considered the case a proper one for the Society to prosecute. The matter was subsequently brought by the Local Executive Committee at Norwich before the Committee of Council, by whom the following resolution was passed at a meeting held on January 14th, 1875:

"That the Committee of Council sympathises with the honorary secretaries of the Norwich meeting, and approves the action they have taken with respect to the recent discussion on Vivisection; that it desires to congratulate those gentlemen on the result of the trial arising out of that discussion; and recommends that the expense to which they have been put in defending themselves be paid out of the funds of the Association."

FIFTEENTH YEAR: 1875-76.

The forty-third annual meeting of the Association was held in Edinburgh, on August 3rd, 4th, 5th, and 6th, 1875, under the presidency of Sir Robert Christison, Bart., M.D., Professor of Materia Medica in the University. This was the second visit of the Association to Edinburgh, the first having taken place in 1838.

The number of members was reported to be 6,112.

At the first general meeting, which was held in the Free Church Assembly Rooms, the magistrates and Town Council of Edinburgh were present in their robes of office; and the senior magistrate (Hailie Tawse), in the absence of the Lord Provost, welcomed the Association to Edinburgh.

An Address in Medicine was delivered by Dr. Warburton Hughes, who took as his subject "The Ancient and Modern Practice of Medicine." Professor Spence delivered an Address in Surgery; and Professor Rutherford an Address in Physiology. There were six Sections: Medicine; Surgery; Obstetric Medicine; Public Medicine; Psychology; and Physiology.

A new code of by-laws, in accordance with the Articles of Association, was adopted. They consisted of the old laws of the Association, with a few alterations. The incorporation of the Association also rendered necessary the re-election of the Vice-President, which was accordingly done.

Dr. Falcner, who had been Treasurer of the Association since 1865, was elected President of Council, in the room of Mr. Southam, whose term of office had expired; and Mr. Hubbard was elected Treasurer, in the room of Dr. Falcner. Mr. Southam and Dr. Falcner were thanked for their past valuable services, and were elected Vice-Presidents of the Association. Under the new laws, the tenure of the office of Treasurer was made triennial, instead of being permanent; and provision was made that the retiring Treasurer should become a Vice-president.

At the presentation of a prize of £20, by Dr. Thackeray of Chester, in the early days of the Association, there had been no lectures in which a special notice had been placed, and a large sum of money at the disposal of the Association for the promotion of medical knowledge. In 1874, however, Dr. A. P. Stewart, on his retirement from the office of Lecturer in Natural History to the Metropolitan Counties Branch, after having laboured many years, was presented with a sum of £100, raised by subscription, in recognition of his valuable services to the Association

as well as to his Branch. Of the above sum, he very generously presented £400 to the Committee of Council, on behalf of the Association, the interest to be applied, under certain regulations, as a fund in aid of investigations on the origin, spread, and prevention of epidemic diseases. The Committee of Council accepted Dr. Stewart's generous donation; and the following resolution was passed by the general meeting.

"That the best thanks of the Association are due, and are hereby given, to Dr. Stewart for his generous and disinterested grant of £400; and the Association trusts that Dr. Stewart may long be spared to assist in the consideration of its disposal."

Mr. Samuel Wood, of Shrewsbury, also placed at the disposal of the Association a sum of £25, for the best essay on Pyæmia. The thanks of the Association were given to Mr. Wood for his liberal donation. Unfortunately, no essay worthy of a prize has been presented; and the sum was some years ago returned to Mr. Wood.

The inadequate remuneration of civil practitioners acting temporarily as army surgeons having been brought under the notice of the Committee of Council by the Aberdeen Branch, reference was made to the subject in the report of Council; and the general meeting adopted a resolution, empowering and requesting the President to sign a petition to the Secretary of State for War calling his attention to the matter.

The question of the desirability of admitting ladies as members of the Association was brought before the Association by Mr. Oliver Pemberton, who moved:

"That it be an instruction to the Secretary, between now and the next annual meeting, to issue a circular addressed to every member of the Association, requesting an opinion, 'yes' or 'no,' as to the admission of female practitioners to membership."

After some discussion, the motion was carried.

A report was presented from the Committee on Qualifications in State Medicine, embodying the recommendations agreed to by the Committee of Council in the previous year. The report was received and adopted, and it was directed that copies should be sent to the members of the General Medical Council.

The joint Committee on State Medicine presented a report, commenting on the Public Health Bill which had been brought into Parliament. The report also expressed regret that Dr. Rumsey, who for forty years had taken an active part in the progress of sanitary science, had been disabled by paralysis. The report was unanimously adopted.

A report from the Scientific Grants Committee was presented, received, and adopted. Grants to the amount of £165 had been made, of which, however, only £54 12s. had as yet been expended. In accordance with a recommendation of the Committee, a grant of £30 was made to Professor Rutherford and M. Vignal for their researches on the Biliary Secretion, an account of which was given by Dr. Rutherford in an Address on Physiology. A grant of £300 was made for the year 1876.

The Parliamentary Bills Committee presented a report of its proceedings, with reference to the Artisans' Timeings Bill, the Adulteration Act Amendment Bill, and the Public Health Acts Amendment Bill. It also expressed satisfaction that a Royal Warrant had been issued, granting to the medical officers of the navy a considerable number of the concessions as to rank, pay, and retirement, which had been laid before the Committee. Representations in reference to the grievances of the army medical officers had been laid before the Secretary of State for War. The report was adopted.

The admission of legislative restrictions for Habitual Drunkards was brought before the Association in the Report of Council. The subject had been considered by the Branches; and at a meeting of the Committee of Council on July 13th a resolution from the Metropolitan Counties Branch, calling attention to the subject, had been taken into consideration, and a Committee, consisting of Dr. Stewart, Mr. W. C. Garman, Dr. Farquharson, Dr. Bodington, Mr. Nicholson, Dr. A. Carpenter, and Dr. B. Foster, were appointed. The subject was also discussed in the Section of Public Medicine, where the following resolution was passed.

"That excessive intemperance is in many cases a symptom of a special form of insanity, which requires special treatment with a view—1, to the recovery of those affected; and 2, to the protection and advantage of them and society; that, in the present state of the law, such treatment is not attainable; and that it is desirable that legal provisions be made to render it attainable."

This resolution was laid before the general meeting, and it was resolved:

"That the Association desires to afford assistance in and of the views expressed in the foregoing resolution, and that the resolution be referred to

the Committee on Habitual Drunkards recently appointed by the Committee of Council."

The following resolution, passed in the Section of Public Medicine, with reference to the Medical Relief of the Poor in Scotland, was laid before the general meeting.

"That, in the opinion of this Section, the interests of the sick poor in Scotland would be furthered, and the system of parochial relief would be placed on a more satisfactory footing, if the following measures of reform were adopted universally throughout Scotland; namely, that the cost of medicines be supplied by every parochial board, exclusive of the salary of the medical officer; that medical officers be removable from office by the Board of Supervision only; that the parochial board be required to superannuate such officers; and that the parliamentary grant in aid of medical relief be placed on the same footing as in England and Wales."

It was resolved by the meeting:

"That Sir Robert Christison, Dr. W. T. Gairdner (Glasgow), Dr. Matthews Duncan (Edinburgh), Mr. Ernest Hart, Dr. Strachan (Dollart), Dr. Joseph Rogers (London), Dr. Littlejohn (Edinburgh), Dr. Mackay (Elgin), and Dr. Alexander Ogston (Aberdeen), be a Committee to carry out the resolution of the Public Medicine Section relating to the system of poor relief in Scotland, with power to add to their number; and that Dr. Matthews Duncan be appointed chairman."

A resolution passed by the Section of Surgery, with reference to anæsthetic agents, was presented to the general meeting. It was as follows:

"That this Section is of opinion that it is desirable that a Committee be appointed to inquire into, and report upon, the use in surgery of various anæsthetic agents, and mixtures of such agents; that it be part of the object of such Committee to collect and summarise the evidence of British practitioners of surgery and medicine, as to the relative advantages of chloroform, ether, nitrous oxide gas, and other agents, and to carry on suitable experimental investigations; that Professor Lister of Edinburgh; Professor Pirrie of Aberdeen; Mr. Annandale, Dr. Thomas Keith, Dr. J. Duncan, Dr. McKendrick, and Dr. Crum-Brown, of Edinburgh; Dr. Burdon Sanderson, Mr. Spencer Wells, Mr. Ernest Hart, and Mr. Clover, of London; Dr. MacDonnell and Mr. J. Morgan, of Dublin, be requested to act as a Committee for this purpose, with power to add to their number."

It was decided by the meeting that, in accordance with the resolution, a Committee should be appointed, consisting of the above-named gentlemen, with power to add to their number; and that application for a grant should be referred to the Scientific Grants Committee.

No special report was presented from the Medical Reform Committee; but a paragraph in the report of the Council stated that, in accordance with their previous policy, they had refrained from urging the Bill of the Association on the Legislature, in order not to trammel the laudable efforts of the English corporations towards the formation of a conjoint examining board.

Forty-fifth Year: 1876-77.

The forty-fourth annual meeting of the Association was held at the Cutlers' Hall, Sheffield, on August 1st, 2nd, 3rd, and 4th, 1876, under the presidency of Dr. Martin de Bartolomé, Physician to the General Infirmary of that town. It had been decided at the meeting in Edinburgh that the next annual meeting should be held in Brighton; and Sir J. Cordy Burrows was appointed President-elect. Local difficulties, however, arose in the way of carrying out the necessary arrangements; and the death of the President-elect in March 1876 led the Council of the South-Eastern Branch to suggest to the Committee of Council that it was inexpedient to hold the annual meeting in Brighton. This suggestion was brought before the Committee of Council in April; and at the same time an invitation was received from Sheffield, which was accepted.

The number of members of the Association was stated in the Report of Council to be nearly 7,000.

The Address in Medicine was delivered by Dr. E. H. Sieveking; an Address in Surgery by Mr. W. F. Favell; and an Address in Public Medicine by Dr. Alfred Carpenter. The Sections were four: Medicine, Surgery, Obstetric Medicine, and Public Medicine.

The Committee on the Registration of Disease presented a report, in which the opinion was expressed that any measure for the registration of all cases of infectious disease must be compulsory in order to be effective. Reference was made to the question whether the duty of reporting the case should rest with the householder or with the medical attendant; and the Committee concluded by expressing the opinion that the proper person to make the returns to the sanitary authority should in the first instance be the person in charge of the case, or the householder, and not the medical attendant upon the case. The report was adopted.

The Medical Reform Committee presented a report in which they referred with regret to the fact that, in filling three vacancies among the Crown representatives in the General Medical Council, neither the Association nor the great body of General Practitioners had been recognised. They regretted also that the Medical Council had not succeeded in the establishment of conjoint examining boards. They had not helped legislation during the past season, but had been able to conciliate the support of members on both sides of the House to the Bill of the Association; and they would consider the advisability of introducing it in the next session of Parliament. The report was approved, and the Committee was reappointed.

A Report was presented from the Parliamentary Bills Committee, giving an account of its proceedings, with regard especially to the Poor-law Amendment Bill (Scotland). The report was adopted, and the Committee reappointed.

The Scientific Grants Committee presented a Report, and were reappointed; and it was resolved to appropriate a sum not exceeding £300 to grants.

The Committee on Legislative Restrictions for Habitual Drunkards reported that they had held several meetings, but hitherto had not been able to take any decided action. They had found that mistaken notions prevailed as to the objects to be attained, and that there was a suspicion of any action likely to interfere with the liberty of the subject. To meet this difficulty, they had obtained the co-operation of the Social Science Association, and had prepared, for signature by the general public as well as by the medical profession, a petition for the passing of a measure for the control and cure of habitual drunkards. The motion for the adoption of the report was carried, after some opposition, by a large majority, and the Committee were reappointed.

A resolution was forwarded by members of the East York and North Lincoln Branch, urging the Association to take into consideration the desirability of prosecuting illegal practitioners, and also stating that it was desirable to form committees of defence, to take the necessary steps to prevent unqualified persons from practising, and to protect the public from illegal practitioners. The resolution was referred to the Committee of Council, with power to carry out the suggestion contained therein. In accordance with this instruction, the Committee of Council, at their meeting in October 1876, appointed a sub-committee to consider the matter, consisting of Dr. Falconer (President of Council), Dr. Chadwick, Dr. E. Waters, Mr. Nicholson, Dr. Bartolomé, Dr. A. Carpenter, Dr. Parsons, Mr. Manby, and Dr. Foster, with power to add to their number.

The Joint Committee on State Medicine presented a report of the proceedings of the past year. The report was adopted, and the committee was reappointed.

No invitation having been received for the meeting in 1877, the Committee of Council were authorised to make the necessary arrangements for the meeting, and to appoint a president-elect. At a meeting of the Committee, held on November 8th, an invitation was received from Manchester. It was accepted, and Dr. Eason Wilkinson was nominated as the future president.

Forty-sixth Year: 1877-78.

The forty-fifth annual meeting of the Association was held at Manchester, on August 7th, 8th, 9th, and 10th, 1877, under the presidency of Dr. Eason Wilkinson, Senior Physician to the Manchester Royal Infirmary. The first meeting was held in the Concert Hall, and the subsequent meetings in Owens College.

The number of members was reported to be 7,147.

An Address in Medicine was given by Dr. W. Roberts of Manchester, the subject being "The Doctrine of Contagium Vivum, and its Application to Medicine;" an Address in Surgery by Mr. Spencer Wells on "The Past, Present, and Future of Scientific Surgery;" and an Address in Obstetric Medicine, by Dr. Robert Barnes, on "The Scientific and Political Position of Obstetrics." There were six Sections: Medicine; Surgery; Obstetric Medicine; Public Medicine; Physiology; and Psychology. Discussions on certain special subjects were held in several of the Sections, viz.: in Medicine—Aortic Aneurysms, and the Treatment of Pleuritic Effusions; in Surgery—Excision of the Knee, the Treatment of Stricture of the Urethra, and Antiseptic Surgery; in Obstetric Medicine—Transfusion of Blood; in Public Medicine—Hospital Out-patient Reform, and the Contagious Diseases Acts; in Psy-

* The following were the members of the Committee: Dr. J. T. Arlidge, Dr. E. Ballard, Dr. F. T. Bond, Dr. W. M. Burke, Dr. Corfield, Mr. David Davies, Mr. T. J. Dyke, Dr. Falconer, Dr. W. T. Gairdner, Mr. Ernest Hart, Mr. A. Haviland, Dr. James Lewis, Mr. J. Liddle, Dr. H. F. Parsons, Dr. G. H. Phillips, Dr. A. Ransome, Dr. M. K. Robinson, Dr. Joseph Rogers, Mr. Heckstall Smith, Dr. J. W. Tripe, Dr. N. Tyacke, Dr. E. Wilson, and Dr. A. P. Stewart (Secretary); with power to add to their number.

An amendment to this resolution was passed :

"That it is necessary, for the successful transaction of the business of the Association, that the publication of reports of meetings of the Committee of Council should be left to the discretion of the Committee of Council."

This amendment was carried by a very large majority ; the members thus expressing their confidence that the Committee would act in the manner most beneficial to the Association.

Another question brought before the special meeting was that of the admissibility of ladies as members of the Association. Some years previously, two ladies holding medical degrees had been admitted to this Association, and had attended the annual meetings and read papers. Against this, several members had remonstrated ; and it was resolved that the subject should be discussed in the Association. At the special meeting it was resolved :

"That the Committee of Council be instructed to take the opinion of counsel as to the rights of the lady members, and to report to the annual meeting." At the meeting of Committee of Council on April 17th, the subject was referred to a Sub-committee, consisting of the President of Council (Dr. Falconer), Dr. Chadwick, Dr. Sieveking, Dr. Wade, Dr. Parsons, Dr. Borchardt, and Dr. Holman, to whom was given power to act in the matter. At the request of this Sub-committee, a series of questions as to the rights of lady members and the forms of the Association with regard to them was prepared by Mr. F. A. Bosanquet, Worcester ; and the questions were submitted to Mr. J. P. Benjamin, Q.C., and Mr. Bosanquet. The questions, with the answers, were embodied in a report presented to the Committee of Council on July 10th ; and notice was given of an addition to the law regulating the admission of members, limiting the form of election to "male members."

In May 1878, another prize was placed at the disposal of the Association, by the liberality of an old member, Mr. Richard Middlemore of Birmingham, who offered £300 for the purpose of founding a prize "to be awarded every three years for the best essay on the scientific and practical value of the improvements which have taken place in ophthalmic medicine and surgery."

FORTY-SEVENTH YEAR: 1878-79.

The Association met, for the third time, in Bath, on August 6th, 7th, 8th, and 9th, 1878: Dr. R. Wilbraham Falconer, Consulting Physician to the Royal United Hospital, being President. The number of members in the Association was 7,536.

In consequence of the recent sudden death of the esteemed President, Dr. Eason Wilkinson, the chair was taken at the opening of the meeting by the Treasurer, Mr. Husband, who read a brief Address which Dr. Wilkinson had prepared for the occasion. The following resolution, moved by Dr. A. P. Stewart, and seconded by Dr. Borchardt, was unanimously adopted: "That this meeting, deploring the sudden removal by death of the much esteemed President of the British Medical Association, Dr. Eason Wilkinson, desires to record its admiration of his constant devotion during many years to the interests of the Association; of his sense of professional honour; of his unswerving and unostentatious philanthropy; of the exemplary purity and sweetness of his professional character, which endears his memory to a multitude of sorrowing friends; and of the kindness and munificent hospitality shown during the late annual meeting at Manchester by himself and his family, to whom not the meeting only, but the entire Association, with grateful remembrance of the past, offers its deepest sympathy in their hour of sorrow."

An Address in Medicine was delivered by Dr. H. F. A. Goodridge, the subject being the Pathology of Fever. Mr. C. G. Wheelhouse gave an Address in Surgery, being a Review of the Progress of Surgery ; and Professor Douglas MacLagan delivered an Address in Forensic Medicine, treating the subject from a Scotch point of view. There were five sections: Medicine, Surgery, Obstetric Medicine, Public Medicine, and Physiology. Special discussions took place in the section of Medicine, on the Differential Diagnosis and Treatment of the Modes of Intestinal Obstruction ; and in the section of Obstetric Medicine, on the Evils of Practices intended to act as Checks on Population.

Dr. Alfred Carpenter of Croydon was elected President of Council for the next three years, in the room of Dr. Falconer, whose term of office had expired ; and Mr. Husband was re-elected Treasurer.

One of the meetings was made special for the purpose of discussing certain proposed changes in the laws. The first had reference to the admissibility of ladies as members of the Association. Dr. Wade moved, and Dr. Stewart seconded, as a new Article of Association, that "No female shall be eligible for election as a member of the Association". This was opposed by Dr. Norman Kerr, Dr. Borchardt, and Mrs. Garrett-Anderson, and supported by Mr. Sissons, Mr. Hus-

band, and Mr. Barrow. It was carried by a large majority ; and an addition was made to the by-law respecting the admission of members by the Committee of Council or by any Branch Council, to the effect that "the power of such Branch Council shall only extend to the election of male persons".

It had been pointed out by the counsel consulted in the matter of the admission of ladies, that the election of members in the interval between the incorporation of the Association and the adoption of the new by-laws was not legal—there being no power of election. Among the persons thus illegally elected was a lady. It being necessary that the election should be legally made, the Association authorised the Committee of Council "to pass a resolution declaring elected all male persons who were elected by it or by any Branch Council during the interval between the incorporation of the Association and the 3rd of August, 1875, but whose election was invalid on account of there being no provision then in existence for the election of members." In accordance with this resolution, the Committee of Council, at a meeting on October 9th, formally elected the 710 male persons who had been irregularly admitted in the interval above mentioned.

A series of regulations for the Medal for Distinguished Merit was adopted.

The Joint Committee on State Medicine presented a report at the annual meeting, and was reappointed. The Medical Reform Committee also presented a report, and was reappointed.

The Committee on Legislation for Habitual Drunkards reported that Dr. Cameron's Bill, with the compulsory clauses omitted, had been again brought into Parliament ; and, having passed the second reading, was in Committee. The report was adopted, and the Committee was reappointed.*

The Bill referred to was not proceeded with, but was reintroduced early in the session of 1879, and on July 3rd received the Royal assent, under the title of "The Habitual Drunkards' Act".

The Committee on Hospital Out-Patient Reform presented a report, to which was appended a report of the Subcommittee on the working of the Provident Dispensary System in Manchester. The report was adopted, and the Committee was reappointed.†

A report was presented from the Scientific Grants Committee, showing that the grants made during the year had amounted to £413 15s., of which £77 17s. would be returned. The sum granted included a special grant of £100 for an investigation of Rabies and Hydrophobia. The Committee asked for a further grant of £300 for the coming year. It was resolved that the report be received and adopted, and that the Committee be reappointed.‡

The Parliamentary Bills Committee presented a report of their proceedings with reference to Coroners' Courts, the Army Medical Department, the Factory Acts Amendment Bill, the Public Health (Ireland) Bill, the Dental Practitioners' Bill. The Committee were reappointed, with power to add to their number.

In December, 1878, on the occurrence of the lamented death of the Princess Alice of Hesse, the President of Council sent a letter of condolence, in the name of the Association, to Her Majesty the Queen. This action received the approval of the Committee of Council at their next meeting.

FORTY-EIGHTH YEAR: 1879-80.

In August, 1879, the British Medical Association visited Ireland for the second time ; the fifty-seventh annual meeting being held in Queen's College, Cork, on August 5th, 6th, 7th, and 8th, under the presidency of Dr. Denis C. O'Connor, Professor of the Practice of Medicine in the College.

The number of members was reported to be 7,810.

An Address in Medicine was delivered by Dr. Alfred Hudson, of Dublin, who took as his subject Laennec's Labours and their Influence in Medicine. Mr. W. S. Savory delivered an Address in Surgery, on the Prevention of Blood-poisoning in the Practice of Surgery ; and Dr. Andrew Fergus of Glasgow gave an Address on Public Medicine. The Sections were : Medicine, Surgery, Obstetric

* The Committee consisted of Dr. A. Carpenter, Mr. S. Alford, Dr. Blandford Mr. W. Cadge, Dr. Eastwood, Dr. B. Foster, Mr. Garman, Mr. J. Gay, Mr. Holt-house, Mr. C. Macnamara, Dr. H. Morris, Mr. G. W. Mould, Mr. R. H. B. Nicholson, Dr. A. P. Stewart, Dr. Farquharson, and Dr. Vinen ; with power to add to their number.

† The Committee consisted of the following members: Dr. Borchardt, Mr. Wickham Barnes, Dr. Brierley, Dr. J. Haddon, Mr. Nelson Hardy, Mr. T. Holmes, Dr. R. J. Lee, Dr. A. Meadows, Dr. J. Rogers, Dr. A. E. Sansom, and Dr. A. P. Stewart ; with power to add to their number.

‡ The members of the Committee were: Mr. G. W. Callender, F.R.S., Dr. Falconer, Mr. Husband, Mr. A. Baker, Dr. Lauder Brunton, F.R.S., Dr. Chadwick, Mr. Curling, Dr. M. Foster, F.R.S., Dr. R. McDonnell, F.R.S., Dr. W. Rutherford, F.R.S., Dr. Burdon Sanderson, F.R.S., Dr. W. Sharpey, F.R.S., Dr. Sieveking, Dr. A. P. Stewart, Dr. Wade, Dr. E. Waters, Mr. C. G. Wheelhouse, Dr. S. Wilks, F.R.S., and Mr. Ernest Hart ; with power to add to their number.

Medicine, Public Medicine, Psychology, and Physiology. A Subsection of Dermatology was appended to the Section of Medicine. To the Section of Surgery was appended a Subsection of Ophthalmology and Otolaryngology. Special discussions were held as follows: In the Section of Medicine; the Value of Mountain Air on the Treatment of Phthisis; Alcohol in Fever; and Tracheotomy in Croup; in the Subsection of Dermatology; Lupus, its Varieties and Treatment; in the Section of Surgery, Subcutaneous Osteotomy, the Diagnosis and Treatment of Joint-Diseases, and the Treatment of Aneurysm by Electrolysis; in the Subsection of Ophthalmology, the Treatment of Glaucoma, Examination for Colour-Blindness, the Use of Eserine, Pilocarpine, etc., the Treatment of Detached Retina, Tobacco and Alcoholic Amblyopia, and Diphtheritic Ophthalmia; in Otolaryngology, the Therapeutic Value of Intratympanic Injections of Medicated Fluids in Catarrhal Affections of the Middle Ear, and Tinnitus Aurium; in the Section of Obstetric Medicine, Intra-uterine Medication, and Hemorrhage from the Genital Organs during Pregnancy and Parturition; in the Section of Public Medicine, the Influence of Drinking Water in originating or propagating Enteric Fever, Diarrhoea, Diphtheria, and Scarletina; and the manner of dealing with Convalescents from Acute Infectious Diseases, so as to limit the spread of disease; in the Section of Psychology, the Prevention of Insanity; in the Section of Physiology, the Physiology of Inhibition, and the influence of Sight on Nutrition.

The Gold Medal for Distinguished Merit had been awarded by the Committee of Council to Surgeon-Major James Reynolds, V.C., in consideration of the extraordinary professional services rendered by him at Rorke's Drift, Zululand, on January 22nd and 23rd, 1879. In the absence of Surgeon-Major Reynolds, the medal was received for him by Surgeon-General Crawford, the head of the Medical Department of the Army in Ireland, who had been deputed by the Director-General, Sir William Muir, to attend the meeting for the purpose. Surgeon-Major Reynolds was afterwards, on the proposal of the Committee of Council, entertained at a dinner, which was attended by a large number of members, on November 26th.

A report was presented from the Medical Committee. It was received and adopted; and the Committee was reappointed, with power to add to their number.

It was also resolved: "That the warmest thanks of the Association in public meeting assembled are due, and are hereby offered, to Mr. Arthur Mills, M.P., for his eminent and able advocacy of the principles of medical reform."

The Committee on Legislation for Habitual Drunkards reported the passing of the Habitual Drunkards Act, and recommended that strenuous exertions should be made to procure the formation of a society for the purpose of providing a residence for patients of the kind described in the Act. The report was adopted, and the Committee reappointed.

The Scientific Grants Committee reported that, of grants amounting to £351 7s. 10d., £177 5s. had been returned. The report was received, and, in accordance with the recommendation of the Committee, a further sum, not to exceed £300, was granted.

The Hospital Out-patient Reform Committee presented a report of their proceedings with respect to the reform of the out-patient system in the metropolis, and the working of the provident dispensary system in Manchester. The report was adopted, and the Committee was reappointed, with power to add to their number.

The Committee on the Registration of Disease presented a report in which they recommended that all medical men should be required to certify cases of infectious diseases, and that the Committee should be empowered to add to their number. The report was adopted, and the Committee was reappointed, with power to add to their number.

The Joint Committee on State Medicine was reappointed.

The Parliamentary Bills Committee presented a report, stating that their attention had been directed during the past year to the consideration of the army medical officers, the amendment of the Medical Act, and the education at the University of Oxford, the amendment of the School

Food and Drugs Act, prison surgeons in Ireland, and animal vaccination. The Committee was reappointed.

The question of the adoption of the metric system was brought before the meeting. Dr. Seguin gave an account of the progress of the system in America; and, on the proposal of Mr. Ernest Hart, a Committee was appointed to consider and report whether it would be desirable to adopt the metric system in medicine in Great Britain and Ireland; and whether the British Medical Association should by any means, and if so, by what, facilitate its introduction.

At a meeting of the Committee of Council in January 1880, a series of resolutions on Medical Education, passed by the Metropolitan County Branch, was received; and it was directed that a copy should be sent to the secretary of each Branch, for the purpose of being submitted to the Branches.

In February 1880, the following resolution was adopted by the Committee of Council, with reference to the recent appointment of a Registrar-General in the room of Major Graham, resigned.

"That the Committee of Council of the British Medical Association observe with deep regret that Her Majesty's Government have not considered it their duty to confer on Dr. William Farr, F.R.S., the office of Registrar-General, lately vacated by the retirement of Major Graham. That Dr. Farr's remarkable abilities and high intelligence, acknowledged with singular unanimity by all competent judges, both at home and abroad; his constant connection for forty-two years with the registration department, which he has contributed so largely to render famous throughout the civilised world; and the kindness, discretion, and unwearied zeal which he has manifested in the discharge of all his official duties, had seemed to this Committee to point him out as pre-eminently qualified to administer, as head of the department, the system of which he had done so much to create and bring into working order. That as this promotion, so much desired and so confidently expected by many, has been judged inexpedient, this Committee can but express the earnest hope that Her Majesty's Government will recommend that some signal mark of Her Majesty's favour be conferred on Dr. Farr, in recognition of the rare and distinguished services he has rendered to the nation, to humanity, and to the science of vital statistics, with the solid progress of which, during this century, his name is, and will remain, inseparably associated."

FORTY-NINTH YEAR: 1880-81.

The forty-eighth Annual Meeting was held in the Senate House, Cambridge, on August 10th, 11th, 12th, and 13th, 1880, under the presidency of Dr. George Murray Humphry, F.R.S., Professor of Anatomy in the University of Cambridge, and Senior Surgeon to Addenbrooke's Hospital.

The number of members in the Association was reported to be 8,052. An Address in Medicine was delivered by Dr. Bradbury, the subject being "Modern Scientific Medicine;" an Address in Surgery by Mr. T. Holmes, on "Fergusson and Conservative Surgery;" and an Address in Surgery by Dr. Michael Foster, on "the Relations of Physiology to Pathology." There were eight Sections, viz., Medicine, Surgery, Obstetric Medicine, Public Medicine, Psychology, Physiology, Pathology, and Ophthalmology; also a Subsection of Otolaryngology. Special discussions took place as follows:—In Medicine, on Hysterical Anæsthesia and on Asthma; in Surgery, on the treatment of Wounds and on Stricture of the Urethra; in Otolaryngology, on the Therapeutic Value of Electricity in Ear-Diseases, and on the Comparative Value of the various Methods of Alleviating Hearing; in Obstetric Medicine, on Uterine Hemorrhage, and on the Removal of Tumours by Uterine Section; in Public Medicine, on the General Working of the Public Health Administration in Great Britain and Ireland, and on Disease communicable to Man from Diseased Animals used as Food; in Psychology, on the Influence of Alcohol on the Functions of the Brain; in Physiology, on the Physiology of the Formation of Urine in the Body, and on Sleep and Hypnotism; in Pathology, on the Influence of Injuries and Morbid Conditions of the Nervous System on Nutrition, and on Micro-organisms and their relation to Disease; and in Ophthalmology, on the Nature of Glaucoma, and on Toxic Amaurosis, especially in relation to Perforation of the Cornea.

In his opening Address, Professor Humphry suggested that the Association should undertake the collection of facts relating to disease, in a careful and systematic manner, with a view to its being carried out thoroughly. He recommended that this work should be carried out by a special investigation committee, with the necessary arrangements.

For the scope of the proposal, he referred to letters by Dr. Arthur Ransome and Dr. Mahomed, which had been published in the *BRITISH MEDICAL JOURNAL* some months previously. After the conclusion of the address, a resolution was unanimously passed, thanking Dr. Humphry for his valuable suggestions, and requesting the Committee of Council to consider how they would best be carried out to a practical result. In accordance with this instruction, the Committee of Council, at their meeting in the following October, appointed a Sub-committee on the subject, consisting of Dr. Carpenter (President of Council), Mr. Husband, Dr. Sieveking, Dr. Clifford Allbutt, Dr. B. Foster, Professor Humphry, Dr. Ransome, and Dr. Mahomed. In the following April, the sub-committee brought up a report, which was approved, and ordered to be submitted to the next annual meeting.

A series of regulations for the conduct of the annual meetings was agreed on. A resolution was also passed, that, in the opinion of the meeting, the price of the dinner-ticket should not include a charge for wine; and the Committee of Council were requested to make the necessary provision.

The honorary degree of LL.D. was conferred on Dr. Brown-Séquard of Paris; Dr. Donders of Utrecht; Dr. S. D. Gross of Philadelphia; Sir W. Jenner, Bart., K.C.B.; Sir W. W. Gull, Bart.; Sir G. Burrows, Bart., Mr. W. Bowman, the Rev. S. Haughton, M.D., Mr. Joseph Lister, Dr. D. C. O'Connor, Mr. J. Simon, and Dr. Andrew Wood.

The Committee of Council was authorised to select the place of meeting in 1881, and, if required, to pay the expenses of the meeting.

The Gold Medal for distinguished merit, which had been awarded by the Committee of Council to Dr. William Farr, C.B., was presented at the annual meeting, and was received by Dr. Acland on behalf of Dr. Farr, who was unable to be present. The award was made by the Committee of Council in the following terms:

"That the gold medal of the Association be awarded by the Committee of Council of the British Medical Association to William Farr, M.D., F.R.S., D.C.L., C.B., as an expression of their high appreciation of his long, unwearied, and successful labours in behalf of statistical and sanitary science; as a recognition of the light he has thrown upon many physiological and pathological problems, and on account of the extraordinary services his work has rendered to the advancement of the health of the nation."

Reports were presented from the Medical Reform Committee, the Scientific Grants Committee, the Joint Committee on State Medicine, the Habitual Drunkards Committee, the Hospital Out-patient Reform Committee, and the Parliamentary Bills Committee. The last contained an account of the proceedings of the Committee with reference to the Medical Services of the Army and Navy and the Indian Army, the Coroners' Bill, the Protection of Infant Life, the Registration of Infectious Diseases, Vaccination from the Calf, and the Vaccination Act Amendment Bill; and appended to the report was a paragraph calling attention to the time and attention given by the chairman, Mr. Ernest Hart, to the consideration of the important subjects brought before the Committee, and for the careful and laborious reports which he had prepared and copied, as materials for judgment on the various subjects. All the reports were adopted, and the Committees were reappointed.

An event of a hitherto unknown nature in the history of the Association took place this year. In the autumn of 1880, a respected member, Dr. Macnaughton Jones of Cork, had been subjected to much unmerited annoyance in consequence of the fatal termination of a case of scarlatina in which he had used pilocarpin. The editor of the *BRITISH MEDICAL JOURNAL*, in the performance of his duty, commented on the case; using expressions in regard to the persons concerned which were at least not more severe than those which occurred in the comments of other medical periodicals. The father of the patient, however, considering himself personally injured by some remarks in the editor's article, and imagining that it had been written by Dr. Macnaughton Jones himself, brought an action for libel against the *BRITISH MEDICAL JOURNAL*, which was tried at Cork in April 1881. The jury were unable to agree on a verdict, and were discharged. A new trial was subsequently contemplated, but the matter was settled, the Association paying a large amount of costs.

Early in 1881, Mr. W. D. Husband, who had for many years rendered valuable services to the Association, as a Branch member, a member of the Committee of Council, President of Council, and Treasurer, resigned the treasurership, which he held for six and a half years, on account of ill-health. The Committee of Council, at their meeting on February 5th, unanimously adopted the following resolution.

"That the Committee of Council, through their chairman, communicate to Mr. Husband their deep regret on the receipt of his communication, not merely in consideration of the great loss which will be

sustained by the Association, but likewise for its cause, the serious failure in his health. The proof Mr. Husband has given through the many years of his active interest in the aims and operations of this Association, and the efficient assistance he has rendered, alike as President of Council and Treasurer, in promoting their successful accomplishment, fill the Committee of Council with the warmest gratitude, and they desire to express to Mr. Husband their hope that by temporary retirement his health may be restored, and that he may once again resume a more or less active function in their affairs."

At the same meeting, Dr. Wade was unanimously appointed to the office of Treasurer until the forthcoming annual meeting.

FIFTIETH YEAR: 1881-82.

At the annual meeting in 1880, the Committee of Council had been authorised to make the necessary arrangements for the meeting in 1881. In doing this, they had to take into consideration the fact, that the International Medical Congress was about to meet in London in August. Ultimately, they accepted an invitation from Ryde, in the Isle of Wight; and the forty-ninth annual meeting was held there on August 9th, 10th, 11th, and 12th, under the presidency of Mr. B. Barrow, Consulting Surgeon to the Royal Isle of Wight Infirmary.

The number of members of the Association was reported to be 9,202.

An Address in Medicine was delivered by Dr. J. S. Bristowe, and an Address in Surgery by Mr. Jonathan Hutchinson. There were four Sections—viz., Medicine, Surgery, Obstetric Medicine, and Public Medicine; and a Subsection of Otology. Special subjects were discussed in the Sections, as follows: in Medicine, Dilatation of the Stomach, Acute Spinal Paralysis, and Jaundice; in Surgery, Resection of the Knee-joint in Early Life, and the Early Recognition and Treatment of Spinal Caries; in Obstetric Medicine, the Removal of the Ovaries in cases of Dysmenorrhœa and of Fibroid Tumours, and the Mechanical Treatment of Uterine Flexions and Displacements; and in Public Medicine, on Vaccination with Calf-Lymph, the Origin and Diffusion of Enteric Fever and Fevers, the Management of Infectious Diseases under the Public Health Act, Hospitals for Infectious Diseases, and Cremation.

Dr. Carpenter's term of office as President of Council having expired, Mr. C. G. Wheelhouse was elected in his stead. Dr. Wade was elected Treasurer for the next three years. Dr. Carpenter was thanked for the manner in which he had performed the duties of his office, and was made a permanent Vice-president. Mr. Husband, who was already a Vice-president, received the thanks of the meeting for his earnest, wise, devoted, and successful services as Treasurer.

The report of Council contained the following interesting paragraph with respect to the forthcoming fiftieth anniversary meeting of the Association.

"On the eve of the fiftieth anniversary of the Association, the Worcestershire and Herefordshire Branch of the Association was legally recognised by your Committee of Council; and your Council learn with much gratification the intention of the profession residing in Worcester, the birthplace of the Association, to invite the members to hold their fiftieth anniversary in that city, and thus not only to secure an agreeable place of meeting, but also to pay a merited tribute to the memory of the founder, Sir Charles Hastings. At the meeting at Chester in 1866, a subscription was started in order to raise a fund which should be devoted to his honour. This movement realised (with subsequent accumulation of interest) £539 13s. 4d., which during the current year has been paid over to the account of the Association, and has since been invested in London and North-Western Four Per Cent. Debenture Stock. Your Committee of Council, considering that the wishes of the donors would be thereby and to that extent satisfactorily carried out, have, at the suggestion of the Worcestershire and Herefordshire Branch, ordered a bust of Sir Charles Hastings from Mr. Brock, the celebrated sculptor, at a cost of 150 guineas. This will be placed in some suitable position in the city of Worcester."

At the meeting in August, the bust of Sir Charles Hastings will be formally presented to the Mayor and Corporation of Worcester.

The sub-committee appointed by the Committee of Council to carry out Professor Humphry's suggestions with regard to collective investigation, presented a report, and proposed the following scheme:

"1. That a Committee of seven be appointed annually at the Michaelmas quarterly meeting, by the Committee of Council, to arrange, superintend, and direct the work of combined observation, and be named the 'Combined Observation Committee.' That the Committee have power to add to their number. 2. That the Committee meet at such times and places as they think fit, and report at least once in each year to the Committee of Council; and that their report be presented at the annual meeting of the Association. 3. That the Committee shall have power to appoint a Secretary, who shall be

paid (£200 annually) from the funds of the Association, and who shall act under the direction of the Committee, and shall hold office during their pleasure. 4. That the Secretary shall attend such Branch Meetings of the Association as may be desirable for the purpose of explaining the nature and objects of the investigations, and of interesting and directing the members of the Association in the work. 5. That the travelling and other necessary expenses of the Secretary, to the amount of not more than £100 in any year, having been submitted to and approved by the 'Combined Observation Committee,' shall be paid out of the funds of the Association. 6. That communications to the members of the Association, and others, for the purposes of the investigation, shall be made through the JOURNAL, or from the offices of the Association, in accordance with the usual regulations. 7. That the Branches of the Association be invited to appoint registrars who may assist in the work, and that such registrars shall, together with the 'Combined Observation Committee,' form a 'General Committee,' to determine from time to time the subjects for investigation, and the manner in which such investigations shall be conducted."

The report was adopted, and it was referred to the Council to carry out the proposals of the Subcommittee.

In October, the Committee of Council appointed Mr. Wheelhouse (President of Council), Dr. Carpenter, Mr. Husband, Dr. Sieveking, Dr. Clifford Allbutt, Dr. B. Foster, Professor Humphry, and Dr. Ransome, to be the Collective Investigation Committee. In the present year, the Committee have appointed as Secretary Dr. F. A. Mahomed, and the work has already been entered on, inquiries with regard to several diseases having been instituted.

The subject of the value of Experiments on Animals was brought before the annual meeting by Professor Humphry; who, after a very able address on the subject, moved:

"That this Association desires to express its deep sense of the importance of Vivisection to the advancement of Medical Science, and the belief that the further prohibition of it would be attended with serious injury to the community, by preventing investigations which are calculated to provide the better knowledge and the treatment of disease in animals as well as in men."

The resolution was carried, with only one dissident.

The Parliamentary Bills Committee presented a report of its proceedings with reference to the Notification of Infectious Diseases, the Naval Medical Warrant, the Indian Medical Officers, and other matters. The report was adopted, and the Committee was reappointed. A proposal that the Committee should be instructed to support a Bill then in Parliament, for the compulsory notification of infectious diseases, in which the duty of reporting was laid on the medical attendant, was negatived by a large majority.

Reports were also presented from the Medical Reform Committee, the Committee on Legislative Restrictions for Habitual Drunkards, and the Scientific Grants Committee. The reports were adopted.

In the foregoing notes, we have chiefly recorded the work of the Association as a great organisation for social, political, and ethical purposes; saying but little of its scientific work, and altogether omitting any notice of certain accessory circumstances of the annual meetings, which have in no small degree tended to enhance the pleasure of these meetings, and indirectly to promote those feelings of professional harmony and good will, the cultivation of which is one of the objects of the Association.

In the first place must be mentioned the arrangements which have for several years been made for holding Divine Service in the town visited by the Association, and the preaching of an appropriate sermon, which has on several occasions been followed by a collection on behalf of that most praiseworthy charity, which had its origin in the Association, the Medical Benevolent Fund.

Formerly, it was the custom to have a public breakfast on one of the days of meeting. This practice has, however, long fallen into disuse. The annual dinner, however, has been a constant feature. Until 1897, it took place on the last day of meeting; but in that year it was changed to Thursday, the business continuing on Friday. These festive occasions have always been most pleasant.

On the part of residents in the town of the Association, the hospitality has been of the most generous and profuse character. No trouble or expense has been spared in the preparation and service of the dinner, and the arrangements for the entertainment of the Association have been of the most successful kind.

The treatment of the Association by the public in the places which it has visited, has been most cordial. Through the influence of the British Medical Association, the friends of the medical profession have been enabled to secure the most successful results of the Association's work.

authorities have several times taken part in the opening proceedings; and, in the great industrial towns and cities, the leading manufacturers have freely opened their places of labour to the inspection of members.

Another important accessory feature which has for many years characterised the annual meetings, has consisted in the excursions to the chief places of interest in the neighbourhood; for which arrangements have been made, at a great expenditure of labour, by local Committees. Opportunity has thus been given for visiting and admiring the beauties of local scenery; and access has been given to the chief places of historic and public interest, on many occasions opened to the Association by the cordial liberality of their possessors.

In concluding, it is but right to mention that very much of the success attending the meetings has been due to the cordial and zealous labours of the local committees and their honorary secretaries. The amount of work which has fallen to their lot has been great; with what success it has been carried out, those who have attended the annual meetings can testify.

PRESIDENTS OF THE ASSOCIATION AND PLACES OF MEETING.

THE subjoined list shows the places of meeting and the names of the Presidents for each year. The asterisks denote the names of those who are still alive.

Year.	Place of Meeting.	President.
1832 ...	Worcester	Edward Johnstone, M.D.
1833 ...	Bristol	Andrew Carrick, M.D.
1834 ...	Birmingham	John Johnstone, M.D., F.R.S.
1835 ...	Oxford	John Kidd, M.D., F.R.S.
1836 ...	Manchester	Edward Holme, M.D.
1837 ...	Cheltenham	Henry C. Boisragon, M.D.
1838 ...	Bath	Edward Barlow, M.D.
1839 ...	Liverpool	Thomas Jeffreys, M.D.
1840 ...	Southampton	George Stead, M.D.
1841 ...	York	George Goldie, M.D.
1842 ...	Exeter	John H. James, Esq.
1843 ...	Leeds	William Hey, Esq.
1844 ...	Northampton	Archibald Robertson, M.D., F.R.S.
1845 ...	Sheffield	William Favell, Esq.
1846 ...	Norwich	John G. Crosse, Esq.
1847 ...	Derby	James Heygate, M.D., F.R.S.
1848 ...	Bath	George Norman, Esq.
1849 ...	Worcester	Charles Hastings, M.D.
1850 ...	Hull	Fewster R. Horner, M.D.
1851 ...	Brighton	George S. Jenks, M.D.
1852 ...	Oxford	John W. Ogle, M.D.
1853 ...	Swansea	G. Gwynne Bird, M.D.
1854 ...	Manchester	William J. Wilson, Esq.
1855 ...	York	Thomas Simpson, M.D.
1856 ...	Birmingham	James Johnstone, M.D.
1857 ...	Nottingham	Booth Eddison, Esq.
1858 ...	Edinburgh	William P. Alison, M.D., F.R.S.E.
1859 ...	Liverpool	James R. W. Vose, M.D.
1860 ...	Torquay	C. Radclyffe Hall, M.D.
1861 ...	Canterbury	*Alfred Lochée, M.D.
1862 ...	London	*George Harrows, M.D., F.R.S.
1863 ...	Clifton	John A. Symonds, M.D., F.R.S.E.
1864 ...	Cambridge	*George E. Paget, M.D., F.R.S.
1865 ...	Leamington	Samuel I. Jeaffreson, M.B.
1866 ...	Cheltenham	*Edward Waters, M.D.
1867 ...	London	William Stokes, M.D., D.C.L.
1868 ...	Oxford	Henry W. Acland, M.D., F.R.S.
1869 ...	Leeds	*Charles Chadwick, M.D., D.C.L.
1870 ...	Newcastle-on-Tyne	Edward Charlton, M.D.
1871 ...	Falmouth	John Whipple, Esq.
1872 ...	Birmingham	*Alfred Lister, Esq.
1873 ...	London	Sir William Fergusson, Bart., F.R.S.
1874 ...	London	Edward C. Martin, M.D.
1875 ...	London	Sir Robert Christison, Bart., M.D., D.C.L., LL.D.
1876 ...	Sheffield	*M. Martin De Bartolomé, M.D.
1877 ...	Manchester	M. A. Foster, M.D.
1878 ...	Bath	Edward W. Fothergill, M.D., D.C.L.
1879 ...	Geneva	John C. O'Connor, M.D.
1880 ...	Cambridge	George M. Humphry, M.D., F.R.S.
1881 ...	Exeter	John W. Harrows, Esq.

The President-elect for 1882 is William Strange, M.D., of Worcester.

THE COMMITTEE ON PARLIAMENTARY BILLS.

THIS Committee had its origin in a suggestion made by Dr. Septimus Gibbon to the Council of the Metropolitan Counties Branch, that it would be expedient to appoint a special committee for the purpose of watching the progress of Bills introduced into Parliament affecting the medical profession. A special meeting of the Branch was held on February 16th, 1864, to consider the proposal; when it was unanimously resolved:

"That a Committee be appointed to watch the progress of all Bills introduced into Parliament affecting the medical profession: to communicate with the Committee of Council of the Parent Association, and with the other Branches; and to report to the Branch on all questions having relation to the political and social interests of the profession."

The Council of the Branch were appointed as the Committee, with power to add to their number. The Committee thus constituted at once proceeded to work, and at the annual meeting of the Branch in July of the same year presented a report. Reports were also presented in 1865, 1866, and 1867. In the latter year, application was made by the Metropolitan Counties Branch to the Council of the Association, for a grant of £10 towards defraying expenses. This was complied with, and, on the recommendation of the Council at the annual meeting of the Association, it was decided to invite the other Branches to send representatives. In 1868, it was decided that the members of the Committee, other than the representatives of Branches, should be appointed at the annual meetings of the Association. The Committee, which had up to this time been a Committee of the Metropolitan Counties Branch, became a Committee of the Association, with representatives from the Branches. From that time, the Committee has presented a report at each meeting of the Association; with the exception of 1870, when, the Committee having in the previous year been, through a misunderstanding, allowed to become defunct, no report was presented. Since 1871, when the Committee was revived, Mr. Ernest Hart has acted as Chairman.

The following is a list of the present members of the Committee: Mr. Ernest Hart (Chairman); Dr. Fancourt Barnes; Dr. Robert Barnes; Mr. J. Wickham Barnes; Dr. Bryan, Northampton; Dr. J. C. Bucknill, F.R.S.; Dr. A. Carpenter, Croydon; Dr. Andrew Clark; Mr. J. B. Curgenven; Dr. W. C. Grigg; Mr. H. Nelson Hardy; Mr. J. D. Harris, Shrewsbury; Mr. Reginald Harrison, Liverpool; Dr. A. Henry; Dr. Holman, Reigate; Dr. Norman S. Kerr; Dr. Macmillan, Hull; Dr. Alfred Meadows; Dr. E. Morris, Spalding; Surgeon A. B. R. Myers, Coldstream Guards; Dr. D. Nicolson, Broadmoor; Dr. W. M. Ord; Dr. J. H. Paul; Mr. S. B. Partridge, Anerley; Dr. G. H. Philipson, Newcastle-on-Tyne; Dr. R. Quain, F.R.S.; Dr. S. Rees Philipps, Exeter; Mr. W. Rivington; Dr. Joseph Rogers; Mr. C. H. Rogers Harrison; Dr. J. Seaton, Sunbury; Mr. S. W. Sibley; Dr. A. P. Stewart; Dr. Michael W. Taylor, Penrith; Dr. E. H. Vinen; and Dr. Charles Williams, Llanbedr, Merionethshire.

The subjoined is a summary, derived from the reports published in the JOURNAL, of the proceedings of the Committee with reference to the subjects which it has had under consideration.

GOVERNMENT ANNUITIES.—In 1864, the Committee reported that the Government Annuities Bill, like the Post Office Savings Banks Act, by encouraging provident habits, was calculated indirectly to benefit medical practitioners. They had inquired into the details of payment for the medical examination of proposers for the small assurances, and had resolved to endeavour to get an adequate fee allowed; but they were informed that it was intended to give a fair rate of remuneration for the medical examinations. In the following year, however, the Committee reported that the fee for medical examination and reports—2s. 6d. for policies below, and 5s. for those above £60, was much lower than the scale of remuneration which the Committee had expected, or than the scale which they had proposed, of an uniform rate of 5s., or one varying from 2s. 6d. to 10s. 6d., according to the sum insured. In an interview with the Postmaster-General, they protested against the inadequacy of the fee, especially for the voluminous reports required. The Postmaster-General declined to increase the fee, but promised to try to shorten the reports.

INSANE PRISONERS.—In 1864, the Committee examined Sir George Grey's Insane Prisoners Act Amendment Bill, and endeavoured to get the words "legally qualified medical practitioners" inserted in place of "physicians" or "surgeons", so that the holders of the Apothecaries' licence might not be disqualified from certifying. They also endeavoured to get a clause introduced, providing extra payment for certifying criminal lunatics, in order that prison surgeons might become entitled to a fee.

DISEASES OF CATTLE.—The Committee in 1864 made an ineffec-

tual attempt to get the appointment of "cattle inspectors" and "examiners of unwholesome meat" under the Cattle Diseases Bill and the Cattle Importation Bill limited to duly qualified medical practitioners, or to veterinary surgeons holding the diploma of some recognised institution.

CONTAGIOUS (VENEREAL) DISEASES.—In 1864, the Committee reported that they had resolved to urge on the promoters of the Contagious Diseases Bill the propriety of paying medical practitioners at a definite rate for the duties to be performed under the Bill. In 1866, the Committee expressed satisfaction that the amended Bill, introduced by Lord Clarence Paget, proposed to properly appoint and remunerate surgeons to examine and attend diseased women at certain stations, instead of making use of the unpaid services of the honorary medical officers of hospitals.

REGULATION OF PHARMACY.—The Committee in 1864 reported that they had examined a Bill prepared by the Pharmaceutical Society, but not yet introduced into Parliament; and they recommended it to the careful consideration of the profession. In 1865, two Bills for regulating the qualifications of chemists and druggists were introduced by Sir Fitzroy Kelly and Sir John Shelley, and were referred to a Select Committee of the House of Commons. The Parliamentary Bills Committee feared "that the temptation to irregular practice" (on the part of druggists) "would be increased by raising the educational status of chemists and druggists". They therefore endeavoured to get a clause introduced, rendering it illegal for any registered chemist or druggist to act as a medical practitioner, under a penalty not exceeding £5. They also endeavoured to get a clause inserted, providing that no patent medicine should be sold unless a sworn certificate of its composition had been lodged with the Registrar appointed by the Act. A deputation waited on Sir Fitzroy Kelly; and the Secretary had interviews with the Chairman (Sir John Shelley) and other members of the Select Committee. The Committee also caused copies of the proposed amendments to be circulated among members of Parliament, and presented a petition in their favour, which was referred to the Select Committee. The Select Committee, after examining both Bills and hearing evidence, decided that legislation was requisite to regulate the sale of poisons; and that the subject of an examination for chemists and druggists should be deferred. In 1868, a Bill promoted by the Pharmaceutical Society, for regulating the sale of poisons and the qualifications of chemists and druggists, was introduced into the House of Lords. The Committee pressed certain amendments on the attention of members of Parliament interested in the measure; viz.: 1. That the schedule of poisons and the examination of chemists and druggists should be under the supervision of the General Medical Council, rather than of the Privy Council; 2. That persons registered under the Act should be prohibited from acting in any way as medical practitioners; 3. That no patent or secret medicine should be sold unless a sworn certificate of its composition were lodged with the Registrar appointed under the Act. The Committee feared that the Bill would not afford sufficient protection against accidental or criminal poisoning, or against carelessness in the use of patent medicines; also, that it would lead to an increase of irregular medical practice by pharmaceutical chemists, inasmuch as, in place of the recommendation No. 2 of the Committee, a clause was introduced which was proposed by the General Medical Council, providing merely that registration under the Pharmacy Act should not entitle anyone to practise medicine or surgery. An amendment was introduced into the Bill, restricting the right of medical practitioners in dispensing medicine to legally qualified apothecaries. This was regarded by the Committee as an undesirable invasion of the rights of medical practitioners not connected with the Apothecaries' Society. This provision produced much remonstrance from practitioners in Scotland; and, in 1869, a Bill to amend the Act, so as to exempt medical men in Scotland from its operation, was introduced by Lord Robert Montagu. In consequence of the representations made by the Committee, his lordship consented to give the amendment a wider range; and a clause was enacted, securing the right of dispensing medicines to all legally qualified medical practitioners, both present and future, who should have passed an examination in pharmacy.

MEDICAL SERVICE OF THE ARMY.—At a meeting of the Committee on May 18th, 1873, the recently issued Army Medical Warrant was taken into consideration, and statements and communications from persons interested in the service were read, relating to the feeling of dissatisfaction which the Warrant had produced in the service, and in the medical profession generally. A memorandum on the points objected to in the Warrant and in a recent Army Circular was prepared and adopted. On June 13th, a deputation of the Committee waited on Mr. Cardwell, the Secretary of State for War, and explained fully the objects which they had in view. Mr. Cardwell, who gave a very courteous and attentive reception to the deputation, promised to take

the proposals of the Committee into consideration. In November, a supplementary Royal Warrant was issued, a copy of which was sent to Mr. Ernest Hart, the Chairman of the Committee, with a letter from Lord Lansdowne, on the part of Mr. Cardwell, stating that he was anxious that no reasonable or removable cause of dissatisfaction should exist among the medical officers of the army. The Warrant provided that the pay of 17s. 6d. a day should be restored to surgeons of fifteen years' service, and that forage or forage allowance should be granted, with certain limitations. By direction of the Committee, the Chairman addressed a letter to Mr. Cardwell, pointing out that the partial concessions granted were not sufficient to allay the discontent produced among the officers by the recent Warrant. In May 1874, a deputation from the Committee waited on Mr. Gathorne Hardy, then Secretary of State for War, and made a series of suggestions as to retirement, membership of the regimental mess, forage, promotion, precedence in rank, duties of principal medical officers, etc. In 1878, a Committee was appointed by the House of Commons to inquire into the causes of the unpopularity of the Army Medical Department; and a statement on the subject, prepared at official request by the Chairman of the Committee, was forwarded to the Secretary of State for War, and was also placed in the hands of several members of Parliament. A schedule of questions was addressed by the War Office to the Chairman, relating to the average emoluments of civil practitioners, copies of which were forwarded to the members of the Committee and to the Secretaries of the Branches of the Association. About thirty answers were received, of which a tabulated analysis was made by the Committee and sent to the War Office; it being at the same time, however, pointed out that they were necessarily wanting in data. In 1879, the Committee presented to Colonel Stanley, the Secretary for War, a memorial explaining the views of the Committee on the amendments required. The Committee especially objected to the proposal to substitute nomination for competitive examinations as the means of entrance. In 1880, a Royal Warrant was prepared, which embodied to a satisfactory extent the recommendations of the Committee, and was successful in producing an increased number of candidates for the medical service of the Army.

INDIAN MEDICAL SERVICE.—Towards the close of the Parliamentary session of 1864, a Bill was introduced, the object of which was to enable the Secretary of State for India to substitute a system of patronage for competitive examinations in recruiting the Indian Medical Service. The Committee regarded the measure as one injuriously affecting the status and interests of the profession at large, and of the Indian Medical Service in particular; and, with the view of opposing it, they entered into communication with several members of Parliament. It was rejected on the third reading. In July 1880, at the request of the Indian medical officers, the Chairman of the Committee accompanied a deputation to Lord Hartington, Secretary of State for India, respecting the grievances produced by recent changes in the regulations affecting the Medical Service of the Indian Army. The Chairman expressed the interest which the British Medical Association felt in the subject, and recommended the case of the Indian Army medical officers to favourable consideration. The intervention of the Committee was, in 1881, acknowledged by the Indian Medical Defence Committee as having been effective and valuable.

Medical Officers of the Navy.—In December 1873, a deputation of the Committee waited on Sir A. Armstrong, the Director-General of the Medical Department of the Navy, to bring under his notice certain complaints that medical officers in the navy had not been allowed to resign. Sir A. Armstrong gave an explanation, which satisfied the Committee that the statements as to the inability of medical officers to resign required modification. He also said "that the opinion of the medical officers of the navy, as the British Medical Association was necessarily concerned in so important a matter, and he was anxious of advancing the interests of the service in every way, and should always be prepared and anxious to enter on any subject's meeting to inform the Parliamentary Committee, and to afford any explanations." In June 1874, a deputation of the Parliamentary Medical Committee, after considering a document prepared by the Chairman, waited on the First Lord of the Admiralty, to call his attention to the cause of the discontent among the medical officers of the navy, and to suggest measures for the removal of the causes of which the medical officers complained. In 1875, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal. In 1876, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal. In 1877, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal. In 1878, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal. In 1879, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal. In 1880, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal. In 1881, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal. In 1882, the Committee waited on the Secretary of the Admiralty, and presented a memorial, pointing out the various causes of the discontent, and suggesting measures for its removal.

for the improvement of the condition of the medical officers was drawn up by Mr. Hart, the Chairman of the Committee, at the request of one of the Lords of the Admiralty, and was submitted to the Board of Admiralty, by whom it was referred to a departmental Committee. In 1881, a new Royal Warrant, embodying largely the recommendations contained in the memorandum drawn up by Mr. Hart, was issued. The Committee reported at the annual meeting that, though it did not entirely carry out all that was desired, it did so to a large extent; and that it conferred a considerable boon on the service, and had been accepted with much satisfaction.

MILITIA SURGEONS.—At a meeting of the Committee in April 1872, attention was drawn to the injury that would probably be inflicted on militia surgeons by forthcoming changes in the Army Regulations; and the Committee promised their co-operation with the militia surgeons in order to prevent such injury. In 1877, the Committee had an interview with Mr. Gathorne Hardy, the Secretary for War, in order to lay before him the claims of the militia surgeons in reference to the injurious operation on them of the recent Royal Warrant, which materially diminished their income by removing from them an important and remunerative part of their duties.

SUPERANNUATION OF POOR-LAW OFFICERS.—In 1865, a Bill to provide for superannuation allowances to officers of unions in Ireland was introduced into Parliament by Sir Robert Peel. In order that the medical officers might not be excluded from its benefits, the Committee endeavoured, through Dr. Brady, M.P., but without success, to procure the omission of the words limiting the benefit of the Bill to persons "whose whole time had been devoted to the service of the union". This Bill did not pass; and, in 1869, Dr. Brady (a member of the Committee) introduced into Parliament a Bill "giving power to guardians, with consent of the Poor-law Commissioners, to grant superannuation to any officer who should at any time become incapable of discharging the duties of his office with efficiency.....not exceeding two-thirds of the income." The Committee gave Dr. Brady all the support they could in carrying this Bill through Parliament. This Bill ultimately passed. The Committee has also expressed approval of a Bill now in Parliament, affecting the superannuation of Poor-law officers in Ireland.

METROPOLITAN ASYLUMS.—In the session of 1867, the Committee examined Mr. Gathorne Hardy's Bill for the establishment in the metropolis of asylums for the sick, insane, and other classes of the poor, etc. They regarded it as of a well digested and a thoroughly practical character. They endeavoured, however, to get one-third of the Dispensary Committee proposed on the Bill nominated by the Poor-law Board from among magistrates or members of the learned professions, resident in the metropolis; and also to get compensation for workhouse medical officers in case of modification of their duties or districts. These suggested alterations were discussed in the House of Commons, but were not adopted. The Committee also recommended to the Poor-law Board, that one or more medical gentlemen should be appointed as managers of asylums; and this suggestion was carried out by the appointment of Dr. Sibson, Mr. Timothy Holmes, and Mr. Bostock.

MEDICAL RELIEF OF THE POOR.—In April 1868, a deputation of the Committee had an interview with the Earl of Devon, President of the Poor-law Board, in order to urge the necessity of medical and sanitary inspection of workhouses. Mr. Ernest Hart was appointed to represent the Committee in giving evidence before the Select Committee of the House of Lords on the Poor Relief Bill. In 1871, Mr. F. S. Corrance, M.P., in an interview with the Committee, expressed his intention of introducing a measure for the purpose of applying to England some part of the Irish Poor-law Medical System. The Committee regarded the scheme as beneficial, and were prepared to support it at the proper time.

THE LOCAL GOVERNMENT BILL.—In 1871, the Committee decided on supporting Mr. Stansfeld's Bill for the consolidation of the departments of Medical Relief, Poor Relief, and Public Health, into one "Local Government Board", as a measure of immediate and obvious advantage.

POOR-LAW (SCOTLAND). At the meeting of the Committee in April 1872, communications from Scottish medical officers respecting the Poor-law (Scotland) Bill were read. The Committee expressed the opinion that it should contain a provision for the superannuation of medical officers, and directed that steps should be taken to bring the matter under the notice of Parliament. In 1876, the Committee took into consideration the Poor-law Medical Relief (Scotland) Bill, and appointed a deputation to the Lord Advocate of Scotland and Mr. Cairnes to express approval of the Bill, and suggest that power should be given to appoint and pay dispensary in suitable places. They also directed to prepare a memorial of the Bill, with the proposed modifications. On May 20th, the Committee had an interview with the Lord

Advocate. The Bill, though meeting with much support, was withdrawn in consequence of the pressure of business.

SANITARY LEGISLATION.—Early in 1866, the Committee agreed on the following resolutions. "1. That a speedy and inexpensive appeal should be provided from the decisions of local authorities; and that the body best fitted for a Court of Appeal is the Health Department of the Privy Council. 2. That the appointment of Medical Officers of Health and Inspectors of Nuisances should be made, as in the metropolis, compulsory instead of permissive. 3. That the appointment and dismissal of Medical Officers of Health should be subject to the approval of the Health Department of the Privy Council. 4. That, in counties, the appointment of Medical Officers of Health should be vested in the justices; and that they should be paid out of the poor-rates. 5. That the provision of local refuges for those labouring under contagious diseases should be rendered compulsory on parishes, etc. 6. That the early removal of persons labouring under such diseases should also be made compulsory. 7. That local authorities should be compelled to provide carriages for the removal of such patients." These resolutions were approved by the Metropolitan Counties Branch at a meeting held on April 16th, with the exception of the sixth; and a resolution was passed "That a return should be yearly presented to Parliament of the names of the Medical Officers of Health and Inspectors of Nuisances throughout the country, and of the salaries paid to them." A provision that the Health Department of the Privy Council should have power to carry out its decisions, was also added to the first resolution. The Committee, in their report presented at the annual meeting of the Branch, announced that some of the provisions recommended had been introduced by Mr. H. A. Bruce into his Bill to Amend the Law relating to the Public Health; and remarked that probably, if the profession would exert its influence with Parliament, the other provisions might be incorporated in the measure. On July 24th, 1866, a deputation from the Committee had an interview with the Duke of Buckingham, Lord President of the Privy Council, and submitted a memorial on the Public Health Bill; explaining also the resolutions agreed on by the Branch. In 1872, the Committee, acting in accord with the State Medicine Committee of the Association, took into consideration the Public Health Bill which had been introduced into Parliament. On March 16th, they expressed regret that it did not provide—"1, for a complete consolidation of the sanitary department of central administration; 2, for the establishment of adequately large and simplified areas of local administration, and the consolidation of all functions within such areas; 3, for a suitable intermediate authority, such as a county board; 4, for the appointment in each municipal area of a highly qualified medical officer of health, required to devote the whole of his time to his duties." A number of petitions, embodying the resolutions of the Association and of the Joint Committee on State Medicine, were presented to Parliament, many of them through the medium of the Branches of the Association, by whom much support had been given to the Committee. The Committee, however, did not consider it advisable to urge amendments which might have imperilled the passing of the Bill, and therefore confined their action to urging on Mr. Stansfeld, President of the Local Government Board, the necessity of strengthening and making more apparent the powers of the Government to unite districts so as to form an adequate area, to provide for the appointment of a medical officer over a large area by the urban and rural authorities; to provide that half the salaries of the medical officers of health should be paid out of the Consolidated Fund, and that they should not be removed except on grounds satisfactory to the central authority. In 1873, a Bill was introduced by Sir Charles Adderley for the collection and adoption of the amendments of the sanitary laws recommended by the Royal Commissioners on the subject. The Committee called attention to the clause which provided for powers to compel Poor-law medical officers to render services, but made no provision for paying them; and a clause remedying the defect was introduced by Mr. Donald Dalrymple. In 1875, the Committee decided on co-operating with the Metropolitan Board of Health in regard to improvements in the Public Health Bill.

In 1874, the Committee co-operated with the joint Committee representing the Dublin colleges and corporations, and the Sanitary Association of Dublin, in the improvement of the Public Health Bill for Ireland. In their report, the Committee stated that "the Dublin Committee had very courteously acknowledged the assistance which the Chairman of the Parliamentary Bills Committee was able to render on the occasion." In 1878, a Public Health Bill for Ireland being again introduced into Parliament, the Committee co-operated with the Irish Medical Association in bringing before the Secretary for Ireland, Sir Michael Hicks Beach, the necessity of making certain amendments in the Bill. Some of the suggestions of the Committee were adopted.

VACCINATION.—In 1866, on the introduction, by Mr. Bruce, of a

Bill "to consolidate and amend the statutes relating to Vaccination in England," the Committee gave much attention to its provisions. They endeavoured to persuade Mr. Bruce, and the Select Committee on the Bill, to abandon the attempt—as it had hitherto proved futile—to form a complete register of all children successfully vaccinated; and to increase the minimum fee from 1s. 6d. and 2s. 6d. to 2s. 6d. and 3s. 6d. respectively, and also to allow a fee for the vaccination of infants and children in the workhouses. The proposals as to payment were adopted by the Select Committee, except that the additional shilling was made dependent on the Privy Council's approval of the quantity and quality of the vaccination; but the scheme of forming a register of vaccination was retained. On July 24th, a deputation of the Committee waited on the Duke of Buckingham, Lord President of the Privy Council, and urged that vaccination might be greatly promoted, if the Poor-law Board would advise the guardians to pay a more adequate fee for the operation, and would cancel the standing order prohibiting payment for vaccination in workhouses. The Bill was withdrawn soon afterwards. In 1867, it was reintroduced into the House of Commons by Lord Robert Montagu. The Committee held two meetings, in May 1867, and discussed the clauses; after which they had an interview with Lord Robert Montagu, and proposed amendments to the following effect: That the minimum fee should be 2s. 6d.; that revaccination should not be restricted to cases in which it was ordered by the Privy Council, and that it should be paid for at the ordinary rate for primary cases, instead of two-thirds; that the registration of certificates of vaccination should be simplified; and that a fine of 20s. should not be inflicted on vaccinators for not filling up certificates. Nothing was done in the House of Commons towards making these amendments; and the Committee took steps to get the objectionable clauses reconsidered in the House of Lords. Their lordships referred the Bill to a Select Committee, which introduced several amendments; but, by the rules of Parliament, they were unable to introduce the chief amendments suggested by the Committee, as they related to fees and penalties. The Bill was sent back to the House of Commons, and passed in a form in which, the Committee feared, "its accumulated penalties, and its unnecessarily restrictive and coercive provisions, would prejudice public opinion against the principle of compulsory vaccination itself." In 1871, a Bill to amend the Vaccination Act was introduced into Parliament, one clause of which provided that not more than two penalties (for neglect or refusal of vaccination) should be enforced, nor more than one penalty when it amounted to more than twenty shillings. The Committee, regarding this clause as vicious in principle, recommended that it should be expunged. This clause was struck out by the House of Lords; and the amendment was consented to by Mr. Forster, who had charge of the Bill in the House of Commons, on the ground that resistance to it would cause delay in the passing of the Act. In 1872, the Committee opposed a "Vaccination Acts Amendment Bill," which proposed to stop penalties for non-compliance with the law after the second fine. In 1881, a Vaccination Act Amendment Bill was introduced by Mr. Dodson, for the abolition of multiple penalties for the neglect or refusal of vaccination. The Committee took steps to oppose the Bill; and a highly influential deputation of members of the Association and others waited on Mr. Dodson, and explained to him the objections to the measure. The Bill was withdrawn.

VACCINATION FROM THE CALF.—In November 1879, Mr. Ernest Hart presented to the Committee a detailed report on the subject of vaccination from the calf, in which he stated the favourable conclusions which he had drawn from an examination of the vaccination stations in Belgium, and recommended that the subject should be considered with a view to making representations on the subject. It was decided that a conference on the subject should be held. Accordingly, a conference, which was largely attended, was held on December 4th, 18th, and 30th, at the rooms of the Medical Society of London, and was addressed by, among others, Dr. Cameron, M.P., Mr. J. Greene, Dr. Stevens, Mr. H. Lee, Dr. Warlomont of Brussels, Dr. Ballard, Dr. A. Carpenter, Mr. R. Ceely, Dr. Cory, and Professor Simonds. On February 9th, 1880, a deputation of the Committee waited on Mr. Sclater-Booth, President of the Local Government Board, to lay before him the results of the conference, which had adopted the conclusions of the above-named report, and to urge accordingly that there should be a central department from which animal lymph might be distributed, so as to allow the public and the profession an alternative means of procuring a lymph which would not be liable to the objections sometimes raised against the lymph ordinarily in use. The Local Government Board have since agreed to establish a central department for the supply of calf-lymph for the vaccinators; and a vote for the purpose has been taken this year.

ARTISANS' DWELLINGS.—In 1868, the Committee took into consideration Mr. Torrens's Artisans' and Labourers' Dwellings Bill, and

endeavoured, but unsuccessfully, to obtain a provision that the salary and removal of the health-officer should be subject to the approval of the Home Secretary, or the Health Department of the Privy Council. They also resolved: "That the officer of health under this Act should be a registered medical practitioner; that the appointment and salary should be permanent, with a view to secure the independence and efficiency of the officers in the discharge of their local duties, subject to the approval of the Home Secretary." In 1875, the Committee succeeded in obtaining the introduction, into the Artisans' Dwellings Bill, of amendments relating to areas of measurement, to the protection of medical officers in performing their duties, and to diminishing the expense attending the preparation and approval of improvement schemes.

PROTECTION OF INFANT LIFE.—In 1868, a series of investigations into the system of baby-farming having been carried out in the *BRITISH MEDICAL JOURNAL*, the Earl of Shaftesbury founded thereon a question in the House of Lords; and the President of the Privy Council intimated the intention of the Government to adopt measures for the registration and inspection of the houses of persons taking children to nurse. The Committee supported the opinion that the Poor-law medical officers might be entrusted with the duty of inspection. In 1871, the Committee supported the endeavours made by Mr. Ernest Hart, Mr. Curgenven, Mr. Benson Baker, and others, to obtain the enactment of measures calculated to lessen the destruction of infant life, and to regulate baby-farming; and, in 1872, they reported with satisfaction that, after investigation by a Select Committee, which had called the chairman as the first witness, an Act for the purpose had been passed. A petition in its favour had been sent from the Committee during its passage through Parliament. In 1880, the Committee called the attention of the Home Office to the necessity for extending and strengthening the provisions of the Infant Life Protection Act; and a deputation waited on the Home Secretary and made suggestions: 1, for the registration of persons taking one child to nurse for the purpose of gain; 2, concerning the advisability of making the Act compulsory on all local authorities; 3, for the inclusion within the purposes of the Act of houses and other public institutions for the reception of foundlings and nursed children. The deputation was promised that attention should be given to these representations; but the change of Government prevented any steps from being then taken.

MEDICAL REFORM.—In April 1868, the Committee examined the Medical Practitioners' (Colonies) Bill, and resolved that a deputation should wait on the Duke of Buckingham and Chandos, to urge on his Grace either to withdraw the Bill, or to frame its provisions in accordance with the clauses relating to colonial graduates and practitioners introduced by Government into the Medical Acts Amendment Bill. In 1869, the Committee took into consideration the Draft Medical Acts Amendment Bill, drawn up by the Medical Council. They objected to the erasure of the names of practitioners from the Register, on the ground of their having ceased to practice; and also to the registration of foreign and colonial qualifications. They also recommended, in order to provide for the direct representation of the profession in the Medical Council, that the seventeen members elected by the universities and corporations should be reduced to nine; and that eight seats should be filled by the votes of the registered medical practitioners of the United Kingdom. The amendments were submitted to the General Medical Council, and by them referred to a Committee on the Bill. In May 1876, the Committee expressed disapproval of the Medical Acts Amendment Bill then before Parliament, on the ground that it proposed to admit to registration, by women, degrees of foreign universities, which are not registrable by men. In February 1878, the Committee expressed approval of Dr. Lush's Medical Acts Amendment Bill, proposing penalties against the use of medical titles for the purpose of gain, and for other matters. In 1879, the Committee appointed the chairman to act with the Medical Reform Committee in drawing up a statement of the arguments in favour of medical reform in the consideration of the General Medical Council.

ADULTERATION OF FOOD AND DRINK.—In 1868, the Committee endeavoured to secure a provision in the Adulteration of Food and Drink Act, that the Government should, to the effect that the Food and Drug Act, 1860, should be amended, so that the Government should be empowered to grant licences to the grocers, drapers, and butchers. In 1878, a Bill to amend the Adulteration Act was introduced into Parliament, and received the cordial consideration of the Committee. It was passed by the House of Commons, but the Government refused to assent to the Government's amendments. The Government, however, in 1880, introduced a Bill to amend the Adulteration Act, which was passed by the House of Commons, but the Government refused to assent to the Government's amendments. The Government, however, in 1880, introduced a Bill to amend the Adulteration Act, which was passed by the House of Commons, but the Government refused to assent to the Government's amendments.

of the Bill, and praying that the analysis of water at the fee of £1 is. should be provided for in the Bill.

THE CORONER'S COURT.—In 1869, a Bill for regulating the election and duties of county coroners was introduced into Parliament. The Committee took active steps to oppose the main provisions of the measure, by which the appointment would have been placed in the hands of the Lord Chancellor or the Home Secretary. They proposed to vest the election either in the registered freeholders, or in the justices of the peace for the county. The first of these proposals was adopted by the Committee of the House of Commons, the electorate being at the same time enlarged. The Bill was withdrawn.

In 1871, the Committee energetically opposed clauses in the Coroners' Bill then before Parliament (afterwards withdrawn), which threatened to deprive Poor-law medical officers and others of their fees for *post mortem* examinations conducted for inquests. In November 1877, a subcommittee met in conference with several teachers of medical jurisprudence and medical coroners, on the subject of the law relating to the appointment of coroners and the conduct of their courts. A large amount of information was obtained, and a report was drawn up. The materials of information collected were forwarded to the Home Secretary, who promised that consideration should be given to the documents in the preparation of any Bill on the subject. In 1879, a Bill regarding the Coroner's Courts was introduced into the House of Commons, and referred to a Select Committee. The Parliamentary Bills Committee examined the Bill at two meetings, having the advantage of the assistance and advice of the late Dr. A. S. Taylor. The following resolutions were adopted.

"That, in the opinion of this Committee, the duties of a coroner should consist in making an inquiry with the view of determining the cause of death; and that the coroner should not possess the power of issuing warrants for the committal of a person charged with manslaughter or murder, but that his report and depositions should be placed before a justice of the peace for further proceedings.

"That the qualification of a person to be appointed or elected as a coroner should be, that he has served either as an officer of health or has passed an examination in State Medicine.

"That, in the opinion of this Committee, it is desirable, in view of the present costly and vicious mode of election, that the election of county coroners should no longer remain in the hands of the county freeholders; and that the nomination or election of 'franchise coroners' by universities, boroughs, corporations, or deans and chapters, or by the Lord Steward of the Queen's Household, should be suppressed."

It was considered that the appointment might be placed in the hands of, 1, the Lord Chancellor; 2, the Lord Chancellor associated with the President of the Medical Council or of the Royal College of Physicians or of Surgeons; 3, the Home Secretary in conjunction with the President of either College; or, 4 (as had been suggested by the Home Secretary), a county Board of Management, or the magistrates. Copies of the resolutions and of the report referred to above were sent to the Select Committee, with a request that Dr. A. S. Taylor might be allowed to give verbal evidence in support of the resolutions. The Select Committee, however, closed its proceedings without hearing Dr. Taylor's evidence. In November 1879, the Committee appointed Dr. A. S. Taylor, Mr. Stokely, and Dr. Joseph Rogers to be a subcommittee to examine the Coroners' Bill. In January 1880, this subcommittee presented a report, which was adopted; and the members of the subcommittee, with the chairman, were appointed a deputation to wait on Mr. Cross, the Home Secretary. The deputation had an interview with Mr. Cross on February 19th, and noted the objections to the proposals of the Select Committee. The chief points insisted on were these:—1. Medical men should not be excluded from holding the office of coroner, for which their professional knowledge is especially fit them. 2. When medical services are required of testimony in coroners' inquests, the customary fee for such services should be paid as in other cases. In consequence of the change of Government the Bill was abandoned, and no measure of the kind has since been brought before Parliament.

LEGISLATION (IRELAND).—In 1871, the Committee expressed approval of the amendment of Lord O'Hagan's Lunacy (Ireland) Bill, proposed by Sir Dominic Corrigan, with the view of preventing the removal of the insane to Ireland of their own free will, or in reward. They also supported a Bill introduced by Sir Dominic Corrigan, with the view of affording that remuneration to the Irish Poor-law medical officers for certifying their patients, and of improving the supervision of the insane in asylums in Ireland.

MEDICAL AND VETERINARY WILLS (Ireland).—While this Bill was in Parliament in April 1872, the Committee expressed its approval of a resolution, "That the Committee be desired to communicate with the Secretary of State for the Home Department, and with members

of Parliament, with a view to the amendment of the eleventh clause of the Bill, by the introduction of a power to continue the important system of weekly deductions for the formation of a medical and sick-assurance fund.

MINES REGULATION BILL.—In April 1872, the Committee “observed with regret that, in the Mines Regulation Bill, there was no provision to guard against the employment of children and young persons who were disqualified by inadequate physical development or deformity, or by the presence of disease”; and recommended that the present organisation of inspection of factories should be extended to mines. The Chairman was authorised to take the necessary steps in reference to this, and to express to the Association of Certifying Factory Surgeons the willingness of the Committee to co-operate with them.

EDUCATION AND REGISTRATION OF MIDWIVES.—In 1873, the Committee reported that they had represented to Mr. Stansfeld, the President of the Poor-law Board, the evils arising from the employment of ignorant women as midwives, and the absence of any means for affording or testing their education. Mr. Stansfeld expressed his approval of the views laid before him, and requested Mr. Hart to prepare and submit to him a scheme for the education and registration of midwives. The Obstetrical Society, it was stated, was also prepared to give assistance. At a meeting in November, Mr. Hart laid before the Committee a scheme prepared by the Obstetrical Society for the education and registration of midwives; and Dr. C. Holman, Dr. Desmond, and Dr. J. H. Aveling were appointed a subcommittee “to consider the scheme of the Obstetrical Society for the education and registration of midwives, and to make such remarks or alterations as they may consider necessary, and to circulate the same to the delegates of the Branches and the Committee, with the request that they will take an early opportunity of submitting the same to the Councils of their respective Branches, and communicate the result to the Chairman of the Committee.” A modified scheme was afterwards drawn up and published in the *JOURNAL*, and submitted to the consideration of the Branches of the Association. In 1879, the Committee appointed a subcommittee, consisting of Dr. W. S. Playfair, Dr. J. H. Aveling, and Dr. C. Holman, to co-operate with the Medical Reform Committee in procuring amendments of the clauses relating to midwives in the Medical Acts Amendment Bill then before Parliament. The clauses having been withdrawn, the subcommittee were requested to confer with a subcommittee of the Obstetrical Society on the question of taking up the clauses and amending them on the basis of a scheme proposed by the Society, in order that they might be introduced as a separate Bill. Since that time, much attention has been given to the subject by a Committee, including the Chairman, Dr. Quain, F.R.S., Dr. Priestley, Dr. Barnes, Dr. Aveling, Dr. Grigg, Dr. Holman, Mr. Sibley, and Mr. Nelson Hardy, who have prepared a Draft Bill for the Education and Registration of Midwives, which, it is intended, will be introduced into Parliament when a favourable opportunity occurs.

REGISTRATION OF BIRTHS AND DEATHS.—In 1873, various amendments were made in the Registration of Births and Deaths Bill, at the instance of the Committee. A deputation of the Committee, in conjunction with the Obstetrical Society of London, waited on the President of the Local Government Board, to request that provision for the registration of still-born children should be made in the Bill. The Bill was withdrawn for the session. In 1874, a Bill being again introduced, the Committee originated and supported amendments for the prevention of the illicit disposal of the bodies of infants under criminal pretences, as though still-born, and for providing for a regular inspection of bodies not regularly certified before burial. They also attempted, but without success, to obtain an improvement in the means of remuneration for certificates of death.

THE VIVISECTION BILL.—In May 1876, the Committee held a conference with the teachers of Physiology in reference to the “Cruelty to Animals Bill” then before Parliament. The chairman placed before the meeting a report on the subject; and the Committee agreed to a series of amendments. The report and amendments were circulated among the Branches of the Association, and to the universities and medical licensing bodies in Great Britain. A memorial was prepared, which was signed by more than two thousand members of the Association; and the Committee had an interview with Lord Carnarvon, at which the principal objections to the Bill were stated. Subsequently, Lord Carnarvon consented to certain modifications which removed some of the objections. The Bill as passed in the House of Lords being seriously obstructive to science, and having been supported in a manner which seemed to imply serious imputations on the humanity of the profession generally and of British physiologists, the Committee resolved to oppose it in the House of Commons unless important modifications were introduced. A large and influential deputation,

summoned by the Committee, waited on Mr. Cross, at which the objections to the proposed form of legislation were expressed; and several of these were met and removed in Committee of the House of Commons.

FACTORY LEGISLATION.—In 1877, the Committee took into consideration the Factories and Workshops Bill which had been introduced into Parliament by the Home Secretary. They joined with the Association of Certifying Surgeons in laying before Mr. Cross a statement of the dangers likely to arise to the children of the poor from the changes which were proposed in the Bill. The Bill was withdrawn, and was again introduced in 1878. The Committee again co-operated with the Association of Factory Surgeons, and met with important success in procuring the introduction of amendments into the Bill, which afterwards passed.

DENTAL PRACTITIONERS.—In February 1878, the Committee examined the Dental Practitioners' Bill, and adopted a resolution to the effect that persons holding a licence in dentistry should be entitled to be registered as dentists, and that surgeons taking licences in dental surgery should be registered as dental surgeons. They also expressed the opinion that all persons registered under the Medical Act should be entitled to practise dental surgery, notwithstanding any provision for special registration of dentists. This suggestion was approved by Sir John Lubbock, who had charge of the Bill; and he introduced an amendment securing to all practitioners registered under the Medical Act full privileges of dental practice. On June 8th, the Committee again discussed the Bill, especially with reference to the use of the term “surgeon”; and ultimately decided to approve of it as amended in the House of Commons.

IRISH PRISON SURGEONS.—In 1879, the attention of the Committee was called by the North of Ireland Branch of the Association to the condition of infirmary surgeons who are also officers of gaols. The Committee resolved: “That, in the opinion of this meeting, the present position of infirmary surgeons in respect to their gaol work is a practical injustice to them.” Copies of the resolution were sent to the Chief Secretary for Ireland, and to the medical members of Parliament. A promise was received from the Irish authorities that the matter should be considered, and that the Committee should receive further communication in relation thereto.

THE FACULTY OF MEDICINE AT OXFORD.—In 1879, the Committee adopted a memorial to the House of Commons and the University Commission and Council, praying for the restoration of an efficient Faculty of Medicine to Oxford. Copies of the memorial were also sent to the members of the Association. The memorial, which received about 2,000 signatures, was sent to Parliament and to the university authorities, and was by the latter referred to a Committee of the Hebdomadal Council. Several important reforms have been and are in course of being introduced in the sense of the prayer of the memorial; but much remains to be done.

LOCAL SANITARY LEGISLATION: REGISTRATION AND NOTIFICATION OF INFECTIOUS DISEASES.—In March 1879, the Committee, at the request of the Committee of Council, took this subject into consideration, with special regard to the question whether the notification of infectious disease should be made by the medical attendant. It was resolved—

“That, in accordance with repeated annual reports of the Registration of Diseases Committee of the British Medical Association, and with resolutions confirming the same at successive annual meetings of the Association, this Committee recognises the necessity of early and compulsory notification of cases of certain infectious diseases; it is of opinion that such notification should be made compulsory and formal by the medical man to the family, or guardian, or person in charge of the patient; and that the duty of notifying such diseases to the local authorities should be imposed upon such friends or guardians.”

In November 1879 and February 1880, the Committee took into consideration reports by the Chairman, regarding local legislative measures for the notification of cases of infectious disease. The report of 1879 included a model clause, which was approved by the Committee. Both reports were ordered to be printed and circulated among sanitary officers, members of Parliament, and others interested in the subject. A further report by the chairman was considered at a meeting of the Committee in March 1881, and presented to the Government. The reports have been published in full in the *BRITISH MEDICAL JOURNAL*, and have drawn effective attention to the great variety and extent, and the stringent and hard character, of many of the sanitary clauses in local Acts, which had previously passed without public attention or general parliamentary revision. On the motion of Mr. Hopwood, M.P., a Special Committee of the House of Commons has been appointed, which rigidly investigates all novel changes in local Bills under these heads.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 10TH, 1882.

THE BRITISH MEDICAL ASSOCIATION.

THE near approach of the jubilee meeting of the British Medical Association has suggested to us, that a chronicle of the chief events in its career would be interesting. We have therefore compiled, from the records in the *Transactions* and *JOURNAL*, a sketch of its history from its establishment down to the present time.

Fifty years ago, the provincial medical practitioners of England did not, as a rule, hold that position to which the patriotic zeal and discerning penetration of Sir Charles Hastings and his fellow-workers perceived them to be entitled. Their position was one of obscurity, which the shining of even such great lights as Hey, Dalrymple, Crosse, James, and many others, was not sufficient to dispel. It was the great merit of Hastings that he showed his fellow provincials a way of escape from this state of obscurity and neglect, and gradually instilled into them the important principles of harmony of action and loftiness of aim in aid of the scientific advancement and the social dignity of their profession, and inspired them with confidence in their own powers. At the jubilee meeting, others will speak of the venerated founder of the Association in terms befitting his memory. But we may here call attention to his address to the small body of provincial colleagues who responded to his invitation to meet, in July 1832, in the board-room of the Infirmary at Worcester. That address, of which an abstract is given in our historical sketch, indicates the clear and far-seeing view which he took of the requirements, scientific and social, of medicine, as well as his confidence in the powers of such men as those whom he addressed to fulfil these requirements. With the aid of men of like mind with himself—Barlow, Kidd, Johnstone, John and William Conolly, Hodgson, Sands Cox, Baron, and others—he founded that Association, which, not reaching its first thousand until its sixth year, now reckons its nine thousand members, and spreads its Branches over the British empire and its colonies.

Under the stimulation and guidance of its founder, the aims of the Association were, from the first, ambitious and comprehensive. No great question of the day, in which medicine was concerned, was too formidable for it to attack, and that in a manner which can only excite admiration. We may refer to the proceedings of its early years with reference to Vaccination, the Medical Relief of the Poor, the mode of giving aid to distressed members of the Medical Profession and their families, Medical Reform; to the exhaustive reports on Vaccination, and on the Medical Relief of the Poor, which its earlier committees drew up, and which will be found in the volumes of the *Transactions* and the *PROVINCIAL JOURNAL*; to the energy and pertinacity with which it again and again assailed the legislature, in advocacy of measures calculated to increase the usefulness and uphold the dignity of the profession, and at the same time to be beneficial to the public; to its careful elaboration of a scheme for the relief of distressed members of the profession and their families; and to its persistent endeavours, still continued because not yet crowned with complete success, to obtain a satisfactory legal organisation of the medical profession. Such great matters the Association undertook while yet it consisted of only a few hundred provincial members; and the labours

of the men of that time were attended with an amount of success which has done much to prepare the field for the exertions of their successors, increased tenfold in number, and spread over every part of the British Empire.

Passing rapidly from the distant past to the present, it will be seen that the series of energetic labours on the part of the Association, for the benefit of medicine and of humanity has never been broken; and that, with its increased numbers and influence, the range of its operations has been evidenced. The action of its standing Committees has been most salutary. Its Medical Reform Committee, under the judicious management of Dr. Edward Waters and his colleagues, still holds on with persevering energy in the endeavour to obtain those reforms which the Association demanded nearly forty years ago. The Committee on Parliamentary Bills, under the presidency of Mr. Ernest Hart, keeps a watchful eye on all public measures affecting the medical profession, and has, by its representations to Government and the Legislature, done no small amount of good—as will be seen from the summary of its proceedings which we publish in another page. The Committee on State Medicine, acting in conjunction with a similar Committee of the Social Science Association, seeks to improve the sanitary law of the country, and its mode of administration. Its Committees on the Registration of Disease, on the Treatment of Habitual Drunkards, and on other matters requiring special investigation and persevering and judicious treatment, all aid in securing to the Association the chief place in the estimation of the public, as well as of the profession, as an agent of beneficent design and great power. Its Committee on Scientific Grants guides its Council in the application of a portion of the funds of the Association to the encouragement of researches calculated to advance the science and improve the practice of medicine; and its youngest Committee, that on Collective Investigation, has entered with energy on a task which was long ago partially attempted, but which is now entered on under much more favourable auspices and with a far greater hope of success. Of the labours of these Committees we had intended to give summaries in the present number; but the pressure on the space at our disposal compels us to postpone the task to future numbers of the *JOURNAL*.

We had intended also to give a sketch of the history of those important organisations which have proved themselves so efficient in carrying out the objects for which the Association was founded—its Branches. It was not long after the formation of the Association that the value of such organisations was foreseen; and their development has gone on gradually, until they have now spread over nearly the whole of the United Kingdom, and have in late years been formed in the colonies.

Connecting all these agencies, and affording to the Association an indispensable means of carrying out its purposes of good, is its weekly organ, the *BRITISH MEDICAL JOURNAL*. We must defer to another number the fulfilment of an intention to give a detailed history of this from its commencement, a little more than forty years ago; but, in another column, we will refer briefly to the part which it has taken during the last fifteen years in carrying out the purposes for which the Association was founded. That the value of the *JOURNAL*, as the organ of the Association, especially in its improved condition, and with its rare comprehensive and systematic range of action, has been recognised, is proved by the great and rapid increase which the Association has in recent years undergone: the numbers having increased from little more than 3,000 in 1867, to considerably more than 9,000 at the present time.

The Association has not been without periods of turmoil and anxiety. When it was perceived, by many of its earnest members, that it had been entering on a range of action the catholicity of which did not accord with its limited name, and the proposal was made to give it the more appropriate and comprehensive title of *British*, alarm was caused among some of those who had taken the leading part in its foundation, and had been its firmest friends, lest its character as the great supporter of the interests of provincial medical men should suffer.

When, however, it was found that the change was desired by the great majority of the members, it was readily agreed to; and since that time none have worked with greater cordiality in the management of the Association, than those who at one time strenuously opposed measures which they regarded as revolutionary and dangerous. Looking back on the records of the discussions, we find one motive underlying all differences of opinion—an honest desire for the prosperity and usefulness of the Association.

The financial condition of the Association is now in a highly satisfactory state, but it was for many years a source of much anxiety; and, if there were anything connected with the Association which caused trouble to the mind of its venerated founder and first treasurer, it must have been the monetary difficulties which constantly came in his way. In 1871, there was a debt of £2,000 due from the Association. From that time, the state of affairs has changed; and the Association has not only paid all its yearly expenses, greatly increased though they have been, but has invested £10,000 in good securities. To all concerned, and especially to its late excellent and judicious treasurer, Mr. Husband, this condition of prosperity must be a source of deep satisfaction.

Increase of prosperity involves increase of responsibility. That the Association will continue to recognise that responsibility, there can be no question. It has done much good work; much still lies before it; and if the record at its jubilee is so favourable, what limit can be placed on the hope of the account which it will give of itself at its centenary?

THE BRITISH MEDICAL JOURNAL.

It was our intention to give, in the present number, a history of the JOURNAL from its commencement in 1841. We are compelled, however, to defer the fulfilment of this purpose, and to confine our remarks on the present occasion to a reference to the part which it has taken during the last fifteen years in carrying out the purposes for which the Association was founded.

When the present editor first came into office in 1866, it was agreed, on his suggestion, to enlarge the JOURNAL, and to commence a vigorous development of the several departments. This was commenced in 1867; and from that time the JOURNAL has gone on steadily increasing, until the number of pages in each half-yearly volume has risen from about 600 in 1867 to more than 1000. To increase the utility of the JOURNAL special departments have from time to time being either developed, or newly formed.

In 1868, a department was created under the title of "Poor-law Medical Science" for the special discussion of all questions affecting the interests of the Poor-law Medical Officers. This arrangement has had the happiest effect in providing authoritative and powerful support for these meritorious public servants throughout the kingdom, and giving them, as it were, at once a definite *locus standi* in the medical republic, and a common meeting-place in which they can, from week to week, note any discussion of principle, or any detail of facts, which affect the interests of this important part of the service. In order to ensure that this department should be conducted with a thorough knowledge and in active sympathy with the needs of the great body of general practitioners employed in the Poor-law Medical Service, it was placed under the special care of Dr. Joseph Rogers, President of the Council of the Poor-law Medical Officers' Association, whose advocacy of the interests of general practitioners and medical officers may always be depended upon. It is well known that this department has rendered effective service to the Poor-law Medical Officers as a body, by its vigilant defence of their interests, as well as to individual members under circumstances of peculiar hardship.

When the development of the Sanitary Acts and the creation of the great body of medical health-officers indicated that the interests of the practitioners of the country were about to assume a special phase in connection with the service, special attention was devoted to the de-

velopment of the department of public health in connection with that of the Poor-law service. Here, again, the assistance of highly experienced and skilled persons throughout the provinces was obtained, and this department has been so conducted as to afford a survey of the work of the great body of practitioners who are aiding in the care of the public health, and performing public duties in respect to sanitation throughout the country. The analysis of this great body of reports, involving much labour, has been carried out in a manner which, we may venture to say, has attracted the attention of the most eminent sanitary authorities throughout the world, and reflects no small credit on the gentleman whose services have been available for the purpose.

Again, the development of cottage hospitals throughout England, and the new departures which have been taken of late years in the administration of hospitals, indicated the advisability of devoting a recognised department for the reception and study of communications and information from all sides, relating to the progress of provincial hospitals, of cottage hospitals, and of provident dispensaries. Such a department was accordingly organised in 1877, with the able assistance of Dr. Fairlie Clarke of Southborough and others, by whom all documents and communications relating to this subject are systematically analysed.

The Army and Navy Medical Services have, from 1873, also had a special department in our columns. Free use has been made of this space, and the correspondence which we receive is sometimes very considerable, although of course only a very small proportion of that which is received is intended for publication. Of the services which the BRITISH MEDICAL JOURNAL has been able to render to the army and navy, much has been said by leading personages of those services; and constant communication with representative members of all rank enables us to hope that the sympathy which exists between the editorial department of this JOURNAL and the officers of the army and navy, may continue to serve a useful purpose in protecting and advancing the interests of those departments on all occasions. Of late years, the number of members of the two services who have joined the Association has greatly multiplied.

The JOURNAL has sought, by the establishment of a department of Clinical, Obstetric, and similar Memoranda, to encourage the busy practitioner, in town and in country, to record interesting and valuable cases occurring in his practice, but requiring only a brief history. It has set apart columns for the special record of news concerning the profession in Scotland and Ireland, and has established a staff of correspondents in these divisions of the kingdom, as well as in many of the large cities and towns. It has also widened the range of hospital reports and of reports of medical societies, so as to include all parts of the kingdom.

In thus increasing on all sides the editorial labours connected with the JOURNAL, the object has been held in view, in all cases, of unstintingly devoting the space of the JOURNAL to the interests of the profession at large, and especially to provincial interests and to the interests of practitioners resident in the sister countries.

In the creation of these successive departments, we have met with that sincere form of flattery which consists of imitation, by the ablest and most powerful of our contemporaries. Such competition we hail with great satisfaction, for it is at once powerful testimony of the justness of the views entertained in these continuous developments of the sphere of influence and work of the JOURNAL, and shows us also a healthy rivalry, which as much as anything else tends to that constant progress which it is our object to maintain. Of the JOURNAL generally, in respect to its scientific contents, we may be content to quote the statement of Dr. Bradbury, in his Address on Medicine, delivered at Cambridge. Commenting on the scientific merits of the JOURNAL, he said: "Speaking on the subject of scientific medicine, I cannot but allude to the benefits which our Association especially has conferred upon this branch of study through her scientific grants, and through our most excellent JOURNAL, which is not surpassed in this or any other country in the scientific material

which its pages weekly contain. In preparing this address, I have been struck with the very great care which is taken in our JOURNAL to bring before us all that is best in modern scientific medicine."

The system long since adopted of providing leaders illustrating the progress of science, of classifying papers relating to one series of subjects, and of seeking out the best and latest writers upon the newest questions in medical science, has, we trust, been fruitful in advancing the progress of medicine and surgery. At any rate, it has secured for this JOURNAL an enviable reputation abroad, and, we trust, also at home. Of this European reputation, we have the repeated testimony of foreign journals, which speak of the BRITISH MEDICAL JOURNAL always as of the very highest order of journalistic and scientific merit. Recently, we have received several communications, asking for principles and details of the Editorial conduct of the BRITISH MEDICAL JOURNAL, for the guidance of our brethren in America, who do us the honour to regard this JOURNAL as a type of what a medical journal should be, and propose to imitate and adopt its characteristics, in the journal which many of the leading members of the American Medical Association desire to found.

We hope that we may not be accused of making our own panegyric, if we venture to quote, among the latest appreciations (from an American source) of the value of the BRITISH MEDICAL JOURNAL, the words of Dr. Joseph H. Warren of Massachusetts, Chairman of the Committee of Foreign Delegates, in his report presented at the thirty-second annual meeting of the American Medical Association. He says: "I refer you to the BRITISH MEDICAL JOURNAL, a weekly and influential journal published by the Association, and considered by far the best journal of its kind in the English language. As such it is a journal for us as an Association to pattern after, both in management and much of its detail. I would, Mr. President and Fellows, that the American Medical Association had in place of its ponderous annual publication, a weekly journal published under its own immediate auspices; and I would that at its head we had an Editor with a vigour equal to that of Mr. Hart. I think I am not mistaken nor over-confident, when I say that such an editor and such a journal would be the means of developing from an atrophied membership of to-day some real honest work, and of displaying the mighty power and the wonderful but latent scientific matter that now lie dormant in the hands of our fellow-members."

The appreciation which the vigorous development of the JOURNAL has met with at home has been nowhere better shown than in the rapid growth which the Association has undergone since 1867, in which year was adopted a system of periodical distribution of copies of the JOURNAL to members of the profession who had not yet joined the Association, with an invitation to become members of it. It is not unreasonable to conclude that no small part of the rapid increase in the number of members of the Association is due to the satisfactory impressions produced upon the minds of those in whose hands the JOURNAL was in this way placed—in many instances probably for the first time. In other ways, which it is unnecessary to specify, the JOURNAL has been steadily employed in cultivating the interests of the various branches, and in assisting directly as well as indirectly in the formation of new branches and the extension of the older ones.

In the last fifteen years, the Association has trebled the numbers which it had reached in thirty-five years growth. Whatever may have brought about such a result, it is at least satisfactory, and deserves to be noted.

Of the difficulties and responsibility of our task, it is unnecessary to speak. The position of an editor must be singularly difficult, who has to exercise daily discretion in the discussion of affairs concerning which it must often happen that the members of the Association which he represents take differing views. On the other hand, in the personal responsibility of the Editor, and in the constitution of the Journal Committee, in which provincial interests have predominance, there is a guarantee that, if differences of opinion cannot be prevented, they can at least be referred to a tribunal, which meets

frequently, and is so constituted as to be essentially representative, impartial, and entirely free from undue local influence. Happily there has always prevailed complete harmony between the executive and administrative officers of the Association, and the means of communication provided as described for safeguarding the control of the JOURNAL. This organisation furnishes, it may be hoped, the best assurance that the JOURNAL will continue to serve, as it is, we trust, freely conceded that it has thus far served, the best interests of the the Association and the medical profession.

In concluding these remarks on the JOURNAL, we cannot omit to acknowledge with feelings of deep gratitude the valuable assistance which we have at all times received from the gentlemen who have co-operated with us in the several departments, and especially from the sub-editors: Dr. Alexander Henry, who has held the office for nearly thirty years; the late Dr. John Murray; Mr. George Eastes; Dr. Fancourt Barnes; and Mr. Alban Doran.

A SESSION of the General Medical Council commences on June 27th, and a meeting of the Executive Committee has been fixed for the 26th instant.

THE honorary degree of D.C.L. Oxford will be conferred at the approaching Encœnia upon Dr. Allen Thomson, M. Pasteur, and Sir William Muir.

THE President and Fellows of the Royal College of Physicians have issued cards for a *conversazione* on the evening of the 14th of June.

HIS Royal Highness the Duke of Connaught will distribute the prizes to the students of St. Thomas's Hospital on June 17th.

MR. CHARLES MACNAMARA, Surgeon and Lecturer on Surgery to the Westminster Hospital, is a candidate for a seat in the Council of the Royal College of Surgeons.

WE have to acknowledge the receipt of £10 from Professor Gairdner of Glasgow, for the fund being raised on behalf of the family of the late Sir John Rose Cormack.

MR. ALFRED BUTTERWORTH of Oldham has this week generously forwarded to the Secretary of the Oldham Infirmary a cheque for £1,000, to assist in the endowment of one of the new wards of that institution.

WITH regret we announce the death of two eminent members of the profession; Dr. T. B. Peacock, Physician to St. Thomas's Hospital, whose death occurred suddenly on June 1st; and Mr. Spence, Professor of Surgery in the University of Edinburgh, who died on Tuesday last. Want of space compels us to defer obituary notices of them until next week.

SIR HENRY THOMPSON has commenced "a new departure" in medical book-publishing which is worthy of notice, and may prove what the Germans call a "pathbreaking" innovation. He has republished his well known series of lectures in a really cheap edition in double-columns, with limp cover, very fully illustrated, at three shillings and sixpence.

No such cheap book has yet been presented to the medical world. In America where a fight is going on as to who shall be the first to pirate English medical works and issue them at the lowest possible rates, Mr. Keetley's popular Index of Surgery, published in this country by Messrs. Smith, Elder, and Co., is being issued at about two shillings, and large editions are selling, but the mechanical execution is wretched, and of course all that is looked for in this competition of rival American publishers is a shade of profit to the trader, the author being left out of the question.

THESE are not terms on which publishing could be carried on in this country. Sir H. Thompson's book is very well brought out, and the mechanical execution leaves no room for criticism, especially considering the price. Only books for which a very large professional circulation can be confidently predicated could be published in this form, for it may be reasonably calculated that with all the advantages of illustrations in hand from prior editions, and of printing largely from printed "copy", not fewer than twenty-five hundred copies of this book must be sold before any margin of profit can be reached. Now, of ordinary medical books, a thousand is a fair edition, and two thousand is a full edition of any but quite the most popular of text books. It may be, however, that by considerably cheapening the price of medical books, the circle of readers may be very much extended indeed, and thus a new system of publishing of popular text books at cheap rates may be inaugurated.

THE cause of the death of the eminent Italian patriot, Garibaldi, was laryngeal paralysis following on bronchitis. The fatal illness was of only one day's duration. There was no *post mortem* examination. General Garibaldi, in his will, ordered that his body should be cremated; but circumstances have prevented his instructions from being carried out.

HOSPITAL SECRETARIES.

THE Governors of St. Mary's Hospital have appointed as their secretary Mr. P. J. Michelli, assistant-secretary to the Dreadnought Seamen's Hospital. Mr. Michelli has been carefully trained, under Mr. Burdett at Greenwich, in all the duties—financial, executive, commissariat, secretarial—which it is necessary a successful hospital superintendent should know. Without such knowledge the hospital must suffer; and the sooner this fact is recognised, and steps are taken to train men in all the duties appertaining to a hospital superintendent-secretary, the better will it be for all interested in the competent management of our hospitals.

STATISTICS OF FATAL POISONING.

THE Registrar-General's recently issued report, giving the statistics of death by poisoning, has, as the *Pharmaceutical Journal* points out, a particular interest, viewed in connection with the important question which the Government has of late been considering—the desirability of adopting some further protective measures to regulate the sale of poisons in this country. The death-rate from accidental poisoning has been for some years steadily increasing, and, in the five years ending with 1880, is found to be 15.3 per cent. higher than in the five years preceding. The number of deaths during 1880 ascribable to accidental poisoning was 14 per 1,000,000, while the number ascribable to suicide was 8 per 1,000,000. The total number of deaths from poison being 568, of this number 353 are referable to accident, and 215 to suicide. While the number of violent deaths in 1880 shows a decrease of 9 per cent. on the mean of the preceding ten years, the number of deaths from suicide shows a higher ratio (77 per 1,000,000) than in any previous year, except in 1879, when the rate was 80 per 1,000,000. For the five years previous to this date (1880), it appears that suicide had been on the increase. It is also shown that this form of death is more common with males than with females, and that it prevails more extensively among the educated classes. In the ten years 1871-80, the number of male persons registered as having committed suicide by poisoning was 78.9 per 1,000 cases of suicide in all ways, and the number of females 172.2 per 1,000. The means adopted for self-destruction are found to vary widely in the two sexes. Males generally incline to the use of drugs which, from their more intimate knowledge of poisons, they know are likely to be attended with the least amount of pain. Out of 1,000 males, 567 adopted narcotic poisons; while, out of an equal number of women, 246 only used this means for destroying life. Females, it was found, resorted to the use of strychnia, arsenic, phosphorus, and other preparations easily obtainable in substances sold for the destruction of vermin; and to carbolic acid, vitriol, and other substances which are common articles of domestic use.

IRELAND.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

AN unusually large attendance last Saturday at the Annual Meeting of the College, for the reception of the report of the outgoing Council, showed the great interest taken by the Fellows in the subject that has so keenly exercised the College during the past few weeks, and which has been commented on from different points of view in the *JOURNAL*. On the report being brought forward, Dr. Robert McDonnell moved, and Dr. Darby, of Bray, seconded, a resolution proposing that, in consequence of the state of the College funds, that portion of the report which dealt with the proposed expenditure of a sum of £3,000 on improvements in connection with the school of the College, be referred back to the Council for reconsideration. Mr. Wharton moved an amendment to the effect that the College was bound, both by its interests and by its charter, to maintain its school in the best possible manner. An objection was made to the amendment on the ground of its raising an issue not put forward in the resolution. The President, however, decided to receive the amendment; and after a long and warm debate, lasting from twelve to half-past four o'clock, a division was taken, with the result that there voted for it, exclusive of tellers, 71; and against it, 39. Thereupon the amendment was put as a substantive resolution and passed, the same division being accepted. The effect of this is assumed to be that a majority of the College approves the action of the Council in reference to the proposed alterations and additions for the improvement of the school buildings. However viewed, the amendment was a skilfully framed one. It pledged the college to maintain its connection with its school, and thus anticipated Dr. McDonnell's resolution to the contrary (*vide* last week's *JOURNAL*, p. 835), which was to come on for subsequent discussion. It ignored all financial considerations. And having once definitely asserted the duty of the college to maintain its schools, it rationally and necessarily followed therefrom that the college should support it in a state of creditable efficiency. The contest for the Vice-Presidency of the college, and the election of the Council last Monday, brought together one of the largest colleges that has met for a similar purpose for some years past. One hundred and seventy-six Fellows attended; many of them having come from England as well as from distant parts of Ireland to vote. Owing to the efforts made by the candidates for the Vice-Presidency and by their friends, some excitement and uncertainty was felt as to the result of the voting. In the end Mr. Wheeler obtained twenty more votes than his opponent, Mr. Stokes, and was accordingly declared elected. The numbers were for Mr. Wheeler, 95; for Mr. Stokes, 75. Mr. Barton was elected President of the College, and the following gentlemen, in order of Fellowship seniority, the Council for the ensuing year:—William Colles, Richard G. H. Butcher, George H. Porter, James H. Wharton, William A. Elliott, George H. Kidd, T. Jolliffe Tufnell, Edward Hamilton, Rawdon Macnamara, Robert M'Donnell, Edward D. Mapother, Archibald H. Jacob, Henry Gray Croly, Edward Halloran Bennett, Philip Crampton Smyly, John Denham, Anthony H. Corley, William Thornley Stoker, and Samuel Chaplin. It will thus be seen that all the members of the outgoing Council who sought re-election were, with the exception of Mr. J. A. Baker, re-elected. The two new members are Dr. A. H. Jacob, who resigned his seat on the Council last April, for the purpose of seeking the Chair of Ophthalmic Surgery, to which he has been since elected, and Mr. Henry Gray Croly. There were fourteen unsuccessful candidates.

DEATH DURING ADMINISTRATION OF CHLOROFORM.

DR. WHYTE, city coroner for Dublin, held an inquest at the Rotunda Lying-in Hospital, last week, on the body of an unmarried country-woman, aged thirty-four, who died under the following circumstances. The patient, who was apparently a healthy woman, was the subject of a large ovarian tumour. The abdomen measured 38 inches. It

was decided to perform ovariectomy, as the tumour was increasing rapidly. No indications of cardiac or renal disease were ascertained. Chloroform was administered by Junker's apparatus, and the administration was proceeding satisfactorily, and the patient becoming anaesthetised, when the Master, Dr. Atthill, proceeded to make the primary cutaneous incision. Immediately on his having done so—the chloroform having been inhaled for about four minutes, and only one drachm used—the pupils became suddenly dilated, the face livid, and simultaneously both heart and respiration failed. The usual remedies, including galvanism, inversion, hypodermic injection of ether, and venesection, were resorted to without avail. An attempt was also made to take blood from the left temporal artery; but only a few drops of a dark colour could be obtained. Artificial respiration was kept up for an hour, but she never rallied from the first. The jury returned a verdict that the woman died from collapse while under the influence of chloroform, but they entirely exonerated the medical staff from any responsibility in connection with the occurrence. After the inquest, a *post mortem* examination was made. The ovarian tumour weighed over 26 lbs., and the diaphragm was pushed up.

THE JUBILEE MEETING, 1882.

THE arrangements for the jubilee meeting of the Association are in a forward and satisfactory condition. For the lectures, there is a promise of many subjects for discussion, and of numerous papers, etc. On Tuesday, a dinner will be given by the Mayor of Worcester to the officers of the Association and to the officers of sections.

Wednesday will be jubilee day, *par excellence*. The local Branch will give a luncheon to the whole Association in the Shire Hall. Mr. Hastings, M.P., will give some memorials of his father's life; and Mr. Husband, the late treasurer, will give an eulogy of Sir Charles Hastings as regards his work in connection with the Association. Afterwards, the President will present a marble bust of the founder of the Association to the Mayor and citizens of Worcester. The evening will be occupied by a performance of the oratorio of the *Creation* in the cathedral, to which members and their ladies will be admitted on showing cards of membership.

On Thursday will be the dinner, to which the city and county magistrates will be invited. This will take place in the handsomely decorated Guildhall, newly restored.

On Friday, Lord Beauchamp, Lord-Lieutenant of the County, will entertain the members and the *élite* of the county at a garden-party at Madresfield Court, to which the members will be conveyed by special train.

On Friday evening, a *soirée* will be given at the Shire Hall by the President, in conjunction with Mr. G. W. Hastings, M.P.

There will be an exhibition of works of art, and of the industries and manufactures of the county, open during the stay of the Association in Worcester, which will afford members much interest.

The excursions on Saturday will be to the Malvern Hills; to the beautiful scenery of the Wye, Tintern Abbey, etc.; to Stratford-on-Avon and the memorials of Shakespeare; to Warwick Castle, and Kenilworth.

IRISH MEDICAL ASSOCIATION.

THE annual general meeting of our sister Association was held on Monday last, at the Royal College of Surgeons in Stephen's Green, at 8 o'clock; Dr. Farin, President of the Association and President-elect of the Dublin Branch of the British Medical Association, in the chair. Dr. Chapman, honorary secretary, read the report of the Council for the past year. The chief matters of interest referred to in the report, and upon which resolutions were subsequently adopted by the meeting, were Medical Reform Bills, Superannuation, the Notification of Infectious Diseases, Vaccination, Loss for Medical Witnesses, and the Abuse of the Dispensary Medical Relief System. It was shown that the Union Officers' Superannuation (Ireland) Bill, now before Parliament, when altered in the manner promised by Government, would not afford sufficient justice to the claims of medical and other union officers, and would not meet the requirements of the public service. The Council was therefore requested to endeavour to have the said Bill so amended that it should become a thoroughly satisfactory measure.

With reference to the Bill for the Notification of Infectious Diseases in Ireland, drafted by the representatives of the Association, and by the representatives of the Dublin Branch of the British Medical Association, which, after its approval by both these bodies, as well as by

the King and Queen's College of Physicians and the Royal College of Surgeons, has been introduced in the House of Commons by Mr. Meldon, and read the first time, it was stated that the Bill stands "blocked" by Mr. Thomassen, M.P., and by Mr. Gray, M.P.

The principle of the new Bill is to make the notification of infectious diseases throughout Ireland compulsory on the householder or custodian of the patient, with a voluntary right on the part of the medical practitioner to notify the case to the sanitary authority; provided that, whenever a medical practitioner voluntarily undertakes to notify a case, but not otherwise, he shall be bound to do so. The Association considers this a happy solution of the difficulty, and trust that so important a public benefit and protection as must necessarily arise from a good and efficient system of early notification of infectious diseases may soon be conferred on the community.

Mr. Gray, M.P., has re-introduced his Bill of last session; but it, too, stands "blocked" by Mr. Thomassen. The principle of Mr. Gray's Bill is, that the medical practitioner shall, under penalty of five pounds, notify to the sanitary authority each case of infectious disease—a method to which the medical profession is strenuously opposed.

The enactment of a good and effective system of easy and compulsory notification of infectious diseases is a matter of much importance in the public interest, and no opposition appears to have been offered to it. Mr. Gray, M.P., admits its importance, but at the same time does not appear willing to consent to the passing of any Bill but his own. The consideration of public health must therefore patiently await the withdrawal of Mr. Gray's Bill before any system can be legalised which would effectually check the avoidable spread of infectious diseases in Ireland; but the Association trusts all obstacles to legislation regarding a subject so essential may soon be overcome.

As regards Vaccination, it is the opinion of the Irish Medical Association, that the administration of the law regarding public vaccination in Ireland is unsatisfactory, and that a more vigilant supervision and improved system of inspection are essential for the better protection of the public against small-pox. It recommends that a distinct department of the Local Government Board should be created, with power to make and enforce the general observance of such regulations as may, in the public interest, be necessary; and that the English system of inspection of public vaccinations, under which awards are granted for excellence in results, should be extended to Ireland.

The abuse of the system of dispensary relief has been often under the notice of the Association, and there is no question that the indiscriminate issue of tickets for Dispensary Medical Relief to persons who can well afford to pay has a demoralising effect on such persons, improperly imposes upon the ratepayers heavy expense, and upon the Medical Officers much illegitimate labour and considerable loss. The Council has therefore been requested to take such steps as they deem best with a view to prevent abuse of the present system. The following resolution was also adopted:—That, in the opinion of this Association, it is desirable that legislation be sought with a view to enactment of a system to provide for the support of the widows and orphans of poor-law medical officers, which was submitted by the Council to the last annual general meeting.

During the past year thirty-six new members have joined the Association, and its financial position is exceptionally good.

The following officers were elected for the ensuing year: *President*: Dr. Molony, Tulla. *Vice-Presidents*:—*Leinster*, T. L. Wheeler, Bray; *Ulster*—A. K. Young, Monaghan; *Manx*—W. D. Henhill, Glenmel; *Connaught*—J. Harrison, Roscommon.

In the evening, the annual dinner took place at the Royal College of Surgeons; Dr. Molony, the newly elected President, in the chair. Dr. Lyons, in returning thanks for the House of Commons, spoke of the inadequate representation in it of the profession at large. Until medical men, he said, were prepared to make the sacrifices necessary for that purpose, they would never occupy before the public and the empire the position to which they were fully entitled. The fact was now universally recognised, that the public wanted more thorough information in the legislature on the subject of hygiene and sanitary legislation than they had hitherto enjoyed. There was only one way of giving that information, and that was by an adequate representation of the profession of medicine in the House. Mr. Meldon, O.C., M.P., in responding also to the same toast, said he quite agreed with Dr. Lyons as to the necessity of a better representation of the medical profession in the House of Commons. There was an organised party in that House which opposed all kinds of sanitary legislation. But he also wished to know why the medical profession was not represented in the House of Lords. The rewards and prizes which were at present open to the medical profession were most insignificant. Great legal reforms had lately been originated in the House of Lords; and, with a medical representative there, legislation of great practical utility, in a medical

point of view, might also be originated. The toast of "The Army and Navy" was responded to by Surgeon-General Furlong, and by Mr. Javis, R.N. Dr. Banks, Ex-President of the King and Queen's College of Physicians, and Mr. Chaplin, immediate ex-President of the Royal College of Surgeons, in the absence of the Presidents and Vice-Presidents, responded to the toast of "The Colleges of Physicians and Surgeons". The toast of "The British Medical Association and its Dublin Branch" was very cordially received, and ably responded to by Dr. Kidd. Several other toasts followed; and the company separated at a late hour, having spent a pleasant evening and enjoyed some excellent music.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MONTHLY meeting of the Council of the College was held on Thursday, the 8th June. The minutes of the previous Council held on the 11th May were read, and were confirmed after a strong contest regarding that portion relating to the referring of rejected candidates for the Pass membership to their studies for various periods, according as they have evinced deficiency of knowledge at their examination.

Reports were received from the Board and Court of Examiners, and from other Committees. The Vice-Presidents presented their report on the letter from the Secretary of State for the Home Department, inquiring whether the Council had any suggestion to make for the amendment of the law relating to the sale of poisons. The Vice-Presidents, in the absence of the President from illness, in pursuance of the Resolution of the Council of the 13th April, reported that they had carefully considered the provisions of the Act relating to the sale of Poisons, and altering and amending the Pharmacy Act of 1852, and that they had conferred with the Council of the Pharmaceutical Society thereon, and submitted to the Council the following recommendations as embodying the reply to the letter of the 21st March, from the Secretary of State: That it is neither necessary nor practicable that any further restrictions should be placed on the sale of medicines containing poisons dispensed from ordinary prescriptions by legally qualified medical practitioners; that there should be greater restrictions placed on the sale, *by wholesale*, of certain virulent Poisons, such as Strychnine, Aconitine, and all poisonous vegetable alkaloids and their salts; that further restrictions should be provided by law, so as to more efficiently control the sale of poisonous patent medicines; and that the power which the Act confers on the Pharmaceutical Society to make, with the consent of the Privy Council, any additions to, or alterations in, Schedule A, is a wholesome provision, and a sufficient guarantee that from time to time further changes in that schedule will be effected, as new poisons are introduced into common use. The report was adopted.

The Report of the Nomination Committee, in which it was recommended that the various examiners in medicine and midwifery be re-elected, was also adopted; as was also their recommendation that in future all candidates for the primary anatomical and physiological examinations, whether for the diploma of Member or of Fellow of the College, be only required to attend one winter course of lectures on Anatomy, instead of two courses of such lectures.

Mr. Marshall moved that the attention of the teachers at the various schools be called to the resolution of the Council relating to the elementary examination in anatomy and physiology at the end of the first winter session, and that they be invited to confer with the Committee of the Council appointed to consider the matter, with a view to the carrying out of the suggestion of the Council.

Mr. Henry Power was nominated Arris and Gale Lecturer on Anatomy and Physiology. The other professors and lecturers were re-appointed for the ensuing year.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION: FIFTIETH ANNUAL MEETING.

THE Fiftieth Annual Meeting of the British Medical Association will be held at Worcester, on Tuesday, Wednesday, Thursday, and Friday, August 8th, 9th, 10th, and 11th, 1882.

President: BENJAMIN BARROW, F.R.C.S., Consulting-Surgeon to the Royal Isle of Wight Infirmary.

President-elect: WILLIAM STRANGE, M.D., Senior Physician to the General Infirmary, Worcester.

An Address in Medicine will be delivered by W. F. WADE, F.R.C.P., Physician to the Birmingham General Hospital.

An Address in Surgery will be delivered by WILLIAM STOKES, M.D., F.R.C.S.I., Professor of Surgery in the Royal College of Surgeons, Ireland.

The business of the Association will be transacted in Eight Sections, viz.:—

SECTION A. MEDICINE.—*President:* Thos. Clifford Allbutt, M.D., F.R.S. *Vice-Presidents:* George W. Balfour, M.D.; William Henry Broadbent, M.D.; G. H. Philipson, M.D. *Secretaries:* Edwin Rickards, M.B., 14, Newhall Street, Birmingham; H. Ashby, M.D., 13, St. John Street, Manchester.

SECTION B. SURGERY.—*President:* Augustin Prichard, F.R.C.S. *Vice-Presidents:* T. W. Walsh, F.R.C.S.; Reginald Harrison, F.R.C.S.; T. H. Bartleet, M.B., F.R.C.S. *Secretaries:* F. E. Manby, F.R.C.S., 10, King Street, Wolverhampton; Richard Clement Lucas, M.B., F.R.C.S., 18, Finsbury Square, E.C.

SECTION C. OBSTETRIC MEDICINE.—*President:* William Leishman, M.D. *Vice-Presidents:* Henry Vevers, M.R.C.S.; J. G. Sinclair Coghill, M.D.; Arthur W. Edis, M.D. *Secretaries:* C. J. Cullingworth, M.D., 25, St. John Street, Manchester; Tom Bates, L.R.C.P., Worcester.

SECTION D. PUBLIC MEDICINE.—*President:* Alfred Carpenter, M.D. *Vice-Presidents:* Alfred Hill, M.D.; Horace Swete, M.D.; E. T. Wilson, M.B. *Secretaries:* Geo. Haynes Fosbrooke, jun., M.R.C.S., Bidford, Redditch; Francis Edward Atkinson, L.R.C.P., Settle, Yorkshire.

SECTION E. ANATOMY AND PHYSIOLOGY.—*President:* George M. Humphry, M.D., F.R.S. *Vice-Presidents:* S. S. Roden, M.D.; Frank Payne, M.D.; Gerald Yeo, M.D. *Secretaries:* J. B. Haycraft, M.D., Mason's College, Birmingham; James Shuter, M.B., F.R.C.S., 58, New Broad Street, London.

SECTION F. PATHOLOGY.—*President:* J. Hughlings Jackson, M.D., F.R.S. *Vice-Presidents:* W. R. Gowers, M.D.; H. T. Butlin, F.R.C.S.; Wm. Smith Greenfield, M.D. *Secretaries:* Sidney Coupland, M.D., 14, Weymouth Street, London; F. Treves, F.R.C.S., 18, Gordon Square, London.

SECTION G. OPHTHALMOLOGY.—*President:* James Vose Solomon, F.R.C.S. *Vice-Presidents:* David Everett, F.R.C.S.; F. Mason, M.R.C.S.; Edwyn Andrew, M.D. *Secretaries:* Geo. Edwin Hyde, L.R.C.P., Worcester; J. A. Nunneley, M.B., 22, Park Place, Leeds.

SECTION H. OTOLOGY.—*President:* W. Laidlaw Purves, M.D. *Vice-Presidents:* Geo. P. Field, M.R.C.S.; A. H. Jacob, M.D.; E. Cresswell Baber, M.B. *Secretaries:* J. J. Kirk Duncanson, M.D., 22, Drumsheugh Gardens, Edinburgh; Peter McBride, M.D., 20, Alva Street, Edinburgh.

Honorary Local Secretaries: George W. Crowe, M.D., Shaw Street, Worcester; H. C. Moore, M.R.C.S., 7, King Street, Hereford; Thelwell Pike, M.D., 2, Montpelier, Great Malvern.

Honorary Treasurer: G. A. Sheppard, M.R.C.S., Worcester.

TUESDAY, AUGUST 8TH.

2.15 P.M.—Meeting of Committee of Council.

3 P.M.—Meeting of the Council of 1881-82.

4.15 P.M.—Service in the Cathedral, with sermon by the Dean of Worcester.

8 P.M.—General Meeting. President's Address; Annual Report of Council, and other business.

Tea and Coffee after the Meeting.

WEDNESDAY, AUGUST 9TH. (Jubilee day).

9.30 A.M.—Meeting of Council of 1882-83.

11 A.M.—Second General Meeting. Address in Medicine.

1.30 P.M.—Luncheon given by the Worcester and Hereford Branch to Members of the Association (limited to 500), and afterwards presentation of bust of Sir Charles Hastings to the Mayor and Corporation of Worcester.

3 to 5.30 P.M.—Sectional Meetings.

7.45 P.M.—Special Service in the Cathedral, at which, by permission of the Dean, Haydn's Sacred Oratorio, "The Creation", will be performed by the Philharmonic Society, assisted by members of the Gloucester and Hereford Choirs, and conducted by W. Done, Esq., Organist to the Cathedral.

THURSDAY, AUGUST 10TH.

9 A.M.—Meeting of the Committee of Council.

10 A.M.—Third General Meeting. Reports of Committees.

11 A.M.—Address in Surgery.

2 to 5.30 P.M.—Sectional Meetings.

6.30 P.M.—Public Dinner. Tickets will not be issued later than twelve o'clock on the day of the dinner. (There will be two kinds of dinner ticket: one for those who take wine, and the other for abstainers, 21s. and 14s. each.)

FRIDAY, AUGUST 11TH.

9.30 to 11.30 A.M.—Sectional Meetings.

11.30 P.M.—Concluding General Meeting. Reports of Committees.

3 P.M.—Garden Party, at Madresfield Court, Great Malvern, given by the Lord-Lieutenant and the Countess Beauchamp.

9 P.M.—Soiree of the President and G. W. Hastings, Esq., M.P.

EXCURSIONS.

On Saturday, August 12th, there will be—1. An excursion to Malvern Hills, including the ancient British Camp, the chief interesting features of which will be explained to the visitors on the spot. 2. An excursion to Stratford-on-Avon to visit Shakespeare's house, the church and tomb, Shakesperian Museum, etc. The party will then proceed to Warwick and Kenilworth Castle, returning by way of Leamington. 3. An excursion to the Wye, by which the beautiful scenery on the banks of that river may be viewed either from the railway or by boats from Ross to Monmouth. Particulars of this excursion will be published in an early number. 4. There are steamers and pleasure-boats on the river Severn at Worcester, which will afford very enjoyable short trips up or down the river.

ANNUAL MUSEUM.

The sixteenth annual exhibition of objects of interest in connection with medicine, surgery, and their allied sciences will take place in the Music Hall, Worcester, during the second week of August, 1882. The floor-space of this building amounts to 4,000 square feet. The Committee appointed to take charge of the arrangements for this Museum will be glad to receive—1. Pathological specimens (wet or dry); 2. Drawings or diagrams illustrating disease; 3. Casts or models; 4. Surgical instruments and appliances; 5. Microscopic preparations; 6. Microscopes, thermometers, and other instruments of investigation; 7. Preparations, diagrams, etc., relating to investigations in anatomy and physiology; 8. New drugs, chemicals, pharmaceutical preparations, and dietetics; 9. Sanitary appliances, including drawings or models illustrating the ventilation of hospitals or private dwellings; 10. New medical books. It is intended that the surgical instruments, sanitary appliances, etc., shall be *bona fide* novelties, or improvements on those in common use. The pathological specimens will be arranged in departments.

Exhibition of Instruments and Apparatus.—It is intended to arrange for the exhibition of complete series of instruments, electro-therapeutic apparatus, instruments for physical diagnosis, and appliances relating to sanitary science and public health. Facilities will also be afforded, when requested, for the display of instruments in action, or for special explanation by the exhibitors of apparatus, etc.

The Catalogue.—It is intended to print a catalogue, which will be as complete as circumstances may permit. The Committee earnestly request those who intend to exhibit to bear in mind that it is impossible that descriptions, etc., can be included in the catalogue unless sent in early. They should be received at least a month before the meeting, that is, not later than July 8th.

Communications, objects intended for exhibition, etc., to be addressed to the Secretary of the Museum Committee, Mr. J. RANDLE HICKS, 26, Siddury, Worcester. During the week preceding the meeting all articles should be sent direct to the Music Hall, Worcester, and addressed to the care of the Curator of the Museum of the British Medical Association.

FRANCIS FOWKE, *General Secretary.*

London, April 13th, 1882.

BRANCH MEETINGS TO BE HELD.

[illegible][illegible]

Notice of Improvements.—The annual meeting of the Board will be held in the Hospital House, Hospital as Usual, Tuesday at 4 o'clock a.m. The election of officers will be at the Hospital House at 5 o'clock a.m. from Monday, M.D., January 1890.

[illegible]

delivered by the President-elect at 2 P.M. Excursions will be made to the Royal Victoria Hospital, Netley, and Netley Abbey. Carriages will be provided (free of charge), leaving the Masonic Hall across the foot-bridge at 3 P.M. (leaving at 3.15 P.M. for the foot-bridge). By permission of Colonel Cooke, R.E., C.B., the Ordnance Survey Office will be open for the inspection of the members. The dinner will take place at the Masonic Hall, at 6 P.M. precisely, to allow time for those members who are desirous of leaving Southampton by the evening trains. Tickets, 2s. 6d. each, including light wine. The committee request that those gentlemen who intend to be present at the dinner will send in their names to Dr. Trend, on or before Tuesday, the 20th instant.—J. WARD COUSINS, M.D., Honorary Secretary and Treasurer.

MIDLAND BRANCH.—The annual meeting will be held at Lincoln on Thursday, July 13th. Notices of papers to be read should be sent early to the undersigned.—LEWIS W. MARSHALL, M.D., Honorary Secretary and Treasurer.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—The annual meeting of the above Branch will be held at Wisbech, on Friday, July 23rd, at 2.15 P.M. W. Groom, Esq., President. The Great Eastern Railway Company have signified their willingness to facilitate the travelling of members by running a special train from Cambridge to Ely at 12.20 P.M., to catch the 12.58 P.M. train from there to Wisbech due at 1.42; and a special train from Wisbech to March at about 11 P.M. to join the up mail, for a payment of £5 in addition to the ordinary fares. If twenty members will make themselves responsible for 9s. each, the above arrangements may be easily accomplished. — **JOSEPH ANTONSON**, Honorary Secretary, Walthamsal, Barton Road, Cambridge. — May 31st, 1882.

GLASGOW AND WEST OF SCOTLAND BRANCH.—The annual meeting of this Branch will be held in the Western Infirmary, Glasgow, on Friday, June 30th, 1900. The President-elect, Professor George Buchanan, after taking the chair, will give a clinical demonstration on the Operation for the Radical Cure of Hernia; will show cases in which the operation has proved successful; and will perform the operation. Thereafter the President will conduct the members to the University, where they will inspect the Bute Hall, the Randolph Hall, and other new buildings, which are approaching completion. The members will afterwards be conveyed into the city, and the annual dinner will take place at 5.30. N.B.—Members of the Association who have not joined the Branch are invited to do so by communicating with the secretary before the meeting.—JOSEPH COATS, Honorary Secretary.

SOUTH-WESTERN BRANCH.—The annual meeting of this Branch will be held in the Board Room of the North Devon Infirmary, Barnstaple, on Thursday, June 23rd, 1904, under the Presidency of Mr. Joseph Harper. Opportunity will be given after the meeting, if time permits, to visit places of interest in and near Barnstaple. The annual dinner will take place at the Lion Hotel at 6 p.m.; dinner tickets, each 10s. if wine, 7s. 6d. each. Members intending to dine, or to read papers, or make communications, are requested to give notice to S. RIES PHILLIPS, M.D., Honorary Secretary, Wonford House, Exeter. P.S.—The President invites the members to take luncheon at his house in Bear Street between the hours of 12 and 2 o'clock.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following Members of the College, having passed the necessary examinations for the Fellowship at the half-yearly meetings terminating on the 27th ultimo, were reported to have acquitted themselves to the satisfaction of the Court of Examiners, and at a meeting of the Council on the 8th instant were admitted Fellows of the College.

Maxwell, John, I.R.C.P. (Land), Chester, 1, The Harpings, I.S.A., Cleveland
 Messrs. William A. Nutting, James M.F. (Land), Chelsea, Arthur Quarry, S.W. 1,
 M.P. (Land), Dabhorn, William Charles Stone, Pettitt, I.R.C.P. (Land),
 L.E.S., George Street, Haverley Square, Arthur Jackson, I.S.A., Grays,
 James, John Polard, I.R.C.P. (Land), Inverness, Frederick Dale, B.A. and
 M.P. (Land), I.R.C.P. (Land), Southampton, Messrs. Doreen, I.R.C.P. (Land),
 1, The Grange, Cardiff, Messrs. J. and J. Williams, M.F. (Land), Lower
 Clonmel, and Charles John Bond, I.R.C.P. (Land), Luttrell, W. Leicester

Mr. Mark Purcell Mayo Collier, of Turnham Green, who passed the examination in May 1881, having now attained the legal age of 25 years, was also admitted a Fellow.

Two diplomas of two candidates are retained: until of age in one case, and on passing in Obstetrics in the other. Only four candidates out of the seventeen were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practice, on Thursday, June 1st, 1882.

[illegible]

The following gentlemen also on the same day passed their Primary Professional Examination.

Faculty: *John F. Barrett, M.D., University Hospital,
 Medicine; Thomas A. Lawrence, M.D., University Hospital,
 Medicine; Howard John, Gray's Hospital.*

MEDICAL VACANCIES.

The following vacancies are announced :—

- BIRKENHEAD BOROUGH HOSPITAL.**—Junior House-Surgeon. Salary, £60 per annum. Applications by the 14th instant.
- CHILDREN'S HOSPITAL, Birmingham.**—Assistant Resident Medical Officer. Salary, £40 per annum. Applications by June 20th.
- CHILDREN'S HOSPITAL, Birmingham.**—Resident Medical Officer. Salary, £80 per annum. Applications by June 20th.
- CUMBERLAND INFIRMARY, Carlisle.**—House-Surgeon. Salary, £100 per annum. Applications by June 27th.
- EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.**—Resident Clinical Assistant. Applications by June 22nd.
- EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E.**—House-Surgeon. Salary, £70 per annum.
- FRENCH HOSPITAL AND DISPENSARY, 10, Leicester Place.**—Resident Medical Officer. Salary, £60 per annum.
- GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff.**—House-Surgeon. Salary, £100 per annum. Applications by June 12th.
- GREAT NORTHERN HOSPITAL, Caledonian Road, N.**—House-Surgeon. Salary, 60 guineas per annum. Applications by June 30th.
- GUISBOROUGH UNION, Yorks.**—Medical Officer of Health. Salary, £370 per annum. Applications by the 12th instant.
- HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street, W.C.**—Assistant Physician. Applications by the 21st instant.
- HULL GENERAL INFIRMARY.**—Junior Assistant House-Surgeon. Salary, £35 per annum. Applications by the 13th instant.
- IRVINESTOWN UNION.**—Medical Officer for Irvinestown No. 2 Dispensary District. Salary, £100 per annum, with £15 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 21st instant.
- KILBURN, MAIDA VALE, AND ST. JOHN'S WOOD GENERAL DISPENSARY.**—Resident Medical Officer. Salary, £120 per annum. Applications by the 15th instant.
- LEEDS UNION.**—Assistant Medical Officer. Salary, £100 per annum. Applications by the 12th instant.
- METROPOLITAN FREE HOSPITAL, 81, Commercial Street, Spitalfields, E.**—Assistant House-Surgeon.
- NEW ZEALAND.**—Inspector of Lunatic Asylums. Salary, £800 per annum. Applications by June 20th.
- ROYAL HANTS COUNTY HOSPITAL, Winchester.**—House-Surgeon. Salary, £100 per annum. Applications by June 10th.
- ROYAL UNITED HOSPITAL, Bath.**—Resident Medical Officer. Salary, £50 per annum. Applications by June 22nd.
- SEAMEN'S HOSPITAL (late Dreadnought), Greenwich, S.E.**—Surgeon for the Dispensary. Salary, £63 per annum. Applications by June 20th.
- ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, 54, Berners Street, W.**—House-Surgeon. Applications by July 1st.
- THE INFIRMARY, Halifax.**—Assistant House-Surgeon. Salary, £50 per annum. Applications to the Senior Physician of the Medical Staff by June 20th.
- WESTERN OPHTHALMIC HOSPITAL, 155, Marylebone Road.**—Clinical Assistant. Applications to the Hospital any afternoon from 1 to 3 o'clock.
- YORK COUNTY HOSPITAL.**—Honorary Physician. Applications by June 24th.

MEDICAL APPOINTMENTS.

- AINSLEY, T. G., M.R.C.S.,** appointed Medical Officer for the District and Workhouse to the Hartlepool Union.
- BATTERHAM, J. W., M.R.C.S., L.S.A.,** appointed House-Physician and Chloroformist to the Westminster Hospital.
- BROWN, W. H. J., M.B.,** appointed House-Surgeon to the Alnwick Infirmary, *vice* F. A. McEwen, M.B., resigned.
- CAVAFY, J., M.D.,** appointed Physician to St. George's Hospital.
- COX, L., M.R.C.S.E.,** appointed Superintendent to the Denbigh Asylum.
- DAVIS, A. N., L.R.C.P.,** appointed Assistant Medical Officer to the Portsmouth Lunatic Asylum, *vice* J. F. Woods, M.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

- BOWES.**—On June 2nd, the wife of J. Ireland Bowes, Medical Superintendent of the Wilts County Asylum, of a son.

MARRIAGES.

- DAVY-FIELD.**—May 11th, at Hull, by the Rev. Thomas M'Cullagh, D. Henry Davy, M.R.C.S., L.R.C.P., to Minnie, eldest daughter of Richard Field, Esq.
- LUSH-INGRAM.**—On the 7th inst., at St. John's, Weymouth, by the Revd. Canon Stephenson, William George Vawdrey Lush, M.D., M.R.C.P., to Sarah, youngest daughter of the late Revd. Rowland Ingram, formerly Vicar of Giggleswick, Yorkshire, and late Rector of Little Ellingham, Norfolk. No cards.
- NORMAN-KENNY.**—On the 6th inst., at Killeshandra, Co. Cavan, Conolly Norman, F.R.C.S.I., Mayo County Asylum, Castlebar, to Mary Emily, daughter of the late Randal Y. Kenny, M.D., of Killeshandra, Co. Cavan.

DEATH.

- SPENCE.**—At 21A, Ainslie Place, Edinburgh, on the 6th inst., James Spence, F.R.S., F.R.C.S.E., Surgeon in Ordinary to the Queen in Scotland, Professor of Surgery in the University of Edinburgh. Friends will please accept of this the only intimation.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.
- TUESDAY.....** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 7 P.M.
- WEDNESDAY..** St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.
- THURSDAY...** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.
- FRIDAY.....** King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
- SATURDAY...** St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

- CHARING CROSS.**—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.
- GUY'S.**—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.
- KING'S COLLEGE.**—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.
- LONDON.**—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental Tu., 9.
- MIDDLESEX.**—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.
- ST. BARTHOLOMEW'S.**—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.
- ST. GEORGE'S.**—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.
- ST. MARY'S.**—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F., 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.
- ST. THOMAS'S.**—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.
- UNIVERSITY COLLEGE.**—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. T., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15. Throat, Th., 2.30; Dental, W., 10.3.
- WESTMINSTER.**—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.**—Royal College of Surgeons of England, 4 P.M. Mr. Jonathan Hutchinson: On Temperament, Idiosyncrasy, and Diathesis in Relation to Surgical Disease.
- TUESDAY.**—Royal Medical and Chirurgical Society, 8 P.M., Ballot. 8.30 P.M., Dr. Sidney Ringer and Dr. H. Sainsbury: Concerning the Action of Salts or Potash, Soda, and Ammonia on the Frog's Heart. Sir James Paget: Additional cases of Osteitis Deformans. Mr. Davies-Colley: On cases of Malignant Pustule, with Report on the Microscopic Examination of Sections from the Skin by Dr. Charlewood Turner.
- WEDNESDAY.**—Royal College of Surgeons of England, 4 P.M. Mr. Jonathan Hutchinson: On Temperament, Idiosyncrasy, and Diathesis in Relation to Surgical Disease.—Royal Microscopical Society, 8 P.M. Ordinary Meeting.
- FRIDAY.**—Royal College of Surgeons of England, 4 P.M. Mr. Jonathan Hutchinson: On Temperament, Idiosyncrasy and Diathesis in relation to Surgical Disease.

CLINICAL LECTURE

ON THE

CONTAGIOUSNESS OF PULMONARY CONSUMPTION,

Delivered in King's College Hospital,

By I. BURNEY YEO, M.D., F.R.C.P.,

Physician to the Hospital.

GENTLEMEN,—Within the last few weeks, you have had an opportunity of seeing, in the Physiological Laboratory of King's College, specimens of certain micro-organisms, prepared by Koch of Berlin, and described by him as the bacillus of tubercle.* This organism is believed by him to be the active agent in the origin and spread of tuberculous diseases. You have also had an opportunity of seeing that this micro-organism can be artificially cultivated and successive generations produced, each retaining with undiminished virulence the power of producing tubercle when introduced into the bodies of certain animals.

Now, this demonstration, which you have seen with your own eyes, introduces you to problems in pathology and in practical medicine, the importance of which it is impossible to exaggerate. Never, in the whole of the past history of medical science and of medical discovery, have propositions been advanced of greater import than those which have been advanced and maintained in connection with this discovery.

Let me state to you, in language as clear and simple as I can, what these propositions are.

1. Tubercle is an infective malady, originating in a specific virus, and propagated by the conveyance of that virus from body to body, and originating in no other way.

2. The specific virus of tubercle consists of a particular micro-organism, found only in tubercle; this organism can be seen in the cells of tubercle, can be obtained in a separate form, and cultivated in successive generations, without losing its original properties.

3. Certain forms of disease, termed "scrofulous", are essentially tuberculous; and their characteristic anatomical morbid products contain the infective organism peculiar to tubercle.

4. The disease known as pulmonary consumption is, in the main, a tuberculous disease, and is dependent on the presence and propagation in the body of the infective organism characteristic of tubercle.

5. Pulmonary consumption is a contagious malady.

Of these five propositions, it is claimed for the three first that they rest on demonstration, as I propose to show you; the last two are, more or less, of the nature of inferences from the three preceding; and, in connection with these, we may expect to find there will exist some differences of opinion.

The idea, that consumption is a contagious disease, is not a new one. It is a doctrine which has always been maintained in the south of Europe—in Italy, Spain, and Portugal. Galen believed it, Morgagni believed it, and great names in the history of medicine, from their time to ours, may be found both for and against it.

Pidoux, in France, who had unusual opportunities of becoming acquainted with the histories of a large number of consumptives, declared that his own experience was directly opposed to this doctrine; and that he had never seen a single case of consumption that he could refer to contagion.

One of the most distinguished physicians of our own times, formerly Professor of Medicine in this College, Sir Thomas Watson, in a course of lectures delivered in that very College where you have recently seen demonstrated the existence of a tubercle-bacillus, thus expresses himself on this subject.

"Is phthisis contagious? No; I verily believe not. A diathesis is not communicable from person to person. Neither can the disease be easily (if at all) generated in a sound constitution. Nor is it ever imparted, in my opinion, even by one scrofulous individual to another."

From my own experience of consumption—and, as I shall show you presently, it has been a very large one—I cannot doubt that this was the judgment of sound common sense at the time it was uttered, and with such evidence as was then, and has been until quite recently, attainable. But it would be unscientific now to tie oneself to this opinion, in the face of such facts as recent researches in experimental pathology have established.

On the other hand, another very eminent physician, a brother of another former Professor of Medicine in this College, Dr. William Budd of Bristol, long ago promulgated the view that pulmonary consumption was a disease "strictly analogous to the ordinary eruptive fevers in everything but the slowness of its progress; that, among European populations, tuberculous disease had undergone mitigation of its original severity by long prevalence; but he entertained no doubt of its eminently contagious character."

We must not be surprised that Dr. Budd's views met with little acceptance at the time. Insight, however penetrating, is not demonstration, and scientific belief rests wholly on demonstration. Then (and even now), the evidence, derived from practical experience, against the contagiousness of consumption, in at all the same sense as small-pox and scarlet fever are contagious, seemed overwhelming; and, if we yield now to the teaching that phthisis is a contagious disease, we shall yield solely to demonstration and experiment. For such evidence as we obtain from the experience of physicians in their practice amongst consumptive patients affords, at most, but a weak presumption; and the facts I shall bring before you certainly show that consumption is by no means contagious in the sense which is ordinarily and popularly attached to that word. But the modern methods of experimental research are, doubtless, destined to widen our conception of "contagion", as they have widened and corrected our conceptions in respect of many other pathological doctrines; and it is quite possible that, under certain given conditions, consumption may be a contagious disease.

During ten years of service in an institution devoted to the treatment of consumption, I saw over 27,000 persons who came to that institution for treatment, and a large proportion of that number were actually suffering from phthisis. Throughout this period, many problems naturally came into my mind as to the nature, the causes, and the treatment of this terrible malady; and, a few years ago, I endeavoured to obtain some data, from this extensive field of observation, as to the contagiousness or non-contagiousness of consumption. I followed the following train of reasoning: if consumption be a contagious or infectious malady, in the same sense and at all in the same degree as other maladies which are known to be contagious, the conveyance of the disease from husband to wife and from wife to husband, especially among the poorer classes in this country, ought to be a common and not a rare occurrence; for, amongst these classes, the husband and wife almost invariably occupy the same bed, and live a life of close personal intimacy. The rooms they occupy are, more frequently than not, overcrowded, close, and badly ventilated. In short, the external conditions amongst which consumption commonly appears amongst the working classes are precisely those which would favour the dissemination of a contagious malady. If consumption in this country were, under ordinary conditions, a contagious malady, it would follow, so fatal as its course usually is, that, in dealing with large numbers of consumptive patients taken from the poorer classes, we should often find, amongst the males, the survivors of wives who had died of phthisis; and, amongst the females, the widows of men who had succumbed to this malady. That fact must, I think, be clear to everyone. So also we should expect to find husband and wife frequently the victims, together, of this disease. But this is comparatively rare.

For the purpose, then, of throwing some light on this question, I collected, a few years ago, the particulars of 1,055 cases of consumption that had come under my care, consecutively, in the institution to which I have referred. Of this number, 621 were males and 434 females. Of the 621 males, 306 were married, 297 were single, and only 18 were widowers; about 3 per cent. of the whole, and about 6 per cent. of those who had been married. Of the 18 widowers, two only could state positively that they had lost their wives by consumption, and one of these wives had been dead thirteen years; six of them had lost near relatives by consumption (father, mother, brother, or sister), giving a presumption in favour of hereditary predisposition, and in ten no precise information could be obtained. Of the 434 females, 199 were married, 206 were single, and 29 were widows; the widows being about 7 per cent. of the whole, and about 15 per cent. of those who had been married. Of the 29 widows, 5 only were able to state positively that their husbands had died of consumption, one lost her husband "in a fit," 6 had lost near relatives (father, mother, brother, or sister) by phthisis, pointing to hereditary predisposition, and 17 could give no precise information.

At the same time that I was collecting these particulars from my out-patients, Mr. J. P. Bartlett, at that time acting resident medical officer, was good enough to obtain the following particulars from those who were then in-patients. Of the 94 males in the hospital with phthisis, 53 were married, 37 were single, and 4 were widowers; of these 4, 2 had lost their wives by consumption. Of the 53 whose

* Exhibited by Mr. Watson Cheyne and Mr. E. M. Nelson.

wives were alive, all the wives except two were quite healthy. Of the 83 females who were then in the hospital with consumption, 62 were single, 15 married, and 6 widows; of the 6 widows, 3 had lost their husbands by consumption; in 2 of the 3 there was marked hereditary predisposition; and in 1 there was none; in the remaining cases the husbands were healthy.

Taking these figures for what they are worth, it seems certain that the communication of consumption from wife to husband, even among the class in which the conditions of life favour to the utmost the communication of contagious disease, is very rare; while it would seem that communication (assuming, for the sake of argument, the disease really was communicated) from husband to wife is more frequent.

About the same time that I was making these observations, Dr. Hermann Weber brought the subject of the communicability of consumption from husband to wife before the Clinical Society, and in his paper he states that he possesses the history of "68 persons, male and female, who, with a more or less pronounced consumptive taint, have married healthy partners. One or several of the partners of 10 out of these 68 cases became consumptive. The question, however," he says, "takes a different aspect if the originally tainted husbands and wives are considered separately. Of the 68 persons, 39 were husbands, 29 wives. Only one of the husbands of the 29 wives became diseased, while the wives of 9 out of the 39 husbands became affected. These 9 husbands lost 18 wives, viz., 1 lost 4 wives, 1 lost 3, 4 others lost 2 each, and 3 only 1 each."

One of Dr. H. Weber's cases is certainly very remarkable. A young man, who had lost his mother, two brothers, and a sister of phthisis, and who himself had twice had hæmorrhage from the lungs, had quite recovered, and married at twenty-seven years of age, being then perfectly well. His first wife was in good health, and came of a healthy family. She died of consumption after her third confinement. The man shortly married again, an "apparently healthy woman," and this second wife, after a year of married life, died of "galloping consumption." He again married a third wife, a healthy young woman of 25, belonging to "an exceptionally healthy family." During her second pregnancy, she developed symptoms of phthisis, which ran a rapid course, and ended fatally in about eight months. Undaunted by his previous experience, this man, who seems to have had a mania for matrimony, married a fourth wife, a perfectly healthy young woman, twenty-three years of age, of healthy family antecedents. Three months after her first confinement, she too began to show symptoms of phthisis, and, notwithstanding two sea-voyages, died after an illness of nine months, with tubercle in liver, spleen, and intestines, as well as in the lungs. Though the husband of these four wives, who was a sailor, remained in apparently good health, physical examination revealed the existence of morbid changes about the apex of the left lung. It is possible that the life at sea kept his disease in abeyance; for, when he had to lie by on account of a severe fracture, the disease became active, and he died of consumption within two years.

I have called your attention to this case, because it is perhaps one of the most remarkable on record bearing on the communicability of consumption from husband to wife.

In Dr. Weber's second case, three wives in succession of a consumptive husband died of phthisis, the husband ultimately dying of that disease himself. The disease in the wives appeared during pregnancy, or soon after delivery. The same story is repeated, with but little variation, except as to the number of wives, in Dr. Weber's seven other cases quoted in his paper. Altogether, he had observed thirty-nine diseased husbands, and the wives of nine of them became consumptive after marriage; but, as several of the diseased husbands married repeatedly, it would appear that, out of fifty-one such marriages, eighteen wives became consumptive after marriage. As a set-off against this, out of twenty-nine marriages between consumptive wives and healthy husbands, only one husband became consumptive.

Another noteworthy observation of Dr. Weber's was, that in the infected wives the disease manifested itself in an unusually active florid form, and ran an unusually rapid course; while in the husbands it was chronic, stationary, and apyretic. The fact of the onset of the disease following or occurring in connection with impregnation and utero-gestation, as well as the fact of the immensely greater proportion of wives infected by husbands compared with that of husbands infected by wives, naturally provoked the suggestion that the latter became infected through impregnation and from the fetus *in utero*, just as constitutional syphilis is conveyed from husband to wife. But there is another hypothesis equally tenable, and perhaps more in accordance with modern research: which is, that, during the puerperal state, the female constitution is peculiarly prone to the reception and cultivation of the germs of infective disease; and, assuming for the sake of

argument that tubercle is propagated through the agency of an infective organism, the puerperal state may supply one of the conditions (such, for example, as we could conceive an increased body-temperature to supply) necessary for its cultivation and spread.

These valuable and striking observations of Dr. Hermann Weber, while they give weighty support to the belief that consumption is, under certain circumstances, communicable from husband to wife, corroborate also the suggestions I have already made that, if phthisis be a contagious malady, it is so under very peculiar conditions and laws; that it is not contagious in precisely the same sense as is ordinarily and popularly attached to that word.

I have said enough to show you that it would be extremely difficult to prove from clinical observations alone, or from experience, however extensive, of cases of consumption encountered in this country, that phthisis is an infective and contagious malady. Many, who have had the largest opportunities of judging, have formed an opinion altogether opposed to this view, and would regard Dr. H. Weber's experience as quite exceptional. And yet it seems very probable that consumption is in a sense contagious—contagious under certain conditions; and the practical question, at this moment especially urgent, is, "Under what conditions is consumption contagious?" But, before attempting to answer this question, it will be necessary to go back to the consideration of the remaining propositions which I formulated at the commencement of my lecture, and see on what kind of evidence they rest, and what is the exact relation of that evidence to the final proposition which forms the special subject of my lecture.

The first of these propositions was, that "tubercle is an infective malady, originating in a specific virus, and propagated by the conveyance of that virus from body to body, and originating in no other way." It has taken many years to obtain for this proposition anything like general acceptance amongst pathologists and physicians, and even now there are not a few who hesitate to accept this doctrine. It is some years ago (1865) since Villemin published the results of a series of methodical experiments, which he had undertaken for the purpose of showing that tubercle was an infective malady. His method was to take a small portion of tuberculous matter, as big as a pin's head, from the body of a man, a dog, cow, or a rabbit, and introduce it under the skin of the ear, the groin, or the axilla, in rabbits and dogs. He found that the wound at first healed over; but, after four or five days, the seat of the inoculation began to be red and swollen, and a tuberculous mass became developed there, causing an ulcerated wound. If these animals were killed after the fifteenth day from the inoculation, tubercles were always found in the viscera; in the lungs, they were usually abundant; grey granulations, as well as extensive infiltrated masses of tubercle, more advanced according to the length of time that had elapsed since the inoculation and cavities, were sometimes found: while at the seat of inoculation a caseous mass was usually found, surrounded by small yellowish granulations. The corresponding lymphatic glands were enlarged, and often contained scattered nodules of tubercle, some having undergone caseous degeneration. Cats and guinea-pigs were readily inoculated; but sheep, goats, and birds escaped infection. He obtained the same results from injecting hypodermically the sputa of phthisical patients in very small quantities, mixed with water. Blood taken during the life of animals with phthisis gave negative results; but, taken after death from phthisical men, it readily produced general tuberculosis in rabbits.

Chauveau of Lyons corroborated Villemin's results, by means of experiments on oxen, animals disposed to tuberculosis. He gave to oxen, by the stomach, tuberculous matter obtained from the human subject, or from other oxen, and they all became tuberculous, the lesions varying from trivial ones to the gravest possible. Typical tubercle-granulations were found in the lungs, as well as caseous masses in all stages. The same results followed inoculation into the connective tissue, and injection into the veins of water holding in suspension tuberculous matter after filtration.

Other experimenters (including Drs. Burdon Sanderson and Wilson Fox, in this country) soon opposed other views to those of Villemin and Chauveau. They stated that, in order to produce tuberculosis in rabbits and guinea-pigs, it was not at all necessary to inoculate these animals with tuberculous matter; that they might be rendered tuberculous by other means. They stated that, in the guinea-pig and some other animals, tuberculosis might be produced by inoculations with pus, or with caseous matter of inflammatory origin, or with sarcoma, just as well as with tubercle; that, in the guinea-pig, tuberculosis had been produced by the application of a simple seton; and that, in the rabbit, deep wounds, without inoculations of any sort, would produce pulmonary tuberculosis. Wilson Fox, in his experiments on guinea-pigs, introduced under the skin various substances—portions of putrefied muscle, fatty liver, and even vaccine virus, with the same result; and it was

maintained by others, that such substances as aniline blue, cinnabar, caoutchouc, cotton, etc., caused similar effects; and that carnivorous animals might be fed long on tuberculous lungs without the production of tuberculosis.

Then, it was said by others that the lesions produced by Villemin were not tubercle at all, but simply inflammatory lesions, or embolic infarcts; and some went so far as to say, it was impossible to produce tuberculosis experimentally. At the same time, Chauveau, Klebs, and Bollinger, maintained the correctness of the experiments and views of Villemin.

Two physicians, mentioned in the *Nouveau Dictionnaire de Médecine et de Chirurgie* (Art. "Phthisis"), went so far as to inoculate themselves with the serum of a blister applied to a phthisical patient, and, we are not surprised to hear, without effect: for, if the peculiar micro-organism which we have recently seen be the active agent in the production of tubercle, we should scarcely expect to find it in the serum extracted from the blood by the action of a blister. Another remarkable case of human inoculation is mentioned in the work I have just cited. Three medical men of Syra (in Greece), in 1874, inoculated a man, fifty-five years of age, with tubercle. He was suffering from gangrene of the left great toe, due to obliteration of the femoral artery, and was in a moribund state. They inoculated some of the sputa of a phthisical patient into the upper part of the right leg. The lungs were previously examined with great care, and found to be perfectly sound. Three weeks later, there were signs of commencing induration at the right apex. On the thirty-eighth day after the inoculation, the patient died of gangrene. At the necropsy, there were found, at the apex of the right lung, seventeen small tubercles, varying in size from that of a mustard-seed to that of a lentil. Two similar tubercles were found at the left apex—two others on the convex surface of the liver. The authors of the experiment considered the embryonic state of the tubercles, and their limited number, to correspond with the short space of time that had elapsed from the inoculation.

It is not likely that an experiment of this kind will be often repeated; but though it stands alone, it is, none the less, an important observation.

Tappeiner and others have shown that animals could be rendered tuberculous, if tuberculous matter (such as the sputa of phthisical patients) were diffused in spray in the air which they breathe.

It has also been stated by Professor Gerlach that, in the variety of tubercular disease which affects oxen, the infection can be introduced by the stomach, if portions of the tubercular organs be mixed with the food, or if the healthy animal be fed with milk from the animal which has tubercle (Simon: *Proceedings of International Congress*). Now, as tubercle is a malady which is very common among cows, this observation is one which may have a vast importance in connection with the feeding of young children.

Cohnheim has also made numerous observations on the infective nature of tubercle. He introduces the tuberculous matters either into the subcutaneous tissue, or into the pleural or peritoneal cavity, or into the anterior chamber of the eye. After introduction in the latter situation, the primary irritation soon passes away, the small piece of tuberculous matter becomes smaller and smaller, and may even wholly disappear; for a time, the eye appears quite clear and intact, when suddenly in the iris a number of delicate grey nodules appear, grow to a certain size, and then caseate. In rabbits and guinea-pigs, fourteen days after the introduction of the virus, disseminated tuberculosis will appear in the various organs; in other animals, twenty-one days is the usual period of incubation. He has succeeded with pieces of lung affected with caseating pneumonia, or with pieces of caseating testicle, or with freshly excised scrofulous gland from the neck; but he has never found any result from introducing caseated sarcoma or myoma, or simple lymphoma.

But some of the most instructive and conclusive observations and experiments on this head are those of Dr. Hippolyte Martin of Paris. They are related in an article on the "Relations between Tuberculosis and Scrofula", in the *Revue de Médecine* for April of this year; and also in the *Archives de Physiologie* for 1881, on the "Infective Properties of Tubercle". The object of his original experiments was to show that inoculation with true tuberculous matter was alone capable of producing true, general tuberculosis, and that all the lesions produced by the introduction of foreign bodies of non-tuberculous nature were not true tubercle, but what he terms false or "pseudo-tubercle". But he insists that it is of prime importance that all these inoculations should be performed with strict antiseptic precautions; and that if, perchance, the inoculation of non-tuberculous foreign substances have been followed by an eruption of true tubercle, it is because these precautions have been disregarded. He also points out that the anatomical structure of the true and false tubercle, as revealed by microscopical examination, is identical, and that the only means of distinguishing between them is by

inoculation *in series*—by a series of successive inoculations. True, infective tubercle is reproduced in an indefinite series, producing always a general tuberculosis as a consequence of local infection; the infectious properties becoming, if anything, more energetic as the series is prolonged. The same method proves the absolute innocuousness of false (pseudo) tubercle.

Some of his experiments are so important, that I make no apology for citing them to you. First, Dr. Martin tested the effects of injecting irritating animal and vegetable powders, such as cantharides, lycopodium, and pepper, into the peritoneal cavity of guinea-pigs. In one instance, he injected sixty centigrammes of lycopodium diffused in water into the peritoneal cavity of a guinea-pig; the animal died four months afterwards of general adhesive peritonitis, but all the viscera were healthy. Into the peritoneum of another guinea-pig he injected a large quantity of powdered cantharides mixed with water; nine months after the injection, the animal was quite well.

His next experiments were with fragments of morbid growths, non-tuberculous. Four pieces, of a cubic centimètre each, were cut from an epithelial tumour freshly removed from the neck of the uterus; two pieces were placed in alcohol, and two pieces in bichromate of ammonia. After a week, the two preserved in alcohol were introduced into the peritoneum of an adult rabbit, and rather more than three months afterwards the animal was killed; both fragments were found encysted in different parts of the peritoneal cavity; all the viscera were healthy. The two other fragments were introduced into the peritoneum of another rabbit, and about a month later the animal was killed, and the fragments were found enveloped in a fold of omentum, their angles rounded, and absorption evidently commenced. All the viscera were healthy.

In another experiment, two pieces of a sarcoma of the testicle, freshly removed, were immediately introduced into the peritoneal cavity of a guinea-pig; about a month later, the animal was killed, and no trace of the foreign bodies was to be found, and all the viscera were perfectly healthy. The same experiment was repeated with portions of mammary carcinoma, on a large and strong female guinea-pig in a state of advanced utero-gestation. She was confined with two healthy little ones a few days after, and, when killed two months afterwards, two free masses were found in a cyst in the abdomen, wholly caseous, and dry like crude tubercle. All the viscera were healthy.

The same kind of results followed the introduction in the same manner of a piece of the femur of a rabbit, with periosteum and some fragments of muscle adherent; half the tibia of a new-born infant that died of erysipelas; three squares of a hard pear; two squares cut out of a ripe apple. In one of these cases, about six weeks after the operation, the two pieces were found surrounded by yellow pus in a large vascular cyst. There was no peritonitis; the viscera were healthy.

The next experiment is very significant. In the centre of a large sarcoma removed from the thigh of an infant, there was a large completely caseous nodule; a portion of this caseous matter, weighing 50 centigrammes, was introduced into the peritoneal cavity of a rabbit, with careful antiseptic precautions. A year afterwards, the animal was in perfect health.

These experiments prove conclusively that those observers were certainly in error who asserted that almost any kind of foreign body—animal or vegetable—would produce tuberculosis in guinea-pigs.

In other experiments, Dr. Martin has shown that foreign bodies having irritant properties, non-specific, may set up inflammation, the pathological products of which may have a complete anatomical resemblance to true tubercle, no distinction being possible by microscopical examination; and he has obtained by means of cayenne pepper, lycopodium, and cantharides, the finest specimens of pseudo-tubercle; but these lesions, in spite of their special anatomical structure, have no specific virulence. He had repeatedly injected, with antiseptic precautions, the caseated inflammatory products of such experiments, and always failed to produce an eruption of tubercle. He insists strongly on the necessity, especially in a pathological laboratory, of these antiseptic precautions. All the instruments should be washed in alcohol and heated in a flame; and before each operation all parts of the syringe should be taken to pieces and treated in the same way.

On the other hand, pus from a scrofulous gland in the neck, as well as scrofulous products not yet degenerated, nor caseous, inoculated immediately after surgical removal, produced a series of cases of generalised tuberculosis.

Dr. Martin's experiments completely establish the following conclusions: 1. Tubercle, inoculated locally, determines, after incubation, the formation of a local tubercle, and, after a variable time, general tuberculosis; and the virus seems to acquire increased activity by inoculation in series of animals of the same or allied species. 2. But, if we

inoculate matter obtained from those tubercles secondary to the injection of non-tubercular foreign bodies, they never give rise to general tuberculosis; and, after two, or, at most, three terms of the series, they even lose the power of producing a local inflammation, and become absolutely inoffensive.

Here, then, he remarks, we have two inflammations: one specific, infective, and truly tuberculous; the other non-specific, non-infective, and not true tubercle; but both having the same anatomical structure, and the former differing from the latter by the presence of the property of a morbid agent at the present time unknown. It is this "unknown morbid agent" which Koch believes he has made known to us and shown us—an agent which the microscope had failed to discover until those special methods of preparation were employed which Koch has had the honour of discovering.

So, then, the proof of our first proposition seems complete: that "tubercle is an infective malady, originating in a specific virus, and propagated by the conveyance of that virus from body to body, and originating in no other way." And Koch's experiments appear to have proved the truth of the second proposition: that this "virus" is the property of a micro-organism peculiar to tubercle, and which may be called the tubercle-bacillus.

I need not repeat what has already been published as to Koch's methods of investigation. I may, however, say that the tubercle-bacilli appear as "delicate rods from a quarter to half the diameter of a blood-corpuscle in length"; that they have been found "in large numbers in all places where the tubercles are of recent formation and spreading rapidly, more especially at the border of the cheesy masses." They possess a special relation to the giant-cells, being found in their interior sometimes to the number of twenty in each cell. They do not appear to possess any power of movement. In some of the rods, oval spores have been seen. They have been seen in the human subject in cases of miliary tuberculosis, in cases of caseous broncho-pneumonia, in tubercle of the brain, in intestinal tuberculosis, in freshly extirpated scrofulous glands, and in certain cases of synovial degeneration of joints. Nor need I repeat the account (already published in this JOURNAL) of the beautiful series of experiments by which Koch has shown that it is to the presence of this organism, and to this alone, that tubercle owes its infective property. One fact, however, let me mark, *en passant*, for future comment. "It was found that these bacilli required a temperature approaching that of the human body for their growth." The minimum temperature of 86° Fahr., and the maximum of 104°, are the limits between which they can develop and multiply. This disposes of the first and second propositions, and brings us to the third; *viz.*, "that certain forms of disease termed scrofulous are essentially tuberculous."

Both the experiments of Koch, as well as those of Dr. Hippolyte Martin, go to establish this proposition. I have just said that Koch has found the infective bacillus of tubercle in freshly extirpated scrofulous glands, and in certain cases of (scrofulous) degeneration of the synovial membrane of joints. And Dr. Martin has obtained a series of cases of generalised tuberculosis, by successive inoculations in guinea-pigs; the original inoculations being in one instance from a small collection of pus found, after death, in a firmly encased submaxillary gland of a child, who had died of measles and broncho-pneumonia without any trace of tubercular disease, but with well marked clinical characters of scrofula; and in another, from non-degenerated (non-caseous) scrofulous products, a few instants after surgical removal.

Dr. Martin suggests, however—and the suggestion seems to me a sound and practical one—that scrofula is, perhaps, not a distinct morbid type, and that some of its manifestations must be included under the class of tuberculous diseases, and that others belong simply to the "lymphatic constitution"; that the possession or non-possession of the property of infectivity, capable of being transmitted through a series of inoculations, affords the only elements of a certain diagnosis, or, as I should probably say, the presence, in their characteristic anatomical characters of the tubercle bacillus.

The fourth proposition, that pulmonary consumption is, in the main, a tubercular disease, will not need to be stoutly opposed by many in this country, who have adopted the views of the origin of pulmonary consumption in tubercle, and the theory of its production which have been so ably advocated by Blandford; and much additional experimental research will be necessary in order to test this question at root.

At present, the most striking results on the subject are that fresh caseous matter, as well as the grey granulations found in the lungs of phthisical patients, are infective, and contain in their anatomical elements the tubercle bacillus; and that the parts of phthisical patients are infective; whereas the caseous degenerated products of ordinary inflammation are not infective, and do not contain the characteristic micro-organism.

But it is not denied that chronic inflammatory changes may be produced in the lungs by the entrance of various irritating foreign particles, and that these changes may in time produce fatal injury to the organs of respiration; it is, however, suggested that these cases should not be spoken of as phthisis, but as forms of chronic pneumonia.

In conclusion, we again come to the fifth and last proposition, the proposition with which we started, that pulmonary consumption is a contagious malady. I must again say that it is impossible to over-estimate the importance of establishing the truth or error of this proposition.

It is precisely one of those questions upon which the Collective Investigation Committee of the British Medical Association may be expected to gather up valuable information. And it is one also which can scarcely be cleared up without prolonged and repeated investigations by means of experiments on animals; not painful experiments, happily; there is no need to give pain in carrying out the kind of investigations which this subject demands, and which are calculated to promote the welfare both of man and animals. There are, moreover, many matters of daily concern connected with this investigation; the way, for instance, in which consumptive patients should be tended and nursed; the propriety of massing together a great number of consumptive patients in the same building; the propriety of allowing healthy persons to breathe air contaminated by the breath of such patients; the mode of dealing with their expectorations; the kind of medical, climatic, or other treatment best suited to the arrest and cure of the disease, regarded as an infective malady; the marriage of consumptive patients. Supposing consumption to be, under certain conditions, a contagious malady, there seems to be, *prima facie*, some ground for believing that one of those conditions may be that of temperature—the temperature of the body, or the temperature of the external air.

I have already mentioned that in the South of Europe consumption has always been looked upon as a contagious disease. May this not be owing to the relatively higher temperature of these regions? And we naturally associate with this reflection Koch's statement that the tubercle-bacillus requires a temperature above 86° Fahr. for its propagation.

I must content myself at present with simply pointing to this question of the influence of temperature upon the origin and propagation of consumption, as one which requires careful investigation. I shall have something to say in a future lecture on the antiseptic treatment of consumption. Finally, there is the pressing question of the possibility of conveying tuberculous disease to children by feeding them with the milk of consumptive cows; but I have said enough I hope to convince you of the truth of the statement I made at the commencement of this lecture, that it is impossible to exaggerate the importance of the subject to which I have now called your attention.

ABSTRACT OF AN ADDRESS ON THE MATERIALS OF BLOOD-POISONING IS MALIGNANT DISEASE PARASITIC?*

*Delivered at a Meeting of the Lancashire and Cheshire Branch
at Blackpool,*

By RUSHTON PARKER, B.S., F.R.C.S.,
Professor of Surgery in Liverpool.

I HAVE to show you micrococci from acute abscess, ganglion, and pyæmia, and bacilli from a wound in a case of septicæmia. They are prepared by Koch's method of aniline-staining, and rendered distinct under microscopes bearing high powers, illuminated, in two instances, by Abbé's condenser; and are additionally represented in the diagrams which hang before you.

The germ-theory of disease is so far a reality, that spirillum is the demonstrated organic cause of relapsing fever, bacillus anthracis that of splenic fever; while the local and constitutional changes in septicæmia, pyæmia, and acute suppurative, are equally proved to be due to the presence, propagation, and influence of bacilli and micrococci of various kinds and differing degrees of irritative or toxic virulence.

In reviewing the germ-theory of infective disease in general, and of traumatic infection in particular, it may be convenient to allude to two distinctive types severally represented by septicæmia and pyæmia. Many of the infective diseases having been proved, most of them are provisionally supposed, to be due to organisms imparted in some way

* This Report was kindly prepared by Dr. HARR, from the extempore address; and has been revised, with slight verbal alterations and additions, by the author.

from without. The organisms present in decomposing animal fluids are both numerous and various, yet they are, fortunately, "pathogenic" only in an extremely small minority. Some of them are always present in decomposing, and under certain conditions in suppurating, wounds; while, even in health, the cutaneous and mucous surfaces may be peopled with organisms of several distinct kinds. Under the type represented by septicæmia may be classed anthrax (and possibly also measles, typhus, and their associates), where the blood is simply polluted with an organism or with its products. Septicæmia proper seems to be of two kinds: (1) septic intoxication or toxæmia due to sepsis evolved by the septic bacteria (themselves confined to a putrid part of the patient or victim); and (2) septic infection or toxæmia in which the septic bacteria themselves enter the blood. In the septicæmia of mice, bacilli are the form of organisms concerned, and found in the blood, or in the infected wound, or in both. But they are often not to be found in casual specimens of the blood, owing to their more numerous accumulation in the capillary vessels rather than in the main bloodstream.

In pyæmia, as investigated in rabbits, the organisms concerned are micrococci. There have been changes of opinion as to the appropriateness of the word pyæmia, as a descriptive term, especially in the old sense implying a suppuration of the blood, seeing that the introduction of pus into the blood had chiefly a negative value in the attempted experimental production of pyæmia. But, since Mr. Lister showed, in his observation of the breaking down of the infected blood-clot in a donkey's vein, that a genuine suppurative of the blood can indeed take place, the rational value of this necessary traditional expression is once more established. Pyæmia is characterised by a clotting of the blood, and the distributed infection of an organic ferment. The micrococci crowd together, increase the adhesiveness of the corpuscles, and promote the clotting of the blood, even in capillary vessels. The thrombi, whether large or small, are foci for the further development of the micrococci; and hence all the secondary phenomena, which, like the primary, may be suppurative or not.

In septicæmia, the bacilli kill by poisoning the blood, without giving rise to secondary inflammations or primary local manifestations; whereas in pyæmia, the micrococci cause clotting of the blood, and set up embolic pneumonia, nephritic infarcts, and perhaps also suppurative of the joints. The micrococci do not seem to be in themselves always so extremely poisonous; but, by giving rise to suppurative or other organic changes, indirectly lead to death by perversion of visceral functions.

What is the immediate cause of death in perforation of the bowel? The general answer is, "Collapse", which is indeed true enough when collapse actually takes place. But how are we to explain the cases where neither collapse nor death occurs? Perforation or rupture of intestine, with diffusion of contents throughout the peritoneum, is followed by peritoneal absorption, and the collapse is septicæmic; but a similar occurrence into the tissues, and not into the peritoneum (or only gradually and slowly into that serous sac), is a sure cause of acute (because putrid) abscess, but is often followed by recovery. A similar explanation attends the fatality of intestinal gangrene—as a complication, for instance, of strangulated hernia. It is a modern canon of surgical pathology that, in gangrene of any superficial part, putrefaction will occur unless circumstances specially prevent it. Dry gangrene may spontaneously fail to putrefy, except at the moist line of demarcation; but moist gangrene will infallibly putrefy, unless the timely disinfection of the superficial surface be artificially undertaken. But, if this be successfully done, the disease may be arrested, its spread prevented, and its disappearance accomplished, without loss of substance.

In the case of the intestine, no such prevention can be practised, so putrefaction inevitably attends the establishment of gangrene, demanding the prompt and free excision of this (as of any equally advanced) gangrenous organ.

A case of hernia, three days strangulated, recently came under my care at the Liverpool Royal Infirmary. At the necessary herniotomy, I removed twelve inches of bowel, with some omentum, and the patient for a time did perfectly well, in fact nearly recovered, but eventually died collapsed. After the *post mortem* examination, it was found that fresh patches of gangrene had appeared in other parts of the intestine, and thus the temporary relief and the ultimate death were both explained. Cases have been already reported in which this operation has been perfectly successful.

Although bacilli are the characteristic organic poison in the septicæmia of mice, and micrococci in the pyæmia of rabbits, it is to be noted that Koch found rabbits liable to a true septicæmia produced by micrococci differing in shape, size, and distribution from those producing pyæmia in the same animal.

Tubercle is an infective disease, now known to be due to an organism

which gives rise to the characteristic manifestations. These are both anatomically and physiologically allied to pyæmia. Opinions have, in the past, been apparently divergent as to the supposed real nature of tubercle; for instance, one school of able observers held that it was a purely inflammatory process, while another equally able, and its allies, have always regarded it as a specific disease due to an infective virus. No doubt the histological phenomena of tubercle are consistently explained as inflammatory, and so are those of pyæmia. But what causes the inflammatory changes? The very specific virus once thought to be an explanation antagonistic to the former, but now woven inseparably into it in the form of the tubercular bacillus so admirably discovered by Dr. Robert Koch.

Syphilis again presents many features analogous to those of pyæmia, and some have even alleged that they have seen a special syphilitic germ. But though this is not yet sufficiently proved, it is probable that such a germ exists. As for gonorrhœal rheumatism, its clinical features have long been interpreted as those of an aseptic pyæmia, which, fortunately for the patients, lacks the anatomical proofs that might be afforded if it terminated fatally; while ulcerative embolic endocarditis is a true aseptic pyæmia on the best anatomical evidence.

There is another infective disease which I venture to compare with pyæmia, and that is malignant disease, more especially its so-called carcinomatous varieties. Like tubercle, the inflammatory character of which is admitted on all hands, so far as the histological changes are concerned, the cutaneous, mucous, and glandular cancers have very close affinities to inflammation. The primary growths are essentially a plastic catarrh; and the round-celled infiltration, by which they are additionally indurated, shares, with the similar indurations of undisputed inflammation, a histological identity. Simple inflammations, however, are resolvable, their infiltrated products disappearing on the subsidence of the irritant cause, be it chemical or mechanical; whereas the cancerous induration is unresolvable, be it a malignant stomatitis, glossitis, enteritis, or dermatitis, as in epitheliomas, or be it a malignant adenitis, as in mammary or other glandular cancers. Round-celled sarcoma, again, is a true infiltration of the plainest possible kind, whether it constitute a malignant cellulitis, periostitis, or osteitis, or even an interstitial orchitis or any other adenitis; and differs only from undisputed inflammation of regions and organs in its "unresolvability". But the very unresolvability of carcinomatous tumours, whether primary indurations, lymphatic infections, or disseminated visceral growths, has a distinct parallel in the similar unresolvability of pyæmic, tubercular, and neglected syphilitic phenomena.

The cachexia of acute cancer, and of acute sarcoma, when now and then it kills as a poison, without prominent local symptoms, is not unlike that of pyæmia, of tuberculosis, and even of syphilis; the lymphatic glandular infection, and all its attendant and consequent phenomena, is conspicuously similar to various forms of infective inflammation; while the malignant thrombi that form in veins, in cases of carcinoma and sarcoma alike, with the still more frequent embolic disseminations of these truly infective appearances, have a resemblance to the thrombosis and embolism of pyæmia too obvious to need defence.

More than six years ago, I was led to the assumption that malignant disease had inflammation for its anatomical type, by the histological examination and comparison of inflammation, tubercle, and cancer; and I have taught it, during the greater part of that period, as an idea justified on anatomical grounds, though not entitled to acceptance as a truth. As a mere hypothesis, I venture to suggest it here, with the intimation that many things will surprise me more than the discovery of a parasitic germ originating malignant growths.

The bacillus of tubercle, though discovered, separately cultivated, and successfully inoculated by Koch, is still most difficult to find, and then chiefly in the freshest growths. The microphytes of disease, how terrible soever be their vigour, or the initial reality of their presence, are sometimes exhausted, and even effaced, in the transformations of tissue which they themselves induce—exhausted, as noticed in tubercle by Koch; effaced, as observed by Lister in the ass's jugular. The parallel, once established, recurs even in prevention, in treatment, and in cure. Against pyæmia, the only certain safeguard lies in preventing the primary infection; in tubercle, we already extirpate the earliest manifestations when we can get at them; while, in cancer, timely excision does sometimes amount to effectual eradication. The purpose is, in all, to avoid the dreaded physiological "infection".

THE Darlington Guardians, at a special meeting, have decided to rearrange the medical districts throughout the Union, and to appoint seven medical officers instead of five.

3. The facility granted to the house-surgeon for restraining, and to the patient for escaping, secondary hemorrhage.
4. Freedom from pain, exclusion of air, and adaptability for perfect drainage.
5. The symmetrical appearance and utility of the stump.

ABSTRACT OF LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND ZOOLOGY OF THE EDENTATA.

Delivered at the Royal College of Surgeons of England.

By W. H. FLOWER, LL.D., F.R.S.,
Hunterian Professor of Comparative Anatomy.

LECTURE V.—FAMILY MYRMECOPHAGIDÆ.

THE animals constituting this family are externally clothed with hair. They have no teeth. The mouth is tubular, with a small terminal aperture, through which the long vermiform tongue, covered with the viscid secretion of the enormous submaxillary glands, is rapidly protruded in feeding, and withdrawn again with the adhering particles of aliment, which are then sucked into the pharynx. In the manus, the third toe is greatly developed, and has a long falcate claw; the others are reduced or suppressed. The pes has four or five subequal digits with claws. The posterior dorsal and lumbar vertebræ have additional interlocking zygapophyses. The tail is long, and sometimes prehensile. The placenta is subdiscoidal or dome-like, and apparently deciduate as in the sloths; and the penis is rudimentary. The mammae are two, pectoral.

The animals of this family are the Anteaters *par excellence*. They feed exclusively on animal substances, mostly insects. One species is terrestrial, others arboreal. None burrow in the ground. They are all inhabitants of the forest regions of South and Central America. There are only three species of the family known with certainty, which differ so much from each other in structure and habits, that each is placed in a separate genus.

Genus *Myrmecophaga* (*M. jubata*, the Great Anteater or Ant Bear).—The skull is greatly elongated and narrow, its upper surface smooth and cylindrical. Anteriorly, the face is produced into a long tubular rostrum, rounded above and flattened below, with terminal nares, and composed of the mesethmoid ossified for more than half its length, the vomer, the maxillæ, and the long and narrow nasal bones; the premaxillæ being extremely short, and confined to the margin of the anterior nares. The zygomatic arch is incomplete, the styliform malar only articulating with the maxilla in front, and not reaching to the very short zygomatic process of the squamosal. The lacrymal foramen is in front of the margin of the orbit, as in the sloths. There are no post-orbital processes to the frontals, or any other demarcation between the orbits and the temporal fossæ. All the parts to which the muscles of mastication are attached are most feebly developed. The palate is extremely elongated, and produced backwards as far as the level of the external auditory meatus by the meeting in the middle line of the largely developed pterygoids. The glenoid fossa is a shallow facet, with its longitudinal diameter from before backwards. The mandible is very long and slender, with an exceedingly short symphysis, no distinct coronoid process, and a slightly elevated, elongated, flattened condylar articular surface. The vertebræ are seven cervical, fifteen or sixteen dorsal, two or three lumbar, six sacral, and thirty-one caudal. It was till lately always stated that the clavicles were absent, but they have been found in a rudimentary state in two examples lately dissected by Mr. Forbes at the Zoological Gardens. The scapula has the suprascapular notch converted into a foramen, as in the sloths; but the acromion is not united to the end of the coracoid. The humerus has a large supracondylar foramen. The radius and ulna are distinct. The hand is of remarkable formation: its first digit is very slender, the second also slender, with compressed phalanges of nearly equal length; the third digit is immensely developed. Though its proximal phalanx is extremely short, its ungual phalanx is so long, that the entire length of the third digit exceeds that of the second. The fourth has a long and rather slender metacarpal bone, and three phalanges diminishing in size, the ungual phalanx being very small. The fifth has the metacarpal nearly as long, but not so stout as the fourth, and is followed by two small phalanges, the last of which is rudimentary and conical. Claws are developed upon all but the fifth. In walking, the toes are kept strongly flexed, and have their joints turned

upwards and inwards, the weight being supported upon a callous pad over the end of the fifth digit, and by the dorsal surfaces of the third and fourth digits. The hind feet are short and rather broad, with five subequal claws, the fourth rather longest, and the first shortest; the whole sole is placed on the ground in walking. The tail is about as long as the body, and covered with very long hair, disposed chiefly in a ridge above and a larger one below, making the whole organ something like a large feather. It is not prehensile, and in sleeping is turned over the body, which it covers as with a warm blanket. The ears are small, oval, and erect. The eyes are very small. The cavity of the mouth is remarkably long, not only occupying the under surface of the skull, but extending for nearly the greater part of the neck, the hyoid bone and larynx being placed at a distance of nearly six inches behind the cranium. This is to give room for the very long, cylindrical, tapering, vermiform tongue, which ends posteriorly in a pair of retractor muscles, attached to the inner surface of the sternum. Its surface is covered with very minute, backward-directed horny papillæ, and there are two small circumvalate papillæ on the dorsal surface near the base. The parotid gland is rather small in proportion to the size of the animal, placed in the usual situation, and of flattened triangular form. The duct, which is eleven inches in length, terminates near the anterior angle of the mouth. The submaxillary glands, on the other hand, are enormously developed, and unite below in the middle line for a considerable distance. Posteriorly, they lie over the front part of the sternum, and are notched on each side for the prominence of the shoulders. The length of each gland from before backwards is sixteen inches. There are three ducts on each side, commencing in distinct portions of the gland, and running forwards to very near the anterior part of the floor of the mouth, where they pour out their viscid secretion in such a way that the tongue must be lubricated by it as it passes out. Ants adhering to it as it is withdrawn into the mouth are swept off by two projecting ridges from the upper edge of the rami of the lower jaw, and then swallowed. The want of teeth is compensated for by the structure of the stomach, which consists of a subglobular sac of moderate capacity, lined by soft vascular secreting membrane, into which the œsophagus enters, and of a smaller pyloric portion, with a dense epithelial lining and thick muscular walls, not unlike the gizzard of a bird. The intestinal canal is slung on a simple continuous mesentery (as in reptiles), without the usual mammalian constriction at the duodenum. The colon is short, and there is no ileo-colic valve; and the cæcum is represented by an ill-defined dilatation of the commencement of the colon. A conspicuous ridge of mucous membrane runs along the greater length of the small intestine, projecting into the cavity, opposite to the mesenteric attachment. There is a gall-bladder. The great arteries of the limbs and of the tail are surrounded with *retia mirabilia*, as in the sloths. The external orifice of the genital, urinary, and intestinal organs is not quite a cloaca, as in the sloths, as the anterior and posterior outlets are separated by a slight perinæum of true skin. The penis is quite rudimentary, consisting of a pair of small corpora cavernosa, no larger than the clitoris of most mammals of corresponding size. The testes are abdominal, and there are distinct vesiculæ seminales and Cowper's glands. The uterus is simple, and pyriform; but the vagina has, at all events in the virgin state, a median septum. The gravid uterus and fetal membranes have not yet been examined.

THE TREATMENT OF CHRONIC RINGWORM OF THE SCALP: A NEW METHOD OF EPILATING THE DISEASED HAIRS.*

By MALCOLM MORRIS, F.R.C.S. Ed.,

Joint-Lecturer on Skin-Diseases at St. Mary's Hospital Medical School.

THAT chronic ringworm of the scalp is a difficult disease to cure, every practitioner will admit. There are two propositions, as regards treatment, which I desire to bring under the notice of the profession. But, first, I must briefly refer to the factor in the problem we are called upon to consider—a fungus growing on and in the hairs, extending deeply into the follicles as far as the roots.

In a paper published in the early part of last year, I pointed out that two things were essential in the treatment of this disease: first, some drug which is capable of destroying the fungus, and so preventing its further development; and, secondly, some vehicle to carry this drug to the part of the follicle where the fungus exists and grows. Arguing, from analogy, that certain chemical substances, called antiseptics, had the power of destroying certain low forms of vegetable life, such as bacilli, micrococci, and bacteria, I suggested

* Read at a meeting of the East and West Surrey Districts of the South-Eastern Branch.

that thymol or menthol should be used as the parasiticide, and that the fat would answer the purpose as the absorbent. But, as the latter was volatile, I added oil to the compound to prevent evaporation. While trying this liniment, of thymol, chloroform, and oil, in a large number of cases, I was struck with the fact that in some of them, instead of the constant application of the remedy, the disease appeared on other parts of the body, and also on other parts of the head previously free. It seemed difficult to understand that, in a strictly antiseptic medium, spores could be carried from part to part and live; but such seemed to be the case, for in some instances, when the liniment had been used too freely, and had run down the neck, fresh spots of the disease showed themselves in that region. During the time I was struggling with this difficulty, I found that Koch, in Berlin, had been making experiments on bacillus spores with various antiseptics, and found that these spores lived and developed even after being placed in carbolic oil (one part in twenty) for one hundred and ten days. This, I think, is a very strong argument that neither oil nor fat of any kind should be used when the full action of an antiseptic is required.

Of course I am fully aware that all the best authorities recommend ointments, mercurial or otherwise, though for a very different reason from that I have been describing. They care little or nothing for the antiseptic action, so long as inflammation of the follicle, and a less severe, be produced. The spores are said not to live in mercurial products (Thin). But surely cases are not uncommon in which the disease is transplanted to healthy parts by means of the discharge. I have seen a case in which croton-oil was used to a single spot, and in a short time the head was covered with small centres of disease. In this case, the spores were carried in the discharge.

Again, have not all the old chronic cases we see in practice—some of them of four or five years' duration—been cases treated by mercurial attacks of inflammation, and yet with the result that spores were found with ease? My view is that to produce inflammation of this kind is useless; and that a severe kind is unjustifiable, on account of the risk of destroying the follicles altogether, and producing alopecia.

I return to the question of fats: if fat of any kind from without answers the purpose, as Koch asserts, the natural fat or sebaceous matter must have a similar effect. For this reason, I have tried to remove the fat by means of ether, and have abstained from using ointments or ointment-like treatment. I wash, or more strictly dab, the patch each morning with ether, rectified spirits of wine, and thymol, in the following proportions: ether, five drachms; rectified spirits of wine, two drachms and a half; and thymol, half a drachm—applying during the day with a very small trace of perchloride of mercury. Petroleum jelly may be used in the place of the ether and spirit. One drachm of petroleum-oil takes up five grains of thymol. The ether is of greater value than would at first sight appear, and the thymol is very strong. There is a disease of the scalp known as alopecia areata, the chief characteristic of which is the falling out of the hair. This is caused by the absence of the natural fat in the sebaceous matter. It is cured by stimulating the glands to action, and by artificiality. In the ringworm patch, we want the diseased matter to fall out; and, by producing a condition similar to scab, or ringworm, by making the part very dry—we can actually produce alopecia areata. Indeed, therefore, of epilating by means of forceps—which is the best method, as the hair breaks at the neck of the follicle, leaving the diseased matter behind—we can epilate by dissolving the fat, and thus remove the hair. In this way, we can in a few days remove all the hair from the scalp.

THE INGUINAL COLOTOMY IN RECTAL STRICTURE.

By H. A. REEVES, F.R.C.S.,

Assistant Surgeon to the London Hospital.

This preliminary note is published with the view of drawing professional attention to the following method, which appears to possess certain advantages. I have performed it three times, the first two of which were of the non-perforating type, and the last one of the perforating type. Up to date, I have performed it twenty-four times, and in all cases the result has been left lumbar, and the large intestine has been left in its normal position. Only once have I done the right inguinal colotomy, and in this case the stricture was high up in the rectum, and the large intestine was not perforated. In all the other cases, the large intestine was perforated, and the result was left lumbar, and the large intestine was not perforated. I may add that the large intestine was not perforated in any of the cases in which the stricture was high up in the rectum, and the large intestine was not perforated.

and result were explained to them, or through their getting tired of waiting for a bed, I lost sight of many of them.

The inguinal operation avoids the risk of unintentionally opening the peritoneal cavity, which has often fatally occurred in the lumbar operation. In fact, the operator deliberately prefers to go through two layers of that membrane, the parietal and that covering the bowel; and the probability of the occurrence of prolapse is, I think, much diminished; but the days are yet early to speak definitely on this point. If the operation be undertaken for innocent stricture, this method of operating offers the advantage that a bougie may be carefully passed through the stricture from above, when it may be impossible or dangerous and difficult to do so from below.

As regards æsthetic considerations, I find that, when the objects and the resulting conditions of the inguinal and lumbar methods are put clearly to the patients, they are usually indifferent, leaving the matter to me; so that it would seem that even married women think more of present relief to pain than of future consequences. I think that the situation of the opening matters little from a sexual point of view, because it is protected by a suitable apparatus, which is not more unsightly than a truss; and because, wherever the incision be, the odour is much the same. This annoyance may be to a great extent kept under by suitably scented compresses.

I make the incision a little higher than that advised in the books—i.e., rather more than an inch above Poupart's ligament, and extending from just external to the internal inguinal ring to a little external to the anterior superior spine of the crest of the ilium. I found that, by doing this, the intestine (sigmoid flexure) was more easily reached at the lower part of its course, and that its tendency to drag away from the stitches to the abdominal wall after operation was diminished. An appendix epiploic will usually be seen; and, if this be steadily drawn out, the bowel will follow.

In my first case, I did not open the bowel at the time of operation, but stitched it to the parietal peritoneum, and not to the skin. The wound was kept open by oiled lint; and, as the patient was a very stout multiparous woman, and had a fat pendulous abdominal wall, this was not a very easy matter. On the third day, it was difficult to recognise the bowel, which was coated over with a thick layer of lymph, and deeply placed at the bottom of the wound. The patient, who was suffering from malignant disease of the rectum, was much relieved by the operation.

In the second case, to avoid difficulty in finding the bowel, I stitched it to the parietal peritoneum and to the skin; but on the fourth or fifth day I found that the stitches had ulcerated through the intestinal coats, and that the bowel was covered with lymph, and deeply placed at the bottom of the wound. At one spot, it seemed as if the serous coats of the abdominal wall and bowel had not united; but the case has done beautifully. This patient is only twenty-five, and has malignant disease of the rectum.

The third patient was a woman aged 50, with extensive disease of the rectum involving the vagina; and in her case I stitched the bowel to the abdominal wall, and opened it at once. She has progressed most favourably.

It is important that the opening in the parietal peritoneum should be sufficiently free, so that, when the bowel is pulled through it, there should be no strangulation on account of its passing along a too small opening. Although the abdominal incision was a little higher up than usual, small intestine did not present, and was not even seen, in any of these cases. I mention this, not so much on account of a possible difficulty in distinguishing a thickened piece of small intestine, but because of the inconvenience which would arise if it bulged at the small opening; as to return it and keep it in place while the operation is being completed is not always an easy matter. All bleeding must be stopped before the peritoneum is opened. I give morphia after, and also a night or two before, the operation, to lessen peristaltic action, and to make the bowels quiet, so that no fluid matter may escape along the track of the sutures and set up peritonitis. Should some solid fecal matter be taken up by the needle as it transfixes the bowel (and this may generally be avoided by making sure that the fold of intestine between the mesenteries does not contain any solid matter), its point will be closed by the mesenteries and muscular coats of the opposite wall before it penetrates the serous coat; but the operator should look to this, and, if necessary, cleanse the needle's point before passing it through the parietal serous membrane. It is advisable to let the patient lie half over on the abdomen, either on the left or the right side, to prevent the dragging on the stitches, which occurs in the lumbar position. This tendency to fall back is partly due to the weight of the bowel, and partly to a rather short mesocolon. I may here state that the bowel may be reached on its posterior surface, and without opening the peritoneal cavity, by proceeding very nearly as if for tying the external

iliac high up; but, as this involves a larger wound, a longer operation, and as, moreover, we now-a-days know that the peritoneum is no longer to be dreaded, this plan is at a great disadvantage.

The cases mentioned have all recovered, and were operated on during the last three months at the Hospital for Women; and, since writing the above, I have operated on a fourth case at the London Hospital. In this case, omentum presented when the peritoneum was opened. In this last case I had, two years ago, excised four inches of her rectum, giving her eighteen months of comfort; but the return of the disease, and the pain caused by the growth, induced me to offer her the few months' comfort which this operation, if successful, will give her.

CLINICAL MEMORANDA.

MEASLES WITH MARKED THROAT COMPLICATION.

E.T., aged 6, who was stated to have been more or less ailing for ten days, was first seen on April 10th. He then had a very distressing cough, croup-like in character, and unaccompanied by any expectoration. Slight aphonia was also present. The larynx was tender on pressure, and the fauces acutely inflamed; there was no enlargement of the tonsils. Inspiration was whistling, the origin of the sound being referable to the larynx. He had occasional sickness, and was extremely prostrated. Temperature 102° ; respirations 36; very small pulse. There had been several cases of acutely inflamed and ulcerated throats in the house quite recently, their cause having been traced to imperfection in drainage. On April 12th, the patient being still without any coryza, and with the cough retaining the same character as before, a slight rash appeared on the forehead, which on the next day presented the characteristic aspect of measles, and spread rapidly over the back, arms, and legs. There was also busy delirium at night, and the temperature reached in the evening 104° . The glands of the neck became much enlarged, and cough continued, still dry and barking. On April 15th, the rash was fading on the legs, but very deeply pigmented on the arms and hands. There still was delirium. Temperature 104° ; respirations 60; pulse 130. The patient continued in the same state until April 18th, when there were physical signs of pneumonia at the base of the left lung. The cough was more loose. The sputum was swallowed by the child, and therefore could not be noticed. He had diarrhoea, with yellow foul-smelling stools. The rash was very deeply pigmented, and almost everywhere on the body and extremities. Delirium was not constant. Temperature in the evening 104.4° ; respirations 62; pulse 130. Brandy was freely ordered, and the diarrhoea checked by astringents. The patient gradually improved under treatment, but it was not until the 1st of May that the rash entirely disappeared. This was the boy's first attack of measles. The mother of the patient, who had had measles when young, and who had been constant in attendance on her boy, began to show symptoms of illness on May 10th. No previous feeling of illness could be elicited. On May 10th, she complained much of her throat. The fauces were very acutely inflamed, the tonsils not enlarged, the larynx tender; there was slight aphonia; the cough was dry and barking. The glands of the neck were swollen. On May 13th, she had slight coryza. Temperature 100° . On May 14th, a very well-marked morbillous rash appeared on the face, and spread the succeeding day over the body. With the exception of slight prostration, she progressed favourably, and on May 18th had lost all appearance of rash.

H. G. ORLEBAR, M.D.

THERAPEUTIC MEMORANDA.

ON THE TREATMENT OF ECZEMA BY DIET.

MR. B. SQUIRE entirely fails to comprehend my remarks on the above subject, and his criticisms show a complete misconception of my meaning. A few words, however, will make this clear.

As to the use of cod-liver oil, I did not say that the efficacy of the Banting diet was "very much enhanced by the addition of a little cod-liver oil." On the contrary, I agree with Mr. Squire that the oil is inconsistent with Bantingism. What I did say was this—and here is the exception to the rule—that in some children the use of oil is indicated, and may be given after the diet has been used for some weeks. There is no inconsistency here; if there be, then modern therapeutics is full of such inconsistencies. Sudden change of treatment, medicinal or dietetic, or both, is of every-day occurrence, as, for example, in pneumonia. May not the same principles be applied to the treatment of cutaneous disorders? I may add, that I usually prescribe the oil in small doses, and in the etherised form, five minims of ether to one drachm of oil.

With regard to the case I mentioned, I am perfectly well aware of the good results of the pitch treatment in chronic eczema. But here is a little patient, who, for more than eight years, has been under active treatment with ointments of all kinds, including pitch, and no improvement is noted. He is put on the Banting diet, the pitch being continued because it appeared to relieve the intense irritation; and he recovers. Surely the logical inference is, that the dieting has been productive of this happy result.

In conclusion, let me add that in my article I did not explain the Banting diet, or attempt any definition of it; that I strictly follow the diet laid down by Mr. Banting in his pamphlet on *Corpulence*; and that the patient, whose case I quoted, was under my personal observation during the whole course of his hospital treatment.

A. CRESWELL RICH, Liverpool.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

UNIVERSITY COLLEGE HOSPITAL.

FOUR CASES IN WHICH IODOFORM, USED AS A LOCAL APPLICATION, APPEARED TO EXERT A POISONOUS INFLUENCE ON THE ECONOMY.

(For the notes of these cases, we are indebted to Mr. STANLEY BOYD, Surgical Registrar.)

CASE I. *Strangulated Femoral Hernia: Iodoform Dressings: Drowsiness, Hebetude: Recovery when the Iodoform was removed.* (Under the care of Mr. MARCUS BECK.)—G. F., aged 61, a barber, was admitted on August 13th, 1881. During the previous eleven years, he had occasionally noticed a swelling in the right groin; it gave him no inconvenience. He was subject to sudden attacks of acute pain in the epigastrium, which were accompanied by vomiting of "black stuff", but had always ceased spontaneously. On August 10th, at 9 P.M., he was suddenly seized with an acute pain in the hypogastrium, and he passed a small motion. Two hours later, he began to vomit dark green, bitter-tasting material. On the morning of August 13th, the vomiting became stercoraceous. When admitted, a strangulated femoral hernia about the size of a turkey's egg was found on the right side. Mr. Beck performed herniotomy. The gut was returned, and the sac was found to be lined by uniformly adherent omentum. The carbolic spray was used; and the wound was dressed with carbolised gauze, etc. For four days, all went well; but on August 18th the wound was found to be suppurating, and there was some cellulitis extending from the iliac crest to the last rib on the right side. The carbolic dressings were persevered in; but on August 20th the discharge was offensive. Fomentations and boracic acid dressings were now used, and the cellulitis began to diminish. On August 23rd, a counteropening was made above the crista ili, and a drainage-tube was passed through to the groin.

On September 3rd, iodoform was used for the first time. A piece of lint, sprinkled with the drug, was passed through the whole length of the sinus above described. On September 7th, it was noted that the iodoform was then being puffed into the sinus through a bougie, and that the patient was emaciating somewhat rapidly. On September 20th, he complained that he felt "generally low", and could eat no solid food. The structures over the sinus were a good deal inflamed. His general condition continued to be very unsatisfactory; he was dull heavy, and exceedingly drowsy; he was disinclined for food or to make any exertion, wandered a little at night, and was losing flesh. On September 26th and 27th, the temperature reached 101.6° ; and on the following day it was thought that pericardial friction could be heard at the inner end of the sixth rib. The tongue was dry and brown. The pain was relieved by poultices; but the appetite remained bad, and the pulse high (130). He continued to waste, and was apparently passing into a hopeless condition of hebetude and exhaustion. The sinus had not contracted much, and still discharged freely.

He left the hospital on October 1st. On October 20th, Mr. Beck saw him at his own home, and the following note was made. The patient was very much better. The improvement was said to have begun about three days after he was discharged from the hospital; that is, when all the iodoform had been washed out of the wound by the red wash which had been ordered him on discharge. The great drowsiness and slight wandering at night then disappeared, and he had been getting better ever since.

Soon after he got about again, the hernia again became strangulated. He again waited two or three days before seeking advice. Mr. Beck

then saw him, and operated through the old scar. On this occasion, the patient made an uninterrupted recovery.

CASE II. Extensive Burn in an Adult: Death preceded by Delirium and Coma, while the Local Lesion was Doing Well.—(Under the care of Mr. BERKELEY HILL.)—J. H., aged 38, a railway porter, was admitted on December 6th, 1881. He was a strong healthy-looking man, and said that the only illness he had ever experienced had been inflammation of the brain, nine years before, as the result of an accident. At 2.30 A.M. on the morning of admission, his clothes caught fire by the overturning of a benzoline lamp, and he was severely burnt about the left side of the trunk and the left upper limb; one severe burn extended from the axilla to the iliac crest. He was able to come to the hospital in a cab, and to walk upstairs to the ward. The shock was very slight; the urine contained albumen; the burns were dressed with carron-oil, and two minims of the hypodermic injection of morphia were administered. On the following day, vomiting had become troublesome, and it was found necessary to give one ounce of brandy every two hours. The urine contained albumen, which, as well as hyaline and granular casts, and abundance of triple phosphates, was also noticed on December 8th. The temperature was 99.4° in the morning, and 100.4° in the evening. On December 9th, the temperature was 101.4° in the morning, and 101.6° in the evening. On the following morning the burn on the trunk had begun to slough, and the temperature was 102.2°, and remained at about that, until the morning of the 12th, when it was 101.6°; the dressings of carron-oil failed now to correct the factor of the sloughs, and iodo-vaseline was substituted. Iodo-vaseline is an ointment made by dissolving one drachm of iodoform in one ounce of oil of eucalyptus (by means of heat), and adding five ounces of vaseline. The temperature remained elevated, and on the 14th it was 101.2° in the morning, and 102.4° in the evening; the pulse, which had been 100 on December 10th, and 108 on December 12th, was now 120, but full and strong; there was some bronchitis.

On December 16th, the patient's condition changed decidedly for the worse: he became delirious; the pulse rose to 130, though the temperature was only 101.6°, and the condition of the burns was satisfactory. On the following day he was very weak; the temperature rose at night to 104°, but the pulse was slower, and he was thought to be slightly better. The delirium, however, continued. On the night of December 20th, he was very restless, constantly trying to pull off the bandages and bedclothes. The urine was acid, of specific gravity 1022; it was free from albumen or deposit; the quantity passed was sixty-two fluid ounces in the twenty-four hours. In the previous and in the succeeding period of twenty-four hours, fifty-six fluid ounces were passed each day.

On December 31st it was noted that the patient was still rather delirious at intervals, that his cough was bad, the pulse 128, weak and compressible, and that the temperature varied from 98.8° to about 101°; the urine was still free from albumen, but contained an excess of phosphates. The wound continued to do well, and was now clean and covered with granulations; the patient, however, grew more emaciated, and though the range of temperature had become limited, the pulse was very high. About the middle of January, the delirium again became a very prominent symptom, and on January 20th he was on this account transferred to a private ward. The granulating surface left by the burn was "healing rapidly"; the iodo-vaseline ointment was still used as a dressing in large quantities. After this date the patient's condition rapidly deteriorated, the temperature-curve showed a wider range, the pulse became more rapid and weaker; finally, he became comatose and died on January 31st.

	Pulse.	Temp.		Pulse.	Temp.
Jan. 25th ..	110	101.2	Jan. 26th ..	111 A.M.	101.2
" 26th ..	110	101.2	" 26th ..	1 P.M.	101.2
" 27th ..	110	101.2	" 27th ..	5 P.M.	101.2
" 28th ..	110	101.2	" 28th ..	11 P.M.	101.2
" 29th ..	110	101.2	" 29th ..	11 P.M.	101.2
" 30th ..	110	101.2	" 30th ..	11 P.M.	101.2
" 31st ..	110	101.2	" 31st ..	11 P.M.	101.2

The necropsy was made by Mr. Stanley Boyd, twenty-seven hours after death. The mortuaria was well marked; the burn was healing at the margins; parts of skin were pretty firm over the lower ribs, but in the axilla a large surface (6 × 12 inches) were, have had to heal by granulation. A few petechiae were to be seen on the left costal pleura, and there were a few recent adhesions over the lower lobe; in the right pleura were a few old adhesions. The lower lobes of both lungs were heavily congested; there was some broncho-pneumonia, and the cutaneous was much diminished; there were many petechiae over both lower lungs, but no part of the lungs soaked in water. The peritoneum contained about a draught of thick, on the posterior surface of the liver was a few small petechiae, the surface of the stomach was pale and

perhaps a little soft; there was no staining of the endocardium, and the valves were healthy. All the abdominal viscera were healthy! The brain was carefully examined, but presented nothing abnormal.

CASE III. Extensive Burn: Symptoms resembling those of Cerebral Meningitis coming on after the application of Iodoform, and ceasing on its withdrawal. (Under the care of Mr. BECK.)—Frederick W., aged 4 years, was admitted on January 1st, 1882. He had set fire to his nightshirt and had been severely burnt. The burnt surface occupied the whole of the front of the chest, parts of both axilla, and extended downwards over the abdomen to within an inch of the umbilicus; the parts of the arms contiguous to the axilla, the hands, both cheeks, and the skin around the lower lip were also slightly burnt; the burn over the chest was for the greater part to the third degree, in other parts it was chiefly of the second degree. The child appeared drowsy. The temperature, which was 99.6° at 3 P.M., rose to 103.2° at 11 P.M. The burnt surface was at first dressed with boracic ointment; this was replaced by iodo-vaseline on the following day. On January 2nd the temperature was 102.4° in the morning and evening, and the pulse was 150. On January 4th the temperature had fallen to 103°, but the pulse was 156, and there was some cough. On the following day it is noted that "the patient slept very little last night, and screamed as if suffering from meningitis; he draws his legs up in bed a good deal, suffering from intense headache." The temperature, which was 104.6° at 3 A.M., gradually fell during the day, and was 101° at 11 P.M.; the pulse at 11 A.M. was 160. During the next few days the patient remained in much the same condition; the temperature was high, ranging daily from about 100° to 103°. The burnt surfaces, when dressed on January 9th, were seen to be going on favourably; the child did not scream so much, seemed to be more conscious, and readily took milk, mixed with a little brandy. The pulse remained very rapid; on the 10th it was 144 while the temperature was only 100.4; he ground his teeth and still screamed in a peculiar way. On January 12th, a decided decline in the pyrexia was established; the patient seemed rather more unconscious but was excessively restless. On January 14th it was noted that he had been sleeping better, having had three minims of tincture of opium nightly until the previous night, when he was very restless; he still cried in a peculiar manner, and the eyes "twitched" and "rolled" occasionally; the burn was progressing favourably. No very notable change in his condition occurred until after January 25th; on that day Mr. Beck, suspecting that the symptoms might be due to iodoform poisoning, replaced the iodo-vaseline as a dressing by boracic ointment. On the following day it was noted that the patient was rather more restless, and looked paler, but had ceased to cry in the peculiar way before noticed, and seemed slightly more conscious. On February 2nd the child was conscious of what was going on, and took notice of people around; the screaming had almost ceased. On February 17th, he was rational and quite restored to health; the granulating surface still remaining on the chest was rapidly contracting. He was discharged on February 28th.

CASE IV. Lumbar Abscess: Duration: Delirium Preceding; Irregular Pyrexia, Rapid Pulse, Stupor: Recovery. (Under the care of Mr. BECK.)—Charles M., aged 11, was admitted on January 10th, 1882. The patient had been the subject of caries of the dorso-lumbar spine for about five years; he was admitted for a large lumbar abscess, which seemed likely soon to give way. On January 21st, Mr. Beck made two openings, evacuated about half a pint of thin pus, removed much caseous matter, and scraped the wall of the abscess; the cavity was then well wiped out with a sponge filled with iodoform; drainage tubes were introduced, and the wounds dressed with the so-called iodised wool, which is merely cotton-wool through which iodoform has been evenly distributed. The operation was conducted under the spray. The temperature for the next two days did not rise above 99.2°. On January 24th, the temperature was 100°, and the urine (specific gravity 1037) was loaded with urates; but the tongue was clean, appetite good, and the patient made no complaint. The temperature fell 104° during the day, but he had a restless night; and the temperature rose during the two following days, reaching 104.6° at 11 A.M. On January 26th; the pulse was 138, and rather weak; the skin was hot and moist; the patient complained of vertical headache, of drowsiness, and of nausea; the bowels were regular, he took his food well, and there had been no vomiting; it was thought that the breath smelt of iodoform. The wounds were examined in the afternoon; the discharge, of which there was very little, was quite sweet, and contained no microorganisms; the wounds were thoroughly syringed out with carbolic acid lotion, and a good deal of iodoform thus washed away; carbolic gauze dressings were then applied. On the following morning (Jan. 27th), the patient seemed much better; he had slept well, headache was now very slight, the pulse was slower and fuller, and the tongue had cleared; the urine was still loaded with urates, but contained no albumen. He went

on well until February 1st, when he experienced some pain in the occipital and left lumbar regions; and the temperature rose to 103.8° , and the pulse to 120. On the following day, the temperature and pulse were still above the normal, and the patient was drowsy, and refused food. During the next few days, he gradually improved; the pulse and temperature being little removed from the normal on February 10th. After that date, he appeared to be in pretty good health for about a week; then he again became sleepy, the pulse became more frequent, but full and compressible, and the temperature rose to over 103° ; he complained of headache, nausea, and loss of appetite. After experiencing these symptoms for about thirty-six hours, he improved so much as to be able to eat well, the temperature fell to 101.2° , and he "seemed himself again"; this was on February 19th. On the evening of that day, the temperature rose to 105.6° , and a punctiform rash was found on the arms, knees, and dorsal surface of the feet; the tongue was furred in the centre, and the throat was a little sore. On February 20th, the rash was still to be seen in the same situations, but was very faint; the temperature had fallen to 99.4° ; and the boy seemed quite well.

REMARKS.—Iodoform has been so extensively used during the last year or two in this country, that the subject raised by the above cases has grown to have some importance. The drug itself is, chemically, closely analogous to chloroform: its formula is CHI_3 , and differs, therefore, from that of chloroform merely by the substitution of three atoms of iodine for three atoms of chlorine. In their physical properties, however, the two bodies differ widely; for iodoform is obtained as a yellow-coloured powder, which consists of small flattish crystals. When first introduced, the powder was rather coarse, the individual crystals being of considerable size. This was a disadvantage, inasmuch as these large crystals were very liable to irritate delicate parts; it can, however, be obtained in a fine powder either by pulverisation of the coarse powder, or by a slight alteration in the mode of manufacture. This so-called "precipitated iodoform" is a very fine smooth powder, and so unirritating that it can be dusted on to an inflamed conjunctiva with benefit (*vide* K. Grossman, in *Ophthalmic Review*, April 1882). When the drug was first introduced, about three or four years ago, to general notice, it was chiefly recommended as a local application in soft chancre, and for this purpose it was found highly efficacious. Its use gradually extended, until finally it came to be used in Germany as a substitute for the carbolic dressings of Lister, in all the major operations, in amputations, in excisions, and other operations on joints, and bones, in ovariectomy, in chronic abscess, and in many pharyngeal and uterine diseases. It was especially recommended in the treatment of strumous joint-disease. Gussenbauer maintained that the drug had some specific action on the tubercular process, and that the disease was less likely to recur under this mode of treatment. König, accepting the fact of less frequent recurrence, attributed it to rapid healing. It is difficult to understand how any opinion on this point can have yet been formed on sufficient grounds. In using iodoform in major operations, the method, though varied within certain limits, was in the main as follows. If a limb were the part operated on, it was first rendered anæmic by Esmarch's bandage; the necessary operation was performed usually under the carbolic spray, and the wound was then filled up with iodoform, or the drug was thickly powdered into or over it from a dredger; the external dressing was either of carbolic gauze, or of cotton-wool treated with iodoform in the manner described at page 550 of our present volume. In either case, the dressing was left undisturbed for a long time—a week, a fortnight, or, in some cases of joint-disease, a month. Leoschin has used this method in ovariectomy, sprinkling the drug over the exposed peritoneum, the pedicle, and the wound in the abdominal walls. It has also been made the basis of lotions, but it has not many solvents: ether dissolves about 10 per cent., alcohol about 4 per cent. As to its physiological properties, but little seems to have been known until recently. It has been lauded as a powerful antiseptic, but this has latterly been disputed by Kocher and others; it was generally supposed to produce no constitutional effects beyond, occasionally, a little drowsiness. This latter point has, during the last few months, excited much attention in Germany. Schede, Kocher, and others have published cases where severe and even fatal symptoms have been attributed to its use; and the cases which we here publish illustrate fairly well the complexus of symptoms which it is supposed to produce. As may be seen, it is not always quite clear what proportion of the symptoms is due to the drug, and what to the disease. Case I was, we believe, the first in which Mr. Beck, who has used the drug rather extensively, was led to suspect its toxic action; the most prominent symptoms in that case were slight nocturnal delirium, an unaccountable drowsiness, and progressive emaciation; the patient's life was despaired of when the substitution for the iodoform dressings of ordinary red lotion was followed, after a few days, by the disappearance of all the symptoms. In Case II, there is considerable doubt as to the correctness of

the diagnosis, which was only arrived at after death, still the nocturnal delirium, the rapid pulse, and high temperature continuing in spite of the steady improvement in the local condition, together with the absence of any morbid state likely to cause death, as shown by the necropsy, no doubt make it extremely probable. Case III is of great interest as an instance of a type of iodoform poisoning upon which Schede was, we believe, the first to insist. He said that the symptoms might closely simulate those of meningitis, and in this case it was at first supposed that that disease was actually present; withdrawal of the drug was almost immediately followed by the disappearance of the symptoms, and the patient was discharged a month later quite free from any disease, beyond the local results of the burn. It ought to be observed that Schede believes that the withdrawal of the drug is not always followed by this happy result, and that the cases sometimes terminate fatally; and that, further, iodoform administered by the mouth has recently been praised as a specific in tubercular meningitis. Case IV is extremely obscure, in parts it agrees fairly well with one of the classes under which the cases have been grouped. Four days after the first use of the drug, drowsiness, headache, and nausea came on coincidentally with a somewhat rapid rise in the pulse and temperature, and unaccompanied by any condition of the wound which could have produced pyrexia; after the removal of the drug the symptoms somewhat slowly disappeared. Owing to the fact that iodoform is a powder and is little soluble, considerable difficulty is experienced in removing it entirely from an abscess cavity, or a winding sinus; and, in spite of careful washing, enough of the drug to produce toxic symptoms may remain in contact with the tissues, in spite of all efforts to remove it.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 26TH, 1882.

J. LISTER, D.C.L., F.R.C.S., F.R.S., President, in the Chair.

Hyperpyrexia in Acute Rheumatism.—The report upon this subject by a Committee of the Society, appointed in October 1880, was presented; and an abstract report was read by the Secretary, Dr. Coupland. This abstract was published at page 807 of the *BRITISH MEDICAL JOURNAL* for June 3rd.

Cases of Rheumatic Fever treated with Iodide of Potassium and Sulphate of Quinine.—Dr. E. H. GREENHOW presented a paper on this subject. It comprised notes of forty-three cases of rheumatic fever which were under the author's care in Middlesex Hospital between the beginning of 1875 and the summer of 1876. Like the groups of cases treated with salicine and salicylate of soda communicated by him to the Society in 1880, they were all treated as nearly as possible in an identical manner, the medicines being administered in the same form in each of the cases. The iodide of potassium was prescribed in a simple solution containing five grains each of iodide of potassium and carbonate of ammonia, and the sulphate of quinine in that of pill consisting of two grains of sulphate of quinine and three of extract of henbane. In the reports of the cases they will be referred to as the treatment with "iodide of potassium and quinine." Further, all the patients were kept in bed and restricted to milk-diet and beef-tea until the pains and fever had entirely abated; the painful joints were closely enveloped in cotton-wool; and whenever any cardiac complication was present, a mixture of equal parts of extract of belladonna and ointment of iodide of potassium was applied over the præcordia. Sedatives, aperients, and stimulants were only administered when they appeared indispensable, and always as sparingly as possible. The cases varied greatly in character and intensity. Some of them were so mild that they would probably have recovered quite as quickly under confinement to bed and fever-diet, without any therapeutic treatment. On the other hand, other cases were really very acute. A comparison of the present series of cases with those previously communicated to the Society, demonstrated the fact well-known to hospital physicians, that rheumatic fever varied much in intensity and character at different periods, a fact which had probably sometimes led to an overestimate of the value of certain remedies in its treatment. In confirmation of this was the fact that not only did none of the cases included in this paper pass into a state of hyperpyrexia, or manifest any other symptom of cerebral rheumatism, but also that no case of rheumatic fever with hyperpyrexia came under the author's care during the eighteen months over which this series of cases extended. Again, pneumonia or pleuro-pneumonia only supervened in three cases whilst under treatment, and, including the one fatal case, existed on admission in only two cases. Twenty-six of the patients presented unequivocal evidence of the existence of either pericarditis or endo-

cases that had come under his notice, only three had occurred in females. This, he believed, was in accordance with general observation. Ichthyosis resembled some other disorders (such as pseudo-hypertrophic muscular paralysis, colour-blindness, the hæmorrhagic diathesis, etc.), in that, while it generally appeared in the sons, it descended through the daughters, of an affected family.

A Case of Lupus-Psoriasis.—Dr. STEPHEN MACKENZIE read notes of this case. The subject of the eruption was a lad, aged 15. There was no history elicited of struma, or of skin-diseases in his family. The disease began in his face three years ago, and was confined to this position until nine months before he came under observation. It then spread to the forearms, and gradually involved the upper arms, the trunk, and lower extremities. The patient was well nourished, free from any sign of glandular enlargement, or of disease of the viscera or bones. When he came under observation, his face presented the characteristic appearances of lupus vulgaris. In addition to this, however, on the upper part of the chest in front, between the shoulders, over the lower part of the back, and symmetrically distributed on the outer aspects of the arms and forearms, on both buttocks, thighs, and legs, were discs having depressed centres, and a few fine scales intermixed with dull red scars. The skin of the extremities of the fingers was red, rough, and cracked, and there were a few papules on the dorsa of the feet. The patient, under one-drachm doses of citrate of potash, and later, iodide of iron with arsenic, improved somewhat; but perionychitis became troublesome, and led to erysipelas of the right arm. The attack was severe, but the patient made a satisfactory recovery, and the eruption continued to improve. Later, when the treatment of the case concluded, a good deal of the active eruption had subsided from the trunk and extremities, leaving scars in the positions in which it had occurred. His general health was good. The points to which attention was directed were: that the eruption on the face was characteristically lupus; that the eruption on the trunk and extremities resembled psoriasis in its scaly appearance and symmetrical distribution, but, unlike psoriasis, and like lupus, it left scars. Hence the name "lupus-psoriasis" given to the conditions by Mr. Hutchinson, seemed appropriate in characterising its nature and distribution. The condition was a rare one, and, as far as the author was aware, was only described by Mr. Hutchinson. A sister of the patient, who had slight but well marked psoriasis, had since been seen. This brought the lupus element of the case into closer alliance with psoriasis as regarded its essential nature, as well as in its appearance.—Dr. CROCKER thought this form of lupus most rare, this being the only case which had come under his notice. He thought the name lupus-psoriasis not very happy; it would be well to characterise it as a form of psoriasis resembling lupus.—Dr. THIN asked if the case resembled lupus erythematosus, and how the two affections might be distinguished from one another.—Dr. MACKENZIE replied that the term lupus-psoriasis or psoriasis-lupus was immaterial, the alliance between the two diseases being often much more intimate than Dr. Crocker seemed to think. He had, since writing his paper, ascertained that a sister of the patient had suffered from lupus; and he believed the disease was a hybrid between lupus and psoriasis. It left scars. The case in many particulars resembled lupus erythematosus.

A Case of Double Hæmorrhagic Pleurisy with Formation of Cholesteroline.—Dr. CHURTON (Leeds) communicated the sequel to this case, particulars of which were read to the Society in November. The patient was then recovering from an empyema on the right side, and the left pleura seemed free from fluid, although dulness and absence of breath-sounds persisted in the lower axilla. Fluid now collected, the temperature remained high, and he lost flesh. A few days after his return from Scarborough (November 25th), aspiration of the left chest evacuated some pus, and on December 8th a free incision was made, the right empyema having healed. Much pus containing cholesteroline was evacuated, but the subsequent discharge was scanty and offensive. Signs of septicæmia set in, and he died rather suddenly on the sixth day after the operation. At the necropsy, a thick layer of old degenerated cells and lymph containing cholesteroline was found in the floor of the left pleura, but there was no fluid pus. A few small nodules occurred at the apex of the lung, which was considerably compressed. The origin of the cholesteroline was explained by the fatty degeneration of those cells accumulated in former attacks of pleurisy. No such deposit of cells was found on the right side, where the lung was universally adherent. A few small nodules also occurred in the apex of this lung, but no miliary tubercle—the case thus disproving Fraentzel's assertion that double hæmorrhagic pleurisy was almost certainly of tubercular origin. In the anterior margin of the liver was a caseous mass, of the size of a marble; otherwise the organs were quite healthy.—The PRESIDENT regretted that Dr. Churton was absent; he would have been glad to know whether the absence of the spray was the only

point in which the antiseptic treatment was defective. Was the skin purified before the operation? Were the sponges clean? and had the dressing of the wound the proper antiseptic characters?

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JUNE 8TH, 1882.

W. BOWMAN, F.R.C.S., F.R.S., President, in the Chair.

DISCUSSION ON SCLEROTOMY.

THE discussion was opened by the reading of several papers. The first of these was by Mr. CHARLES HIGGINS, who had commenced to perform sclerotomy some years before the cases forming the subject of the paper were operated on. At that time, he was compelled to abandon the operation, owing to the frequency with which it was followed by sympathetic ophthalmia. He had recently resumed the practice of the operation, but had adopted a different method of operating, and now had fairly satisfactory results. The paper contained notes of eighteen cases, in three of which both eyes were operated on, making a total of twenty-one eyes. A printed table, showing the result of the several cases as far as they were known, accompanied the paper. In conclusion, he suggested that the operation should be done in all cases of simple glaucoma, in cases where the pupil was widely dilated, or the iris had undergone changes rendering iridectomy difficult or impossible. Since writing his paper, two of the cases had returned; and in one it had been necessary to perform iridectomy, and in the other the eye had to be excised.

Mr. SPENCER WATSON also contributed a paper. In performing the operation, he made use of the first incision for iridectomy, as modified by Mr. Bowman; the section being made by puncture and counterpuncture. Eserine was used before and after the operation. A cystoid cicatrix formed in the scar, and appeared to be essential as a means of permanent drainage. Sclerotomy was preferable to iridectomy in all cases of eyeball-tension, in which the pupil responded to myotics. It was useful in subacute, acute, and perhaps in chronic cases. Whenever there was a tendency to intra-ocular hæmorrhage, as evidenced by ophthalmoscopic examination, sclerotomy was to be preferred; nor whenever the iris was much atrophied. It was not suitable for cases of "glaucoma fulminans", nor for any cases of eyeball-tension in which there was reason to suspect iritic adhesions, or adhesion of the periphery of the iris to the cornea. Several cases were adduced, in which the results of sclerotomy three, four, and five years after the operation had been noted as satisfactory; and a case of hydrophthalmus in a child of a year old was related, in which sclerotomy and Argyll Robertson's operation had been attended with success in reducing tension. Some cases of failure were also related; the failures being attributed rather to the severity of the cases, and to previous neglect, than to any inherent defect in sclerotomy as a remedy.

Mr. J. B. STORY (Dublin) read a paper, in which he stated that he had examined the notes of thirty-four cases which had been operated on at St. Mark's Hospital. Of the cases where, before the operation, sight was entirely destroyed, in one pain was relieved, while in one the result was unfavourable. In eighteen cases the sight still remained to a varying degree when the operation was performed; in eleven eyes, where the power of counting fingers remained, there was in all an immediate improvement, but in only one was it known to have been permanent. Of four cases where mere perception of light remained, one was benefited permanently, and the other two remained in the same state as before the operation. In six cases of chronic inflammatory glaucoma, one was, two years and a half later, greatly improved; in the other five, there was temporary improvement only. The second eye of the patient who was, as above said, greatly benefited was also operated on, but without any benefit. Three eyes suffering from traumatic glaucoma were operated on. In one, the case was believed to be permanent, in one no benefit was received, and in the third case the result was unknown. Sclerotomy had also been performed on both eyes of a child, aged five months, suffering from hydrophthalmus; the result was believed to have been unfavourable. He was anxious to obtain an explanation of a phenomenon he had observed; namely, that in cases where the pupil was under eserine when the aqueous humour escaped, the pupil dilated; ordinarily, when the aqueous humour escaped, the pupil contracted. He was inclined to attribute it to the elasticity of the iris-tissue. He performed sclerotomy by making a puncture and counterpuncture, and leaving a bridge of sclerotic undivided.

Mr. BÄDER contended that the object of the operation was to establish a permanent communication between the aqueous chambers and the subconjunctival space. In his operation, the scleral incision included not less than one-fifth of the corneo-scleral circumference, and no scleral bridge was left. The aqueous humour and iris prolapsed

through the wound, and gave rise to staphyloma. The after-treatment should tend to encourage the persistence of the staphyloma. In reply to the President, Mr. Bader said that, for the last seven years, he had entirely abandoned iridectomy in glaucoma, in favour of sclerotomy. In reply to Mr. Power, he added that he had never met with a case of sympathetic ophthalmia as a consequence of the operation.

A paper by Mr. SWANZY (Dublin) was read by the Secretary. The author had performed sclerotomy for glaucoma ten times. Of these, two were unsuccessful, one being a case of hæmorrhagic glaucoma; the other a case of chronic simple glaucoma, where the operation was followed by iritis, owing, he believed, to the use of too much eserine. One case of subacute glaucoma was cured by sclerotomy. Three eyes, in which Mr. Swanzy performed sclerotomy for chronic simple glaucoma, early in October 1879, were examined by him on June 6th, and the tension in all three was found to be still normal, and the vision such as to enable the patients to engage, the one in the practice of his profession as a medical man, the other in his business as a market gardener. The other cases were also instances of chronic simple glaucoma, and, so long as the patients remained under observation, the results of the operations were maintained. Mr. Swanzy had met with prolapse of the iris in two cases only, and in each of these the pupil had not been brought to a maximum of myosis by means of eserine. Extreme myosis Mr. Swanzy believed to be the only certain safeguard against prolapse, and would not perform sclerotomy on an eye in which the pupil was not fully contracted. The operation was performed in the way described by De Wecker.

Mr. NETTLESHIP had performed sclerotomy twenty-three times, using eserine before and after the operation. In several cases, iridectomy had been done once or more before sclerotomy. In all, the disease was advanced, and either quite chronic or subacute. The last eight operations had been performed within three or four months from the present date; and the final result had, therefore, not been reached. In the fifteen earlier cases, normal tension was permanently restored and the disease arrested in six, and in all of these the scar was distinctly bulging and dusky ("cystoid"); in the remaining nine, the result was indefinite in some, and decidedly unfavourable in others. (The details of these cases were appended to the paper, but not read.) In all cases, whether successful or not, the degree of bulging of the wound and prolapse of iris were in direct proportion to the increase of tension. The author considered sclerotomy indicated (1) instead of a second iridectomy when a first iridectomy had failed, (2) in all advanced cases where the angle of the anterior chamber was probably permanently closed, (3) in simple chronic glaucoma with good anterior chamber and healthy iris; and contraindicated when the anterior chamber was very shallow, even though the iris were healthy and pupil active. He thought it very important to make the incision as far back as possible.

THE PRESIDENT observed that the subject which these papers raised was extremely important. Iridectomy was, he believed, the most valuable means which the surgeon possessed of dealing with most cases of glaucoma; it was not, however, applicable to all cases, and this discussion would render great service if it could bring out clearly the cases in which sclerotomy could supply its place. The use of eserine was an important advance in our knowledge, and would, he believed, never be discarded, whatever might be the fate of iridectomy or sclerotomy. One point to be discussed was, the form of sclerotomy to be advocated in the various cases, where iridectomy could not be hopefully performed; and another point was as to the forms and stages of glaucoma in which sclerotomy was the better operation. The subject was one of great difficulty, not only from the complexity of the anatomical structures involved, but also from our ignorance, in spite of all that had been done, of the causation of glaucoma, and of the causes of the iridectomy which so frequently occurred. For himself, he confessed that he had, in many cases, when asked to perform the operation, felt great anxiety in understanding their origin, and still kept his mind open, hoping for clearer knowledge.

Mr. CRITCHETT said that, speaking from his own experience, and after listening with attention to all that had been advanced, he still felt his confidence in iridectomy unshaken; he entirely opposed those who would replace it by sclerotomy. In most cases of glaucoma, iridectomy did all that sclerotomy could do; it was more reliable, and its results more lasting. But there were certain classes of cases where iridectomy was contraindicated. 1. In cases where the disease was comparatively acute, rising from irritation of the iris and other intra-ocular structures, the difficulty and dangers of iridectomy were such, that it would be prudent to perform sclerotomy, at any rate as a preliminary operation. 2. In some chronic glaucoma, sclerotomy might partly, if not wholly, remove the cause of the disease, and be very hopeful. 3. In certain rare cases, which the speaker called "simple

simple glaucoma", in which the disease commenced with sudden attacks of dimness, or even loss of vision, lasting for about ten minutes, and recurring once or twice in the twenty-four hours, tension being very great, and the pupil fixed, but there being no pain, and no "inflammatory" symptoms, iridectomy gave very bad results, and it might be wise to try sclerotomy. 4. In glaucoma following cataract-extraction, he thought, from personal experience, that sclerotomy was of more value than iridectomy; in none of these cases in which he had yet tried it had it failed him. In operating, he followed the method of De Wecker. He protested against a complete section, which inevitably led to bulging of the ciliary body, and must result in keeping up a protracted irritation, and so conduce to the occurrence of sympathetic ophthalmia. In response to a call from the President, Mr. TEALE (Leeds) said that he had never performed sclerotomy. The remarks made by Mr. CRITCHETT seemed to him to put the bearings of the subject in a tangible form. In traumatic glaucoma, after extraction of cataract, he had for many years done an operation suggested by the President. With a small knife, he punctured the cornea, and pushed on through the posterior capsule into the vitreous body; in two cases, this had been most successful. He could remember the time when iridectomy was a new operation, and was fiercely opposed; but it seemed to him that the general success of iridectomy, at that time, was far greater than was now the case with sclerotomy. Mr. GEORGE LAWSON thought that sclerotomy was distinctly contraindicated in certain cases—in hydrophthalmus, for instance (where he had had subsequently to excise the eye), and in acute glaucoma. But, after cataract operations, sclerotomy gave excellent results; and did good also in hæmorrhagic glaucoma, and in cases of increased tension in the later stages of sympathetic ophthalmia. In these it relieved the tension and pain, even if it did not improve the sight, whereas iridectomy did no good. In operating, he was careful to avoid prolapse, and regarded entanglement of the iris as a dangerous event. Mr. PRICHARD (Clifton) said that, in the cases where iridectomy could not be done, he had been in the habit of making a vertical section through the corneo-sclerotic junction with a fine knife. If a prolapse of the iris occurred, he regarded it as rather a good thing, since the cicatrix was then less firm and regular. He had watched cases where, at each subsequent rise of tension, leakage had occurred through this scar.

Clinical Specimens:

Mr. Vose Solomon: 1. Myoma of Ciliary Muscle; 2. Melano-Sarcoma of Iris: with microscopical sections of both specimens.

Dr. Brailey and Mr. Hartridge: Microscopical Sections of Sclerotomy Scars.

Mr. Nettleship: Microscopical Sections of Sclerotomy Scars.

Patients who had been subjected to sclerotomy were shown by Mr. J. E. Adams and Mr. Bader.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS IN IRELAND.

WEDNESDAY, MAY 31st, 1882.

J. W. MOORE, M.D., Vice-President, in the Chair.

Case of Enteric Fever.—Brigade-Surgeon J. E. MOORE, R.B., reported the details of the case of Private D. S., 2nd Battalion Royal West Kent Regiment, who was admitted on March 10th, 1882, to the Royal Infirmary, Phoenix Park, Dublin, direct from the transport which brought the regiment from South Africa. He was admitted for abscesses about the toes. There had been a good deal of enteric fever among the troops in Natal, from which station the regiment returned home. On April 6th, while in hospital, Private D. S. had a shivering fit, followed by hot and sweating stages. On the evening of the 21st, he became comatose, and died at 5.20 P.M. From the state of the ulcers in the ileum, there was every reason to believe the disease existed for some weeks before his admission to hospital for another affection. The chief reason for diagnosing the disease as enteric fever was the range of temperature, which was less modified by the malarial influence than in most cases of fever in men subjected to the taint. In place of the diarrhoea frequently met with, there was constant constipation, although, in the post-mortem examination, the small intestine contained fluid faeces of the appearance usual in enteric fever. Extreme nervous depression was another marked symptom. From the first, the man insisted that he would die. The absence of abdominal tenderness and of tympanites was also a source of difficulty in defining the fever; in fact, there was more reason to expect notable lesion in the nervous centres than in the intestines. The tongue for some days of his illness had the whitish thick fur often found in remittent fever. Dr. J. W. MOORE said the lesions in the case were certainly those of

typhoid fever. It was interesting to observe that the glands of the colon were affected, as well as those of the ileum. Cases of typhoid fever, which were characterised by constipation from the beginning to the end, were not at all unlikely to terminate, as this did, with destructive ulceration of the intestine and perforation leading to peritonitis.—Dr. CHARLES F. MOORE asked whether there was any information as to the sanitary condition of the troop-ship.—Brigade-Surgeon JACKSON said the deceased came in one of Donald Currie's vessels, the *British Castle*. He unquestionably brought the disease from Africa with him.

Three Cases of Eczema, both Fatal.—Dr. HENRY KENNEDY detailed the case of an infant, who was born at full term, was one of a large family of brothers and sisters, all of whom were healthy. He was described as being a plump fat child, but with a shade of paleness in his face, which was out of keeping with the rest of his appearance. He was nursed by his mother, a healthy woman, and seemed in every way healthy till the seventh month, when signs of irritation began about both ears. In a fortnight, this had developed into a rash, which was pronounced by the late Dr. Jacob of Maryborough to be eczema. From the very outset, the irritation was a very marked symptom. Even now, when the disease was local, the itching was very troublesome. By degrees, the rash spread over the head, and then the face was involved; here it assumed the form of "crusta lactea". Then the neck, body, and extremities exhibited the disease; so that finally no part of the body was free from it. After seven months' suffering, the child died. The second patient was a female, 67 years of age—one of two sisters who had seen better days, but were now in very reduced circumstances; they occupied one room. The patient, when Dr. Kennedy first saw her, had been about two years ill, and presented an unusually well-marked example of eczema. She was affected from the crown of her head to the sole of her foot, and the entire surface was of a reddish colour; but some parts were redder than others. Her great suffering was from the itching, which broke her rest much; and it was about the elbows and knees she suffered most, more particularly the latter. Dysphagia gradually came on, and the patient sank from exhaustion in about two months. Dr. Kennedy held with those who looked on eczema as being essentially a constitutional affection, and not merely a local disease. In many cases, the disease must be treated cautiously, lest serious consequences might ensue, were the skin-affection cured too quickly. The puckering of the skin observed in many cases was probably caused by prolonged inflammatory action. Of the close connection between the gouty poison and eczema, there could be no doubt. Two sequelæ of the disease, which Dr. Kennedy had particularly noticed, were pemphigus and hemorrhage, most generally from the nose. Itching, which was often a most troublesome symptom, was frequently relieved by wet heat—warm water applied as a fomentation, or used as a bath.—Dr. QUINLAN said that eczema was a distinctly constitutional disease. Within the last few months, he saw a patient who was threatened with apoplexy, and at the same time suffered from eczema; at the moment the eczema got better he was attacked with aphasia. He had recently seen a severe case of this disease, in which itching was a most troublesome symptom. He (Dr. Quinlan) tried every remedy, including hydrocyanic acid, calomel powder, and hypodermic injections; but the only thing that relieved the patient was the warm bath.—Dr. BEATTY asked, could the disease in any of the cases have been pityriasis rubra?—Dr. CAMERON said a preparation which in a great many instances had mitigated, and in some had removed the itching, was sweet milk combined with liquor plumbi subacetatis—one ounce of the solution to four ounces of milk. Milk thus combined with sugar of lead would keep perfectly sweet for two or three years. He agreed with what Drs. Kennedy and Quinlan had stated as to the comfort given by warm water.—Dr. C. F. MOORE remarked that, in cases of derangement of the liver, which occurred in India, eczema was not uncommon; and mercurial applications had been found to relieve the itching. He had known itching to be produced by worms in the alimentary canal; in such cases, the itching ceased when the worms were removed.—Mr. DOYLE had seen cases of eczema which were local, the disease having been caused by friction of the saddle in riding. Cavalry soldiers were liable to it. He had also known local eczema to result from varicose veins. First, there was congestion; and that was followed by an eczematous condition, and afterwards ulceration. As a constitutional disease, he had met it in both the scrofulous and the gouty diathesis.—Dr. J. W. MOORE said one of the most important points in connection with the cases brought forward by Dr. Kennedy was, that both the patients died. In England, in 1879, 308 deaths were attributed to eczema, the total deaths registered in that country during the year having been 271,496. In the cases reported by Dr. Kennedy, he thought the causes of death were pretty evident. In the cases of the infant, the loss of rest at night alone would have been sufficient to cause

death. In the other patient, loss of rest would also have been an important factor in bringing about a fatal result; besides, there was the asthenia caused by the dysphagia. As to the swelling in the case of the infant, it was probably due to inflammatory thickening of the tissues. Eczema was a constitutional disease in many cases, but he agreed with Dr. Doyle that local eczema might occur as the result of irritation, and this was more amenable to treatment than the constitutional affection. The symptom of wetness was not always present in eczema. Salicylic acid prepared as an ointment with vaseline, in the proportion of 20 to 30 grains in the ounce, and applied locally, had been found of great use. The occurrence of eczema in individuals of a gouty tendency might be explained by the irritation of the skin by uric acid and its salts escaping in the perspiration.—Dr. KENNEDY replied.

The Therapeutic Properties of Quinine Iodate and Bromate.—Dr. CHARLES A. CAMERON read a paper on the therapeutical and physiological properties of these new salts, which he had recently had prepared and introduced to the notice of the medical profession. He pointed out that the researches of Arthur Gamgee, Priestley, and Larmuth had shown that the three forms of phosphoric acid and of vanadic acid had very different degrees of physiological activity. The salts of orthophosphoric acid were almost inert when their bases were inactive, whilst the pyrophosphates and metaphosphates were poisonous. The orthovanadic acid was poisonous, but pyrovanadic acid and metavanadic acid were still more poisonous. The high physiological activity of the pyrophosphates and metaphosphates had been attributed to the unsaturated condition of their nuclei; these salts were not statical, for they could take up additional basic material. Further, when superoxygenated compounds were introduced into the system, it might be expected that their oxygen, being loosely combined, would unite readily with elements of the blood. Dr. Cameron believed that the chlorates, bromates, and iodates were more active physiological agents than the corresponding chlorides, bromides, and iodides. Chlorate of sodium was more powerful than chloride of sodium or common salt. It might be inferred from analogy that iodate of potassium was a more active physiological agent than iodide of potassium. Some years ago Dr. Cameron suggested the use of ferric iodate as a substitute for the unstable ferrous iodide, and more than a year ago he had prepared an iodate of quinine in combination with an effervescing mixture. Each drachm of the effervescing iodate of quinine contained two grains, or one dose, of the iodate. It had been found very useful in the treatment of neuralgia, severe articular pains which had resisted the employment of the usual remedies, sluggish forms of pulmonary congestion, secondary syphilitic disease, and malarial enlargement of the spleen. Bromate of quinine might be prepared by precipitating barium iodate by sulphate of quinine, or by neutralising quinine with bromic acid. It occurred when air-dried in small asbestos-like masses, which under the microscope were seen to consist of very long needles.—Dr. H. COLPOYS TWEEDY had seen good results from iodate of quinine in pulmonary congestion.—Brigade-Surgeon JACKSON asked what was the relative expense of these new preparations compared with sulphate of quinine, with the action of which in intermittent fever he was much disappointed.—Dr. QUINLAN considered that the useful feature of the iodate of quinine consisted in the fact that its acid easily separated from it, thus leaving it circulating in the blood in a basic form.—Mr. KNOTT had no doubt that the large proportion of easily dissociated oxygen present in both the iodate and the bromate of quinine would add materially to the physiological activity of these drugs. He should not be surprised to hear of the bromate of quinine proving a specific in some forms of neuralgia, as the sedative effects of the bromine would be added to the usual action of quinine. The forms of neuralgia in which the latter drug had given best results were those in which evidence existed of malarious or rheumatic influence. In both these cases there was a marked determination of blood to the part, and the periodic dilatation of the blood-vessels which occurred in the former variety—every pulsation of which was conveyed to the over-sensitive nerves which accompanied them—was well known. He believed that there was sufficient evidence in favour of the idea that the more prominent physiological effects of quinine were essentially due to diminution of the systemic oxidation, which took place under the influence of this drug. It had also been observed to diminish the metamorphosis and elimination of nitrogenous compounds, especially uric acid. The excess of oxygen in the newly described salts would probably act as a beneficial corrective. The capillary contraction which followed the ingestion of quinine promoted the same result as that now described.—Dr. CAMERON, in reply, said the great point he had endeavoured to establish was that the addition of oxygen to the iodine compounds, instead of diminishing, increased their activity.

The Society then adjourned till next session.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MAY 19TH, 1882.

J. W. TRIPE, M.D., President, in the Chair.

Letters were read from Dr. Farquharson, M.P., and Mr. Hastings, M.P. The latter stated that it was his intention, on the Bill for the Notification of Infectious Diseases going into Committee, to strike out the clause which makes it doubtful whether the metropolis is included in the measure. A letter was received from Mr. Noel A. Humphreys, enclosing a copy of the tables of causes of death in England and Wales, about to appear in the Registrar-General's annual reports.

On the Administration of the Public Health Acts in Rural Districts.

—Dr. ARMISTEAD read a paper on this subject. He stated that the present administrative bodies and their officers were created by the Act of 1872, and no change was made in the 1875 Act, notwithstanding the wise counsels of those experienced in the working of the 1872 Act, and the strong recommendations from the Joint Committee of the British Medical and Social Science Associations. He mentioned the difficulties against which medical officers of health had to contend in the performance of their duties, and insecurity in the tenure of their office, which had been pointed out to the Local Government Board in August last by a deputation from this Society and the British Medical Association jointly, which, so far as he was concerned, had already resulted in the fixity of tenure of office in five out of six of his districts; but the appointments were now separated, and the combination had now been broken up. He produced a map showing the haphazard way in which the appointments of medical officers of health had been made throughout England, and the salaries paid in each case. About one-half of the rural districts had appointed a resident medical practitioner as medical officer of health; one-fourth had formed combinations of various sizes; and the other fourth had appointed an average of three officers each, some of whom were paid wages at a less rate than common scavengers, and were expected to perform the whole of the duties for two or three shillings a week, and make a report to the Local Government Board once a year. For nearly ten years, the working of the different systems had been carefully watched; and the only conclusion possible was, that medical officers of health could seldom perform their duties satisfactorily, unless they were compelled to devote the whole of their time to them. In order to do this, the Local Government Board might with advantage exercise more frequently than they had done their powers, and compel contiguous authorities in the same county to combine, and appoint the same medical officer of health. The improvement of cottage accommodation in rural districts had never yet been fairly undertaken; and it was doubtful whether sanitary authorities, without State aid, could do more than temporise with the matter; but perhaps, if county Government Boards were ever formed, they might exercise control over these larger sanitary questions in their respective counties. He then referred to the failure of the Public Health (Water) Act, in consequence of the decision of the Local Government Board's legal advisers, which practically limits the powers of the Act to those places where a sufficient supply could be obtained at a cost not exceeding £8 13s. 4d. Notwithstanding defects in administration, an enormous number of filth nuisances had been abated, and there had been a proportionate reduction in the mortality from filth-diseases, especially from fevers, the death-rate from which had been reduced from .9 per 1,000 to .5 in the last decade, and about .3 in the last two years. What had been done was not a tithe of what might be done. Improved drainage for the labouring poor, and the abatement of overcrowding, would do much to prevent some of the 50,000 deaths which occurred every year from consumption. A more complete system of registration of infectious diseases, and the provision of hospital accommodation for the isolation of the cases in every district, would be followed by a reduction in the mortality from infectious diseases, especially scarlet fever, which alone has killed about 20,000 of the country population. At the present time, we cannot boast of much progress in these matters. It is no reason why these diseases should not be abated, that the number of filth nuisances is still so great. In conclusion, he gave it as his opinion that the tenure of office should be made permanent; that the powers of other large areas of administration should be enlarged; and that the Act of 1872 should be entirely repealed, and with it the restrictions of private practice. In the discussion which followed, Dr. F. A. SOUTHAM, Dr. CHIL, Dr. CORNER, and Dr. TRIPE took part.

Dr. F. A. SOUTHAM, Mr. CHARLES WATSON read a paper on the establishment of a hospital at Nice for the reception of cases of consumption, fever, and other diseases, with a view to the isolation of the patients. He said that there was a great want of room and of opportunity for the isolation of cases of infectious diseases occurring in hotels. The hotel-keepers refused to accept any fever patient at the hotel, and great difficulty was being met in finding accommodation elsewhere. At the

instigation, the Medical Society of Nice and the syndicate of hotel-proprietors adopted the proposal to erect a hospital. The cost would be borne by private subscriptions, and it was determined to ask each visitor to contribute one franc to the institution, and thus the sum of £2,000 annually would be realised. It is proposed that each patient shall have a separate room, and shall be attended by his own medical attendant and a separate nurse, and he may also have one member of his family with him. The management would be vested in a committee formed of two members of the municipality, in addition to the mayor and prefect. The hospital should consist of a basement, a ground-floor, and a first floor; it should have two wings and a central block for administration, from which the wings are to be separated by a court or garden, and with which they communicate by a corridor. All the rooms should face south, and each room would have a cubical capacity of 2,200 feet. The kitchen and cellars should occupy the basement. Dr. West, in conclusion, pointed out that if the Society would express its approval of the scheme, it would have an useful effect in urging on the authorities in Nice the better provision for infectious cases.—In the discussion which followed, Dr. Tripe, Mr. Shirley Murphy, Dr. Corner, and Dr. Thomas took part.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MAY 3rd, 1882.

EDWARD LUND, F.R.C.S., President, in the Chair.

Fatal Palsy from a Fall.—Dr. WAHLTUCH showed a patient, aged 19, who, when five years old, fell down a flight of stairs and had been ill since. The face became distorted; it was drawn to the right, and the nostrils became obstructed; the patient heard well. The treatment consisted of oxide of silver in pills, and the continuous current applied locally, and he had considerably improved.

Paralysis of Left Ulnar Nerve caused by Cold.—Dr. WAHLTUCH also described the case of S. M., aged 52, married, a charwoman, who, twelve months ago, whilst cleaning wet flags, suddenly noticed that the last two fingers of the left hand, which rested flat on the flags, lost power of contraction. This condition was stationary; there were trophic changes in the interossei and lumbricales muscles, also in the nails of the affected fingers; she felt a sensation of heat along the whole left upper extremity. Faradisation had no effect; the continuous current a very slight one. The patient was exhibited.

Laryngeal Paralysis caused by Mental Shock.—Dr. WAHLTUCH also showed to the meeting M. W., aged 60, a bootmaker, who received, three years ago, the news of the sudden death of a son in India, and immediately was affected by the mental shock. He began to stammer; the tongue seemed heavy and thick; he gradually lost the power of speech, and deglutition became difficult. The tongue lay at the floor of the mouth; he could neither raise it to the palate nor put it out. A year ago the right hand became affected, and there was now a permanent contraction of the flexor digitorum communis, and a swelling of the right wrist. There was a general waste of muscular tissue. Digestion was fair; intelligence perfect.

Aneurysm.—Mr. WRIGHT showed a girl four years and a half old. At three months old she was noticed to have enlarged veins on the right side of the face. This gradually increased and the eyeball became prominent. She was now the subject of great enlargement of blood-vessels in the temporal and orbital regions of the right side. The vessels were dilated, tortuous, pulsating, and apparently filled with venous blood. There was exophthalmos, with a downward projection of the right eyeball. A systolic bruit, together with a continuous venous hum, was audible over the dilated vessels, over the whole of the vault of the skull, and on both sides of the neck. Pressure on the right carotid had no effect upon the pulsation, etc. The child's mental powers were failing, and the sight of the right eye was thought to be deficient, though the ophthalmoscope showed no change. The condition appeared to be one of that form of aneurysm by anastomosis, where there is a continuous dilatation of the capillaries and veins by extension from the arteries.

Amputation.—Mr. WRIGHT showed two cases of Stokes's amputation, in patients who had useless limbs from old infantile paralysis. The cases illustrated the advantages of the operation as regards capacity of the stump to bear pressure, protection of the cicatrix, convenient length and mobility, etc.

Examination of Stomach.—Mr. F. A. SOUTHAM mentioned a case of cancer of the stomach in which examination of the pylorus had been performed, and showed the specimen. Particulars of the case will be published.

By the kindness of the President, who acted as demonstrator, a special meeting was held on the 16th of May at which Mr. Warren, the American contortionist, exhibited his extraordinary muscular developments and voluntary dislocations.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

J. DRESCHFELD, M.D., President, in the Chair.

Phlegmonous Gastritis.—The PRESIDENT showed sections of the stomach taken from the subject of this condition, a lady aged 28. She was apparently in good health up to a week before her death; she then suffered from abdominal pain, anorexia, and general *malaise*; her temperature went up to 102 Fahr. Physical examination revealed great dilatation of the stomach, with slight abdominal tenderness and some distension. These symptoms continued for three days, and were then succeeded by distinct amelioration. Acute peritonitis, however, suddenly supervened, to which the patient succumbed. *Post mortem* examination showed evidences of recent peritonitis, most marked in the region of the stomach, which was considerably dilated, and united to the liver by fresh adhesions. There was also a quantity of lymph in the pelvis, and recent adhesions were observed round both ovaries. The uterus contained recent blood-clot—"menstruation had just ceased when the illness commenced." The walls of the stomach, at the pyloric extremity, were uniformly thickened; the increase, which at one part reached half an inch in thickness, gradually diminished towards the cardiac extremity of the viscus. On section, the thickening was seen to be due to an infiltration of pus, which indeed exuded freely from the cut surface when pressure was used. Microscopic examination showed the serous and mucous surfaces to be intact, whilst the sub-mucous and muscular tissues were separated by, and infiltrated with, masses of leucocytes.

Porencephalus.—Dr. ROSS showed the brain and sections of the spinal cord from a child, aged 3 years, who during life suffered from partial paralysis, with contractures of all the extremities, the muscles of the neck being also implicated. The child had likewise an affection of speech, but it was difficult to ascertain whether it was aphasia or anarthria. The symptoms dated from birth. A defect was found in each cerebral hemisphere, occupying the position of the sulcus of Rolando, and communicating with the lateral ventricle. The central convolutions appeared to be absent in both hemispheres. The anterior pyramids of the medulla oblongata and the lateral columns of the cord (pyramidal tracts) were relatively small, but there was no sclerosis of them.

Epithelioma of Conjunctiva.—Dr. A. H. GRIFFITH showed sections a tumour from a man aged 45 years. The new growth, which was attached to the lower third of the cornea and adjoining part of the ocular conjunctiva and sclera, was of three years' duration. Enucleation was performed by Dr. Little. Microscopically, the tumour showed all the characters of an epithelioma.

Sections of Eyeballs.—Dr. GRIFFITH showed, also, sections of the eyeballs from two cases of glioma of the retina, and from a case of tubercle of the choroid.

Epithelioma of Pharynx.—Mr. JONES showed sections, and preparation, of a case of epithelioma of the pharynx.

Micro-organisms in Osteomyelitis.—Mr. E. H. HOWLETT showed specimens of micro-organisms in the liver, spleen, and kidneys, from a case of osteomyelitis.

Melanotic Alveolar Sarcoma.—Mr. A. H. YOUNG showed sections of a sarcomatous tumour recently removed from the back of a man, which presented a well defined alveolar structure, and was deeply pigmented. Sections of an enlarged axillary gland, which was removed at a subsequent period, showed similar characters, but pigmentation was much less marked.

Lupus of Vagina.—Mr. YOUNG also showed sections of a growth removed by Mr. Southam from the vagina of a woman aged about 35 years. Microscopically, it showed the ordinary appearances of lupoid new formation and ulceration.

REVIEWS AND NOTICES.

CHRONIC BRONCHITIS; ITS FORMS AND TREATMENT. By J. MILNER FOTHERGILL, M.D. Edin., M.R.C.P., Senior Assistant Physician to the City of London Hospital for Diseases of the Chest. London: Baillière, Tindall and Cox. 1882.

WRITTEN for the benefit of "practitioners, and especially those who are commencing practice," this book deals, in good plain English, with those features of chronic bronchitis which have a direct bearing upon the practical recognition and treatment of the disease, rather than with the more purely scientific features which might tend to increase our knowledge of its etiology and pathology, and of its relations with other forms of disease.

In dealing with the practical side of his subject, Dr. Fothergill

speaks clearly and confidently, and much of his work bears the stamp of originality of observation; but, in approaching the theoretical and scientific aspects, he prefers to speak through the writings of others. This method of teaching, though presenting many advantages to the writer, can never be of the same value or interest to the reader as would be a careful summary of the numerous extracts from text-books and treatises, which, in the book before us, serve rather to confuse than to assist the average reader.

In the introductory chapter is given an excellent description of the ordinary life and habits of the sufferer from chronic bronchitis, as he may be seen in the northern counties of England. Almost every point characteristic of the disease here finds illustration, and the chapter will repay perusal with more than ordinary attention.

In the discussion of the signs and symptoms produced by chronic bronchitis, special attention is directed to the ratio between pulse and respiration. When the normal proportion of four to one is disturbed, the fact is regarded as significant of mischief, either cardiac or pulmonary. "If the pulse mount over the respiration, dilatation of the heart-walls, or mitral disease, or not uncommonly both, are present." The relation of the character of the pulse to that of the heart's impulse and the heart's sounds is considered at some length, and the importance of the indications afforded by it is insisted on.

The concurrence of a strong impulse, or of vigorous sounds, with a small and compressible pulse, signifies an enlarged right ventricle, and thus forms an indication for treatment.

The effects upon the various organs of the impaired pulmonary circulation, and consequent venous congestion, are duly considered, special attention being drawn to the disturbance of intellectual vigour induced thereby.

The chapter on the pathology of the disease consists, for the most part, of extracts from various well known pathological text-books, and from it the reader may extract, if he please, all that is well ascertained with respect to the subject.

The clinical aspects of various forms of chronic bronchitis are next discussed; and the dry, asthmatic, catarrhal, gouty, and other varieties are successively passed in review, and the relation between the clinical indications and the pathological conditions carefully noted. The course of catarrhal bronchitis will be modified according to the degree in which the structures lying outside the bronchial tubes themselves are affected; and, of these modifications, he classes the cirrhotic, emphysematous, degenerative, and mitral as the most important. The titles given to these varieties thus speak for themselves; and, in the chapter devoted to them, will be found a collection of the chief clinical and pathological facts which distinguish them, many of which will be familiar to the readers of the works which Dr. Fothergill quotes, and serve to illustrate his conclusion that "the precise relations of morbid changes within the bronchial tube to other morbid changes outside in the lung-parenchyma, are not yet fully worked out by pathologists".

Some stress is laid upon the importance of recognising the gouty factor in cases of bronchitis, complicated with lithæmia. Acidity of sputa, intercurrent skin-affections, nocturnal dyspnoea, and other indications, are discussed in turn; they are chiefly met with in the catarrhal and emphysematous types.

A long chapter on the treatment of the disease and its complications concludes the book, and to many readers will prove the most interesting of the whole.

Entering fully into the details of the various methods of relief which he commends, the author shows clearly the importance of duly estimating the clinical and pathological indications, before applying the means which "common sense" would suggest for the relief of present symptoms. Whether in medicinal or in general treatment, the pathological condition must never be lost sight of; and, in this spirit, the various stages and varieties of the disease are dealt with, fully and faithfully—a clear distinction being marked between well-ascertained facts, and those which are still *sub judice*, or the results of personal experience only. This is notably the case in his remarks upon the value of strychnia as a direct stimulant of the respiratory centre, and also in the passages in which he condemns the use of opium as a narcotic; and his deliberate and clear expression of opinions on these points, though possibly they will not find universal acceptance, are worthy of more than passing consideration.

With the exception of the compiled portions, referred to above, the book is written throughout in an easy and popular style; it bristles with valuable hints for treatment, and is interspersed with clinical reminiscences both entertaining and instructive.

The few illustrations (repeated unnecessarily often), which are scattered through the text, are diagrammatic, and of secondary importance; but the work, as a whole, deserves cordial recognition at the hands of those to whom it is addressed.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 17TH, 1882.

THE REPORT OF THE SELECT COMMITTEE ON
POLICE AND SANITARY REGULATIONS.

ON Tuesday last was published the report of the Select Committee of the House of Commons to whom were referred all private Bills promoted this session by municipal and other local authorities, proposing to create powers relating to police or sanitary regulations which deviate from, or are in extension of or repugnant to, the general law. The Bills that came under the purview of the Committee were those promoted by the local authorities of Accrington, Blackburn, Bolton, Chadderton, Dundee, Macclesfield, Manchester, and Newcastle-upon-Tyne, the subject matter of which the Committee report as greatly more extensive than the subjects of special reference. All of them contained abundant illustration of the rapid growth and development which have marked private or local legislation of late years. Parliament has given encouragement to the practice of seeking for variations from, or amendment of, the general law for the convenience of particular localities; and the experience thus gained has served, and may serve again, to lay the foundation of useful public Acts of general application. On the other hand, anomalies and irregularities have, undoubtedly, received the sanction without the full knowledge of Parliament; and the Committee think that such provisions, whether justifiable or otherwise, should not, as is too often the case, by the mere fact of being unopposed, escape the publicity which their importance demands. The Committee have dealt freely with the provisions of these Bills, whether opposed or unopposed, by way of amendment, and they recommend that some step should be taken by the House to secure more uniform and stringent supervision of the unopposed clauses in Private Bills. They have, at the same time, struck out a large number of clauses proposing to give powers which may already be obtained by means of by-laws under general Acts.

As to the notification of infectious disease, the Committee report themselves as having had "little difficulty in forming the opinion that the time has arrived when provisions of law on this subject may be sanctioned, at least, in the more important urban sanitary districts." The parliamentary paper recently prepared by the Local Government Board at the instance of the Committee, shows that in no fewer than twenty-three urban districts legislation on this subject has been embodied in private or local Acts, and that the experience thus gained, though in some cases only recent, is stated to have been uniformly satisfactory. Moreover, the Local Government Board, who are charged with the execution and supervision of the Public Health Act, have been parties to similar enactments in Provisional Order Bills passed by their authority through Parliament; notably in the case of the Manchester Provisional Order Act, 1875. The terms of this order have been followed in the clauses which the Committee have sanctioned for insertion in several of the Bills under notice; and they recommend that, in any future amendment of the Public Health Act, similar powers should be extended to local sanitary authorities, or, at least, that means should be devised for clothing them with such powers on application.

The clause proposed to the Committee for the prevention of, or

otherwise dealing with, infectious diseases, were to a less extent supported by precedent, were viewed with disfavour or with hesitating approval by the Local Government Board in their report on the several Bills, and were obviously, in many cases, premature, as the powers for providing hospital accommodation, and for the compilation of by-laws open to the promoting authorities under various Acts, had been inadequately used. Some of the powers sought appeared excessive and objectionable, others in conflict with the general law. The Committee seem on this ground to have been free in expunging clauses proposed by the several authorities, though they do not state to what extent their excisions have gone. The clauses which they have allowed to remain comprise (1) one requiring cowkeepers and milk-purveyors to furnish the local authority with lists of all their customers when it is certified by the medical officer of health, or another medical practitioner, that the spread of infectious disease is attributable to the milk supplied by such dealer; (2) giving further powers in relation to the disinfection of premises [see Clause O, referred to in the report of the Chairman of the Parliamentary Bills Committee of the Association, dated March 1st (vol. i, 1881, p. 377)]; (3) imposing a penalty on persons ceasing to occupy houses where infectious disease has occurred without previous disinfection or without giving notice to the owner, or making false answers as to the existence of such disease; (4) prohibiting the retention of the bodies of persons dead of infectious disease for more than forty-eight hours, except in a mortuary; (5) requiring that the body of a person dying of infectious disease in a hospital shall not be removed therefrom except for the purpose of being forthwith buried (Clause K of the report referred to, vol. i, 1881, p. 376); (6) empowering justices in certain cases to order dead bodies to be removed from houses to the public mortuary, and to be buried within a time limited in the order; (7) prohibiting the carriage of corpses in public conveyances other than a hearse, without informing the owner or driver (Clause L); (8) empowering the corporation to provide temporary shelter or house-accommodation for the members of any family in which infectious disease has appeared, and to provide nurses for attendance on persons suffering from such disease (Clauses B and C of the report of the Chairman of the Parliamentary Bills Committee).

As regards the proposed powers to local authorities to close schools, and to exclude scholars from schools during the prevalence of infectious disease, the Committee think that these, though plausibly urged, are objectionable and unnecessary: first, because the managers of public elementary schools (which form the vast majority of day schools within urban districts) ought to be held exclusively responsible for the exercise of a proper discretion on so important a matter; and, secondly, because the managers have been, recently, under the 18th Article of the new Code, expressly required by the Education Department (presumably as a condition of participation in the grant) to conform to any intimation they may receive from the sanitary authority in regard to the necessity of such closing or exclusion.

It will be obvious, from the above summary of their report, that the Committee have by no means exhausted the subject that was referred to them for consideration. They seem, indeed, to have been capricious and irrational in the clauses that they have accepted or rejected; and it is obvious that the question of the extension of our public health laws cannot be allowed to remain where they have left it. The best, and certainly the only satisfactory course, would seem to be for a Departmental Committee, or small Royal Commission, to inquire steadily and patiently into the reforms of these laws, which recent experience, or the expressed desires of local authorities, have shown to be desirable.

On the whole, the report is a disappointing one, touching only the fringes of a vast and important question, affecting most vitally the conservation of the public health. The local authorities concerned are not likely to be in the least satisfied with it: and assuredly it will not content those who looked, in the appointment of the Committee, for an augury of better appreciation and regulation of the hap-hazard legislation which is now springing up in every direction.

THE DANGER OF IODOFORM DRESSINGS.

THE search for an antiseptic body which shall be a powerful germicide, and yet not injurious when absorbed by the human organism, still continues. Not long ago, Mikulicz, and many other surgeons in Germany, enthusiastically extolled the merits of iodoform; and it has been widely used both in that country and, though to a less degree, in this. For a time, all seemed to promise well with the new drug, but gradually we began to learn its demerits; and recent experience seems to show that its use, under certain conditions, as yet not fully explained, may give rise to most serious, perhaps even to fatal results. Iodoform was introduced into England some years ago, as a local application which was of great use in the treatment of spreading ulceration, and especially of the local contagious ulcer. Gradually its use extended; it gained much favour with gynaecologists, especially for the purpose of correcting the foetor of ulcerating cancer of the womb; it was blown into the nose and into the ear, and, made up into a bougie, introduced into the male urethra. About two years ago, Mikulicz recommended it as a dressing after operations, major and minor, on the ground that it was a powerful antiseptic, and yet did not irritate the parts. Its employment was said to be especially advantageous in the treatment of scrofulous joints; and those who adopted this line of treatment did not hesitate to open freely a knee-joint affected with tumor albus, and introduce iodoform in large quantities into the cavity of the joint; in such a case, an outside dressing of cotton-wool, treated with iodoform, was applied, and left undisturbed for a month or more. No great care seems to have been taken to estimate the quantity of the drug used in such a dressing; it was ladled out of a bottle into the joint, and no ill effects appeared to follow. Now, Dr. Ringer pointed out last summer that iodoform was a heart-poison; he found that one-fifth of a grain would almost arrest the frog's heart. Such an experiment as this prepared us for the clinical observations detailed by Dr. Max Schede of Hamburg, who, in an important paper, published recently in the *Centralblatt für Chirurgie*, drew attention to the toxic action of the drug. He found that, in certain cases, its use is followed by an enormous increase in the frequency of the pulse, which runs up to 180, even in the adult, without any marked rise of temperature, or any general symptoms beyond some disquietude, *malaise*, and loss of appetite; in other cases, in addition to the rapid and feeble pulse, there are some fever and headache; in both of these classes of cases, the withdrawal of the drug is immediately followed by a disappearance of the symptoms. In other cases, where the rapidity of the pulse is very great, and the temperature very high (104° Fahr., or more), the danger to the patient, in spite of the absence of marked general symptoms, is also greater—inasmuch as the withdrawal of the drug is not always followed by an immediate cessation of the symptoms. By far the most serious form that iodoform poisoning takes, however, is that in which the sensorium is deeply involved; in children, the symptoms closely resemble those of meningitis, and have been frequently rapidly fatal, in spite of the immediate withdrawal of the drug. The child, who may have been in excellent health for some weeks under the use of iodoform dressings, suddenly becomes very ill, the pulse grows rapid, with irregular or perhaps very slight pyrexia, vomiting is severe, consciousness is disturbed or lost, and there are localised paralyses. It has been urged that probably, in Schede's cases, these symptoms did in reality depend upon a rapid meningitis—perhaps of a tubercular nature, for the patients have generally been strumous children; but this we do not believe to be a complete explanation, because, among other reasons, we are acquainted with a case of this kind which recently occurred in a London hospital, where symptoms pointing, as it was thought, most unmistakably to meningitis, entirely disappeared when the affected joint was freed from iodoform. In Mr. Stanley Boyd's report of four cases, in the wards of University College Hospital, to be found at page 903 of our present number, drowsiness and stupor were observed in two patients, symptoms of meningitis in one, and delirium in a fourth, which ended fatally. Both Schede and Küster say that the drug can cause sudden collapse and death; but of this there does not appear at present to be sufficient proof.

Iodoform is an iodine-compound, chemically analogous to chloroform; its composition is represented by the formula C H I_3 ; it contains therefore 96.7 per cent. of iodine. From this fact, it has been argued by some, wise after the event, that its use in large quantities must be injurious; but, what do we know of the toxic properties of iodine itself? Very little, in fact. Iodine has been injected into the cavity of the pleura without ill effect, and, combined with potassium, enormous doses can be tolerated. Rather does the above account of the symptoms it can produce tend to approximate it somewhat to chloroform in its therapeutics; and he would be a bold man who would maintain that the symptoms of chloroform poisoning were due to the chlorine in its composition. A writer in the May number of the *London Medical Record*, to whom we are much indebted, adopts the view of Dr. Mundy of Vienna, who contends that the toxic or fatal symptoms have been due to the reckless manner in which large quantities of the drug have been used. No doubt, this is perfectly true; but it does not seem to explain all the phenomena. In the first place, it is comparatively rare to get any symptoms of poisoning at all. There are surgeons in this country, who have used the drug in large quantities at a time, and have never met with a single case of poisoning; and, in a great proportion of the cases reported, the symptoms did not appear until after the continuous use of the drug for two or three weeks. We are loth to fall back on Dr. Max Schede's theory of a peculiar idiosyncrasy; and, before doing so, we would certainly desire more complete observations, especially with regard to the urine. The supposed cumulative action of other drugs—of digitalis, for instance—has been distinctly traced to renal disturbances. So long as the kidneys discharge their functions vigorously, so long is the poisonous substance rapidly eliminated from the blood, and gives rise to no symptoms; but if, from some cause, the urinary excretion is checked, then the poisonous body accumulates in the blood, and gives rise to its characteristic symptoms. For this reason, we think that a careful examination of the urine, where iodoform is being used, may not only throw light on the way in which it produces toxic symptoms, but may also furnish a timely warning of their approach.

Lastly, we are informed that Professor Kocher of Berne has been struck by the resemblance between the symptoms of iodoform and of chloroform poisoning, and that he has encountered one case where the onset of the symptoms was marked by signs of acute nephritis.

M. MATHIAS DUVAL has been elected a member of the Paris Academy of Medicine.

THE Italian residents of New York have started a movement for the erection of a hospital on the site of Garibaldi's old residence in Staten Island.

WE are informed that between seventeen and eighteen thousand pounds have been received by the Secretary of the Hospital Sunday Fund. This amount is more than fifteen hundred pounds higher than that in hand at the corresponding date last year.

IN the reference in last week's JOURNAL (page 877, column 1) to the prize founded by Mr. Middlemore of Birmingham, the sum which he generously placed at the disposal of the Association was stated, by an accidental error, to be £300. The real amount was £500.

ACCORDING to the statistics communicated by M. Vergneaud, the First Secretary of the Prefecture of the Seine, at a recent meeting of the Paris Municipal Society, insanity increases in that city. In 1881, 2,836 patients were placed in asylums by the Government authorities; 902 were voluntarily placed by their families in private asylums. Thus the number of insane registered in Paris for the past year amounts to 3,738.

AMONG the fifteen newly elected Fellows of the Royal Society are Dr. George S. Brady, F.L.S., of Sunderland; Dr. George Buchanan, of London; Dr. Walter H. Gaskell; and Mr. Jonathan Hutchinson.

SMALL-POX has now nearly been stamped out in Bolton. In a recent report on the subject, Mr. Sergeant, the medical officer of the borough, mentions the case of a child who caught the infection by reading a letter sent through the post by a patient in the workhouse hospital.

WE understand that H.R.H. the Duke of Connaught has been obliged to seek relief from one of the attacks of spasmodic asthma, to which he is subject, in a sea-voyage. His Royal Highness will therefore be unable to distribute the prizes to the students of St. Thomas's Hospital, on Saturday next.

DR. RIEMBAULT, in a communication made to the Paris Academy of Medicine, states that he has made a series of researches with reference to "miners' anæmia", and he believes that this affection is due to the presence of a worm of the filaria species, and not to that of the *ankylostomum duodenale*, as asserted by M. Perroncito of Turin.

WE have to acknowledge the receipt of the following contributions to the fund which is being raised on behalf of the family of the late Sir John Rose Cormack: Dr. C. J. B. Williams, F.R.S., £10 10s.; Dr. W. Jelly (Madrid), £5; and Dr. G. T. B. Walters (Stonehouse, Gloucestershire), £1.

TYPHOID fever is reported to be very prevalent in Napier, New Zealand. A man and three of his family died, and, upon examination being made of the house, a pool of stagnant water was found beneath it. Several other deaths have occurred in the town; and, within one week, three travellers, one after the other, caught the infection and died.

SMALL-POX still prevails at Wednesbury. At the last meeting of the sanitary authority, it was reported that, during the past fortnight, there had been thirty-three cases of the disease, four of which had proved fatal. It was resolved to urge revaccination, and to extensively carry out disinfection. Small-pox has also broken out in some of the adjoining parishes, where special efforts are being made to prevent the spread of the infection.

A MEETING of medical students from the various hospitals was held at Anderton's Hotel, Fleet Street, on Saturday, June 3rd, when it was decided to form a medical students' club. It was also resolved to hold meetings at each hospital during the ensuing week, and the names of gentlemen who kindly undertook to conduct these meetings were taken. After an animated discussion, the meeting closed with votes of thanks to the president and officers.

AT a recent meeting of the Norwich Medico-Chirurgical Society held at the Norfolk and Norwich Hospital, Mr. Watson Cheyne gave a demonstration on the recent discoveries of bacilli in tubercle and of other new forms of allied micro-organisms, by means of the microscope and the magic lantern. There was a very large attendance of members of the profession from Norwich, Norfolk, and the adjacent counties.

ON the 23rd of last April, the King of Spain, accompanied by several Ministers of State, inaugurated the new Society of Hygiene in Madrid. Soon afterwards the first number of the Society's Journal, the *Revista de Higiene y Asistencia*. The object of the journal, as its name imports, is to keep its readers well abreast of all that is newest and most valuable in Sanitary Science. The first number is well printed on good paper, and contains interesting articles on the best methods of dealing with epidemics, and of checking adulteration of food.

ATTENTION has been called in the House of Commons to the unsanitary condition of certain dwellings adjacent to the casual wards of the City of London Union, in Robin Hood Court, Shoe Lane. Dr. Saunders, the medical officer, in a recent report, stated that there had been an outbreak of diphtheria and fever, both among the inhabitants and the casuals, and many instances of overcrowding and filth; while children had died from blood-poisoning. In the seven houses situated in the court, there were sixty rooms, which were occupied by 200 persons. It is, we think, high time that the following recommendations of the medical officer should be carried out; that steps be taken either to improve the premises, or to have them demolished; that the board of guardians provide other shelter for their casuals; and that, in view of the coming summer, all the courts and alleys of the city should be cleansed and lime-washed, and flushed regularly from time to time.

THE BROCA SUBSCRIPTION.

THE sum subscribed to defray the expenses of a monument in honour of the late Paul Broca amounts to 22,449 francs (upwards of £897 sterling).

THE MEDICAL DEFENCE ASSOCIATION.

WE are requested to state that, at the meeting of the Medical Defence Association, to be held on Wednesday afternoon next, at the rooms of the Medical Society of London, a resolution will be proposed, calling upon the General Medical Council to take some action, with a view to put a stop to the discreditable practices in connection with the management of so-called "provident dispensaries", to which the attention of the House of Commons was called on Monday evening last.

OMNIVOROUS ECCENTRICITIES.

WE were last week favoured by Mr. Benthall of Derby, with the report of a case treated at the Derby Infirmary. It was that of a man who swallowed some coins in an attempt to secrete them in his pharynx. We were then unable to state the result of the case. It may now interest some of our readers to know that the patient went to the infirmary on the morning of the 6th of June, and produced four pennies and a half-penny, which he stated he had passed in one motion the day before. The coins were much blackened by their sojourn of three weeks in the alimentary canal.

THE HAMPESTEAD SMALL-POX HOSPITAL.

AT the last ordinary meeting of the managers of the Metropolitan Asylums district, Mr. E. H. Galsworthy, the chairman, officially communicated to them the result of the judgment of the House of Lords with respect to the Hampstead Small-pox Hospital. He said that while they would take no steps for a new trial, if another action was brought against them, most certainly they would defend themselves; and the promoters of any new proceedings would find the managers determined to fight upon very different lines and in a totally different manner from that with which they met the original action against them.

MIDWIFERY AT THE PARIS HOSPITALS.

THE reform so long needed, of placing the lying-in wards of the Paris general hospitals under the charge of obstetric physicians, is now fairly started. At the *concours* for appointments of obstetric physicians to four of the general hospitals, the successful candidates were 1. M. Pouché, 2. M. Porak, 3. M. Pinard, 4. M. Ribemont. All four are well known, personally and by their writings, to obstetricians in this country. There will shortly be a fresh *concours* to fill the appointments to be made at the other hospitals. At each of the Paris hospitals, the out-door patients are attended by midwives, who will now be under the supervision of the obstetric physician. The municipality of Paris is to be congratulated on having achieved so useful and necessary a reform.

THE ROYAL COLLEGE OF PHYSICIANS.

THE President and Council gave a brilliant and successful *conversazione* at the College in Pall Mall, on Wednesday last. His Royal Highness the Prince of Wales, who had, in the earlier part of the evening, been presiding at a dinner in favour of the funds of the London Fever Hospital, arrived soon after eleven o'clock, and was received and conducted through the various rooms of the College by the President and Censors. Later in the evening, H.R.H. the Duke of Albany arrived, and was received by the President and Censors. Among the more interesting works of art lent for the occasion by Fellows of the College, were a fine bronze group of pheasants by Cain, lent by Dr. Quain; some fine wedgwood, lent by Dr. Braxton Hicks; and portraits of Professor Donders and Mr. Bowman, lent by Mr. Bowman, F.R.S. Dr. Heron showed some bacilli of tubercle, and Professor Tyndall demonstrated some experiments on acoustical interference and reflection and on some phenomena of colour.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

A PETITION has been signed by 248 of the medical practitioners of Liverpool and its neighbourhood, and presented to the House of Commons by Mr. Whitley, M.P. The petitioners regard the proposal to compel medical men without discretion to report cases of infectious disease to the sanitary authorities, as an unwise interference with their relations to their patients. They believe that the dread of notification by them is likely often to lead to such an amount of concealment as may cause disease to spread, owing to the absence of precautions which they always adopt. They are convinced that concealment does exist in towns where the compulsory notification of infectious diseases by medical men is the law, and that such towns show no greater sanitary progress than those not under such law.—The Birmingham Town Council have resolved to petition Parliament in favour of the Compulsory Notification of Infectious Diseases Bill.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

THERE are no fresh candidates for the coming election of members of the Council, and it appears to be the general impression that the three retiring members will be re-elected. The claims of Mr. Marshall and Mr. Power are universally recognised; Mr. Alfred Baker, the second of the candidates in seniority, will, we believe, be strongly supported by provincial Fellows, and he has well deserved their support, through his high reputation as a surgeon, and the interest which he has taken in the welfare of the profession. Our associates will remember that Mr. Baker, in 1872, filled the office of President of the British Medical Association, and, since that time, has taken an active part in the management of its affairs.

THE ASSAULT ON DR. ORANGE.

THE following is a brief account of the recent assault on Dr. Orange, at the Broadmoor Asylum, by the Rev. H. J. Dodwell. It appears that Mr. Dodwell preferred a request to consult Dr. Orange, with reference to a letter which he stated that he wished to write to a brother who is resident abroad; and whilst Dr. Orange, in compliance with this request, was seated in a chair, and was engaged in looking over the papers which Mr. Dodwell had asked him to read, Mr. Dodwell, who was standing by his side, suddenly, and without a word of warning, dealt him a heavy blow on the crown of the head with a stone weighing more than a pound, slung in a handkerchief. Happily, Dr. Orange, although somewhat stunned, was able to hold his assailant, and prevent him from inflicting any further injury, until he was secured by the attendants. The motive which prompted this act appears to have been of precisely the same character as that which instigated the assault upon the Master of the Rolls. Mr. Dodwell states that, more than a year ago, he had made up his mind that, as the firing of a pistol, not loaded with ball, at the Master of the Rolls, had not proved to be sufficient to obtain for him what he imagined was justice, he should be forced to commit some still more serious act; and he came to the conclusion that nothing less than the taking of life would be

sufficient to call attention to the conspiracy of which he insanely imagines himself the victim. Dr. Orange, we are pleased to hear, is going on favourably, although he is still confined to his bed. He is under the care of Dr. Bastian of University College Hospital (a former colleague), and Dr. Nicolson and Dr. Isaac (his present colleagues), who insist upon absolute quietude for the present. Although the blow was a heavy one, happily no complications have arisen, and the effects of the shock are steadily subsiding.

MR. CECIL LAWSON.

WE have to record with great regret the death of that promising artist, Mr. Cecil Lawson. The following are a few authentic particulars of the circumstances which led to that unhappy event. Mr. Cecil Lawson, who had previously been much out of health, was attacked about a month ago with intense suppurative catarrh of the nares, fauces, larynx, and bronchi. Lobular pneumonia speedily appeared, affecting chiefly the left lung. The whole illness presenting strong indications of a septic origin, and the sanitary condition of the house he was then occupying being more than doubtful, Mr. Lawson was removed to another house, where for a time his general condition seemed more favourable; but the consolidation increased in the upper part of the left lung, and presently the signs of cavity were recognised on the anterior aspect of the lower part of the upper lobe. The cavity appeared to increase rapidly day by day till, on the day before his death, it was evident that pneumothorax had occurred, no doubt through giving way of the wall of the cavity. After this, he sank rapidly. He was under the care of Dr. Daniell of South Kensington. In the earlier part of the illness, Dr. Ord saw him several times in consultation with Dr. Daniell; and, on the day before his death, when the signs of pneumothorax were first noted, Dr. Andrew Clark met Dr. Ord, Mr. Reeves, Dr. Baines, and Dr. Daniell in consultation.

PRESCRIBING BY DRUGGISTS.

A FATAL case, resulting from this too common practice, has recently been under the investigation of Mr. Vaughan, Coroner for Devonport. An infant about a fortnight old, named Sydney James Percy, son of a dockyard-labourer, having a cough, was taken to a druggist, and had some medicine which he prescribed, from Friday until the following Monday, when the child died. After death, the body was seen by Mr. De La Rue, surgeon; but no necropsy appears to have been made. At the inquest, Mr. De La Rue gave it as his opinion that death had resulted from natural causes; but what these were he did not state. He had examined the residue of the medicine (and also questioned the druggist), and he believed it consisted of ipecacuanha wine and syrup of squills. There was no opium nor any preparation of opium in it. The coroner very properly pointed out that it was not a question altogether as to whether the medicine given had killed the child, but whether or not giving it the proper thing at the proper time might not have saved the child's life; and the jury, in returning a verdict in accordance with the medical evidence, entirely endorsed this view of the case. We think it is very desirable that such cases should be fully investigated by means of *post mortem* examinations, as it is only in this way that the public can ever be brought to understand the risks attendant on their so-called treatment by prescribing druggists.

THE LONDON FEVER HOSPITAL.

ON Wednesday last, H.R.H. the Prince of Wales presided, at Willis's Rooms, at a festival dinner in aid of the funds of this hospital. In proposing the toast of the evening, His Royal Highness dwelt upon the great and especial value of the hospital. He stated that last year 667 cases of scarlet fever, 120 of typhoid, 5 of typhus, 56 of measles, and 10 of diphtheria, were treated in the hospital. He said it is the only hospital in the metropolis where persons who were not paupers, suffering from infectious fevers, were admitted. Since the hospital began its work, 492 doctors and nurses had contracted fever, and 83 of them died. There had been 33 resident medical officers, of whom 22

caught the fever, and of whom 8 had died. This proved how steadily they had kept to their work. He regretted that the invested capital of the hospital was rapidly diminishing. The amount sold out in 1881 to meet the expenses was £4,600, leaving a balance of only £6,000. In asking the numerous visitors to drink "Success to the London Fever Hospital", he hoped they would do their utmost to contribute to one of the most excellent and most necessary hospitals that exist. The toast was coupled with the name of Dr. Cayley, senior physician to the hospital. Dr. Cayley, in replying, expressed a most earnest hope that ere long the committee of the hospital would be enabled so to enlarge and build, that they would be able to receive and treat cases of fever in all classes of society. This was a pressing want, which, he trusted, would shortly be supplied. Among the guests were the Earl of Devon, the Bishop of London, Cardinal Manning, Mr. Mitchell Henry, M.P., Dr. Broadbent (consulting physician to the hospital), Dr. Mahomed (physician to the hospital), and a numerous company. Before adjourning, a list of donations and subscriptions was read, amounting to £4,278, including 100 guineas from H.R.H. the Prince of Wales and 50 guineas from Her Majesty the Queen.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE last meeting of this Society for the session was held on Tuesday evening, when three interesting papers were read. The first contained the results of a series of experiments, made last winter, by Dr. Sydney Ringer and Dr. Harrington Sainsbury, with the object of comparing the action of salts of soda, ammonia, and potash. The experiments were made on the ventricle of the frog's heart, which was supplied with a solution of dried bullock's blood, mixed with a solution of the salt whose action was to be tested. The drugs were tested as to their influence on the spontaneous working of the heart (contractility), and as to the influence in modifying the effect of continuous faradisation (excitability). Briefly stated, the results were that potassium salts exercised the greatest influence, reducing powerfully both excitability and contractility; ammonium salts came next, affecting contractility to a great extent, while having but little influence on excitability; and, lastly, at a wide interval, came sodium-salts, which affected excitability slightly, while contractility chiefly escaped. The next paper was one by Sir James Paget, in which he recorded seven cases of that peculiar morbid condition described by him, some years ago, as osteitis deformans. Lastly, Mr. Davies-Colley described two cases of malignant pustule, which had been successfully treated, at Guy's Hospital, by free incision of the eschar, and cauterisation. Appended was a tabular statement of seventeen cases admitted into Guy's Hospital, during the last nine years, in fifteen of which excision was performed with a large amount of success.

THE DEBATE AT THE OPHTHALMOLOGICAL SOCIETY.

ON Thursday and Friday, June 9th and 10th, the members of the Ophthalmological Society met to discuss the subject of sclerotomy. The attendance on the first evening was very numerous, and the discussion has resulted in bringing together a larger body of statistics and experience than has ever before been attempted. That it has contributed much towards settling the many vexed questions propounded may be doubted, but it has put them in a better way to be solved, and has brought the whole subject more prominently before the profession. There were not wanting speakers to advocate the operation in every form of glaucoma, though each speaker made certain more or less large, and generally different, limitations. Several members argued from anatomical and physiological grounds that sclerotomy and iridectomy were in their essential nature the same; that the latter operation was, in fact, sclerotomy over the insertion of a portion of iris. Glaucoma, they contended, and the opinion seems now to be generally accepted, was due to the increase of intra-ocular tension, caused by closure of the angle of the anterior chamber: this led to blocking of the channel by which fluid was normally drained away; an increase of the extra-ocular tissue in the region of the angle gave relief, partly

by removing the existing excess of fluid, and partly by opening up the angle. Sclerotomy undoubtedly fulfils the first of these conditions, but many seemed to doubt whether it could accomplish the latter; if it cannot, then it must not be trusted to work a permanent cure, for the theory that the scar itself left after a sclerotomy, done as recommended by M. de Wecker, is to any special extent permeable, seems extremely doubtful.

EHRlich's METHOD OF STAINING TUBERCLE-BACILLI.

THIS method is a great improvement over Koch's original method, in that the bacilli are much more brilliantly stained and easily found; and it also takes a much shorter time, the whole process requiring only from half an hour to an hour. Ehrlich has employed it chiefly in the examination of sputa; and it has now been adopted by Dr. Koch, in preference to his own method. The sputum is spread in a thin layer on a cover glass, and dried. In order to fix the albumen, the cover glasses are kept at a temperature of 100° to 110° Cent. (212° to 230° Fahr.) for an hour; or, in practice, it is sufficient to pass them three or four times through a gas flame. The staining solution is prepared as follows. About 5 cubic centimetres of pure aniline are added to 100 cubic centimetres of distilled water, well shaken, and then filtered through a moistened filter. To this mixture, a saturated alcoholic solution of fuchsin, methyl-violet, or gentian-violet, is added till precipitation commences. The cover-glass is allowed to float on this, with the side on which the sputum has been spread directed downwards, for a quarter to half an hour. It is then washed for a few seconds in a strong solution of nitric acid (one part of commercial nitric acid to two parts of distilled water), and afterwards in distilled water. In this way, the stain is extracted from everything but the tubercle-bacilli. The ground substance may be stained brown (if the bacilli have been stained violet), or blue (if the bacilli have been stained red), by way of contrast to the bacilli. It is interesting to hear that, in Berlin, the examination of sputum for these bacilli is now generally employed, as a means of diagnosing tuberculous affections of the lung from others: for the bacilli are constantly present in the sputa in cases of tubercle.

GARIBALDI.

THE death of Garibaldi, the funeral ceremonies at Caprera, and the honours which await his memory, continue to be the all-absorbing topics of conversation, not only in Rome but throughout Italy. The impression caused by the unexpected news of his death fully equalled that which the nation manifested for the loss of Victor Emmanuel. The Italians are true hero-worshippers and never try to hide the emotions, which might possibly be felt as deeply, but would certainly not be shown as openly, by us at great national bereavements. For the last ten years nearly, the hero of the Italian nation has been a helpless cripple from rheumatism and rheumatoid arthritis, caused by the innumerable hardships and great exposure attendant on his adventurous and glorious career. As long ago as 1875 it was almost impossible for him to walk, and the succeeding years only aggravated his state. When he crossed to Genoa and Milan, rather more than a year ago, he was scarcely carried about, and was scarcely able even to raise a hand to salute the applauding crowd. His island home could not improve such a condition, and it is known that he suffered much pain. During the last winter, he had been nearly smothered with bronchitis; and, though the troops Naples and resident at Palermo were of service to him, and enabled him to go to Palermo to the celebration of the Sicilian Vespers, it was noticed that his strength had greatly failed. Not long after his return to Caprera, the ailment became worse again; his appetite entirely failed; and it was said that he was unable to swallow food even for three days before his death. Indeed, the medical certificate signed by Dr. Albanese stated that the cause of death was paralysis of the pharynx. No autopsy seems to have been made. The family, yielding to the desire of many friends, reluctantly gave up the idea of embalming the body, as proposed by himself; they had it embalmed, and have buried it in the meantime at Caprera, until the representatives of the nation settle where its final resting-place shall

be. Owing to the very natural hesitation of the family before finally deciding not to obey the expressed wish of Garibaldi, the embalming was too long deferred, and did not prove a success. Nothing, however, can justify the nauseating details as to the appearance of the body when lying in state, which several Italian newspapers have published.

DARENTH SCHOOLS AND ASYLUM FOR IMBECILES.

ON Saturday, June 3rd, the fourth annual inspection of this institution was conducted by the managers of the Metropolitan District Asylums, accompanied by Dr. R. Thorne Thorne, medical inspector of the Local Government Board, and a number of visitors interested in psychology and in Poor-law administration. The company were received early in the afternoon by Sir Edmund Hay Currie, chairman of the Darenth Committee of Management and vice-chairman of the Asylums Board; by Dr. T. B. Dyer, medical superintendent of the asylum; by Dr. Fletcher Beach, medical superintendent of the schools; Mr. Gower, steward to the asylum; Mrs. Gower, matron to the asylum; and Miss Wright, matron to the schools. The asylum, first inspected by the company, consists of a new row of buildings on the block system, erected, as Sir E. Currie explained, for the reception of imbeciles brought up, when children, in the schools, but found, on reaching puberty, to exhibit no signs of improvement. The separation of such cases from younger and more hopeful patients is obviously imperative. Eighty boys had already been transferred to this new building. One block of the Adult Asylum is already tenanted; in this block, the day-room and the two dormitories in the first and second floor above it are 78 feet in length by 36 in width. The lower dormitory is 12 feet 2 inches high, the upper being 2 inches lower; each contains 60 beds; the day-room is 13½ feet in height, and constructed to accommodate comfortably all the patients from both dormitories. There were 480 children in the schools, and the new asylum buildings contained room for 900, in accordance with recently increased necessities for accommodating imbeciles in this institution. Although this would give a total of 1,380 patients, the further extension of the schools and asylum is contemplated. The children in the schools went through various scholastic exercises before the managers. The sanitary arrangements were found to be in the highest degree satisfactory, and the medical visitors were shown special cases of interest by Drs. Dyer and Beach. Amongst these were two patients subject to sporadic cretinism—one male and one female, not related. In both, the physiognomy was highly characteristic, and the thyroid gland appeared to be absent, whilst the characteristic fatty swelling of the neck could be observed. Before leaving the institution, the farm was inspected by the visitors.

INOCULATION OF LEPROSY.

A RECENT number of Virchow's *Archiv* (vol. lxxxviii, 1882) contains an account, by Professor Köbner of Berlin, of attempts to inoculate leprosy on animals. Although the results were negative, the experiments are of considerable interest. Professor Köbner confirms fully the observations of Hansen, Neisser, and others, in reference to the bacillus of leprosy. He not only found the organism in fresh juice from the tubercles, but found it in preparations which had been many years in alcohol, and still more easily in dried portions of leprosy-tissue which had been kept folded in paper for an equally long time; so much so, that he recommends travellers in countries in which leprosy is common to preserve the tissues in a dried state, in so far as they wish to keep them for subsequent examination in reference to the bacillus. A tubercle was excised from the thigh of a patient, a German, of healthy family, who had contracted the disease during an eleven years' residence in Pernambuco. Inoculations with the juice and with small portions of the excised tissue were made on a monkey, two guinea-pigs, two young rats, a white mouse, two rabbits, a pigeon, three eels, a mud fish, and a frog. The monkey died 126 days afterwards of tuberculosis, but no leprosy-tissue was found, any more than in any other of the inoculated animals. One of the rabbits died on the fifty-sixth day, the other was killed after five months and a half. The

inoculations in the case of those animals had been made by inserting small pieces of leprosy-tissue into the anterior chamber of the eye. Those portions of tissue remained visible, and gave rise to no inflammatory symptoms. After being 56 days immersed in aqueous humour the leprosy bacilli were well preserved and easily demonstrated, but they had not grown into the tissues of the iris or cornea. In preparations of dried blood, prepared by Ehrlich's method, Professor Köbner demonstrated that the bacilli are present in the circulating fluid. So far from considering the results of his negative experiments as conclusive, Professor Köbner refers to the time that elapsed before tuberculosis, recurrent fever, and septicæmia were successfully inoculated on animals. Further experiments of the kind are certainly desirable, and the attention of medical men practising in countries in which leprosy is common may be advantageously directed to this question.

THE MEDICAL CONGRESS AT SEVILLE.

A MEDICAL Congress was held in April at Seville. The foreign representatives in medicine were confined to French and Italian, Englishmen and Germans being absent. The general arrangements of the Congress very much resembled those of the annual meetings of the British Medical Association. Work was judiciously mingled with pleasure, and, whilst the mornings were devoted to science, the afternoons were consecrated to drives and excursions in the neighbourhood or in the town itself. The first day's proceedings were chiefly routine, and consisted in the reading by the Secretary, Dr. Madera, of various letters and communications from foreign societies. One of the papers read in the first sitting was from Dr. Arthur, of Edinburgh, who laid before the Congress the description of an antiseptic naso-oral respirator. Señor Ariza, of Madrid, however, took exception to this, holding that the paper and the instrument were not purely scientific, but rather of the nature of advertisements. Messrs. Colin, of Paris, exhibited some very beautiful and novel surgical instruments, on the merits of some of which a special commission was appointed to report. The Congress met, as a rule, at 8.30 every morning, and separated about midday for the various excursions that had been placed on the programme. One of these was to the Provincial Hospital of San Lazaro. This Hospital contains 200 beds, and from an English point of view, at any rate, leaves much to be desired in the way of cleanliness and ventilation. One of the most interesting discussions was that on the treatment of tonsillitis. Dr. Moresco advocated in hypertrophy of the tonsils the injection of acetic acid with a Pravaz's syringe. He exhibited a syringe constructed especially for the purpose, and so arranged that the needle could only penetrate a certain distance. Dr. Sota considered that no treatment could be much more satisfactory than that by the tonsillotome, except, perhaps, in cases where a calculus existed. He exhibited such a calculus, measuring five millimètres in diameter, removed from a patient. A discussion took place on the curative effects of the nitrogenous spas of Spain in cases of phthisis, in which there was a wide divergence of opinion among many of the members. The Congress terminated by a banquet to 150 of the visitors and members. The proceedings, which throughout were well managed, were brought to a close amid general expressions of satisfaction, and a vote of thanks to the authorities of Seville who had helped so much to make the Congress a success.

THE MEDICAL SERVICE OF BRITISH GUIANA.

ON a former occasion, we felt it our duty to take notice of the unsatisfactory relations existing between the Government of British Guiana and its medical servants, and to advise young medical men to think more than once before committing themselves to a career in that country. From information that has reached us, matters do not appear to have mended much since we wrote on the subject. We are far from asserting that the executive authorities of the colony are entirely to blame for this unhappy want of harmony; it is quite possible that there are faults on both sides, as in most cases of the kind: acts, it may be, of indiscretion on the part of a few, visited on the many by

acts of unjust and harsh repressions. This at least is the impression left on our minds, by careful consideration of such facts as have come to our knowledge. The Lieutenant-Governor is said to be engaged in the preparation of a new scheme, intended to restore peace and confidence; this in itself is an acknowledgment that the old system, so fruitful in disputes, heartburnings and discontent, stood in need of revision; and we can only join in the hope expressed by the local press, "that the position and emoluments of the medical service will be so amended as to attract young members of the profession of good status," and that the Government of the Colony, taught wisdom by past experience, will learn to treat them in a more liberal and becoming spirit. A return moved for by a member of the Court of Policy has reached us, which it would appear the executive kept back as long as possible, and did their utmost to keep within the narrowest official limits. This document points neither to the popularity nor the longevity of the Government Medical Service of British Guiana. In 1873 there were 25 medical officers, of whom only 9 remain, one of whom is from illness incapable of serving. Nine out of the 25 died, a heavy mortality; 3 resigned, 2 were dismissed, and 1 retired. Another tabular statement shows that out of fifteen medical men "appointed to districts" between 1873 and 1881 only 9 remain, 3 having died and 3 resigned. The table of supernumeraries from the summer period, shows that out of a strength of 21 only 8 remain. This is not a cheerful or encouraging record, and we agree with the writer in the *Colonist*, who publishes it, "that considerable attractions must be offered before the service can become popular with good men."

POST MORTEM EXAMINATIONS IN HOSPITALS.

MR. FLOWERS, the magistrate at Bow Street Police Court, gave his decision on June 2nd in a case in which a summons had been granted against Dr. Angel Money, Medical Registrar of the Hospital for Sick Children, Great Ormond Street, who had performed a *post mortem* examination on the body of a young child, who died two or three hours after admission into the hospital. The mother, who was a laundress in the Temple, was aware of her child's death in a few hours, that is, on the day before the necropsy was held; she was not asked to permit an examination, and had expressed no desire that it should not be made, but felt herself aggrieved that it should have been performed. The case was taken up by the Vigilance Committee, who thought fit to proceed against Dr. Money, who merely acted in the discharge of his ordinary duties to the hospital, by indictment, and asked Mr. Flowers to commit Dr. Money for trial on the charge of offering an indignity to a human body. The question for decision was, in a few words, whether making a *post mortem* examination could be considered to be offering an indignity to a human body. Mr. Flowers, in his decision, said that he did not consider that the Anatomy Act applied to this case at all. In the case of *Regina v. Feist*, Lord Chief Baron Pollock had held that there was nothing wrong, or against good feeling, in making a properly conducted *post mortem* examination on a human body: in the paragraph in the draft of the proposed Criminal Code, declaratory of the Common Law in offences connected with the human body, the offence aimed at seemed to be the withdrawing the body from the rites of Christian burial. In this case, the examination had been conducted in a proper manner, and the operator was not liable to indictment. The summons was therefore dismissed. This decision seems to us to be the only one at which the magistrate could possibly have arrived, and we are not surprised that Mr. Flowers should have felt some doubt whether he had acted wisely in ever granting the summons. Mr. Flowers added a rider to his decision, in which he expressed regret that the complainant had not been consulted before the examination was made, as he thought that the prejudice against such examinations would be lessened by acting in that manner. No doubt it is most desirable that this prejudice should be diminished, but we doubt whether such an utterance from the judicial bench will tend towards its diminution. The intention of the drafters of the Criminal Code seems distinctly to us to be to endeavour to prevent any increase of this prejudice, and the penalties suggested

are directed, not against persons who perform a proper scientific *post mortem* examination, but against those who would offer wanton indignities to a dead body, or interfere with the right of Christian burial. It is manifestly to the advantage of the community that, in the interests of Medical Science, *post mortem* examinations should be made; and we sincerely trust that the hysterical ignorance which at present animates certain persons to seek by all the arts of the agitator the total abolition and entire suppression of vivisection, so-called, may not lead to an attempt to stir up among the poorer classes a stronger feeling against the proper performance of *post mortem* examinations. Such an agitation would be in every way most unfortunate, and would almost make us despair for the future of medicine as a science in England. We have confidence, however, in the common sense of the people in this country to perceive that the present excellence and the future progress of medical practice and teaching, and, therefore, to no inconsiderable extent, the happiness and welfare of the nation, are involved in this question.

OPENING OF THE NEW WING OF THE HOSPITAL FOR CONSUMPTION, BROMPTON.

THE new wing of the Hospital for Consumption, Brompton, is now out of the builders' hands, and so nearly in complete working order, that it is hoped that one half of the patients in the old hospital may be moved into it in the course of a very short time; the wards and galleries thus left empty will be submitted to a thorough cleansing and reparation. On Tuesday, June 13th, the Earl of Derby, who is President of the Hospital, formally opened the new building. In the course of his speech on this occasion, he referred to the financial position of the charity, which can hardly be regarded as satisfactory; the whole of the large legacy received some years ago "has been," according to the speaker, "spent on this extension, and more," so that the hospital, with a diminished capital, and an annual expenditure increased by about £10,000, now appeals with greater vehemence to the charity of the general public. Lord Derby confessed that one of the weakest points in the present status of the London hospitals was, that they did not provide for that large class which, while it could not afford to pay for the highest professional skill, nevertheless rejected and repudiated the notion of merely eleemosynary aid. That was a question to which public attention was being increasingly turned; and he did not doubt that in a few years the result would be visible. The problem was a hard one to solve; for what was required was that the help given should at the same time be systematic and sympathetic; that there should be, on the one hand, no waste of funds from want of union and co-operation between institutions engaged in doing similar work, and that, on the other hand, in endeavouring to establish order and method, that general and direct interest in each institution, which is the source of its support, should not be destroyed. More than this, there was the difficulty to meet which confronted nearly all charitable undertakings—how to relieve suffering promptly and efficaciously without putting a premium on improvidence, and without encouraging those who could help themselves to look for help to their neighbours. It was no easy problem to solve—probably an entirely satisfactory solution of it was not within our reach; and we must be contented, as in many other human affairs, with a more or less imperfect makeshift. Lord Derby impressed upon his hearers that the benefits conferred by a hospital were not to be measured only by the number of cures, or alleviations of sufferings which it brought about; the accumulation of scientific knowledge by observations made within its walls, gave ground for hope of a progress which should be practically unbounded, each step gained being secured to mankind for ever. A religious ceremony was conducted by the Bishop of London, and at its close, after singing the National Anthem to the accompaniment of Mr. Dan Godfrey's band, the visitors proceeded to inspect the new building. The ground-floor is devoted, in about equal parts, to the requirements of the out-patient department, and of the administrative staff, but contains a long room, provided with gallery and stage, for holding the "entertainments"

which are given to the patients, at short intervals, during the winter and spring. The mazarin floor contains accommodation for the nursing staff. The first and second floors contain the wards, which open off a long gallery running along the front of the building. At the centre of each gallery, there is a short transept, which makes a handsome dining-hall. The general arrangement of the wards and galleries, which was found to work well in the old building, is thus reproduced in the new. The third and highest story is occupied by the kitchens, which communicate with the gallery by two small lifts. There is also a large lift for patients and heavy goods, which runs from the basement upward to each floor. Hot and cold water are laid on throughout the building, and each gallery is also provided with taps of filtered water from a special cistern-filter. On Wednesday evening, the lady-superintendent and resident medical staff entertained a party of friends at a *soirée dansante* in the "entertainment-room", which is well adapted for such a purpose.

SCOTLAND.

PROPOSED CONSUMPTIVE HOSPITAL FOR ABERDEEN.

THE trustees of Mrs. Allan have offered a sum of £2,000 for the establishment of a hospital for consumptive cases in Aberdeen. The managers of the infirmary remitted the matter to a committee, who obtained the opinions of the members of the medical and surgical staff regarding the proposal. The balance of opinion seemed to be in favour of instituting such a hospital. Ultimately it was agreed to consider as to the expediency of altering the older portions of the infirmary buildings, with the aim of forming them into wards, or a hospital for "chest disease."

ADULTERATION OF MILK IN GLASGOW.

FOR some time the authorities in Glasgow and elsewhere have experienced considerable difficulty in obtaining a conviction in cases of milk adulteration. This has been due in a great measure to the interpretation put upon the words of the Adulteration Act by the local magistrates. With a view of remedying this uncertain state of the law, the Glasgow sanitary authorities recently carried a case to the higher courts for their opinion in the matter, when a decision was given in favour of the view which has been held all along by the authorities as the only reasonable interpretation of the Act, namely that the putting of water into milk meant adulteration. The effect of this decision will probably be that convictions will now be got in this important class of cases, where they could not be got before, and our sanitary authorities are to be congratulated on the action they have taken in the matter.

REGISTRAR-GENERAL'S RETURNS.

FROM the returns of the Registrar-General for the week ending June 3rd, it appears that the death-rate in the eight principal towns during the week was 22.9 per 1,000 of estimated population. This rate is 2.3 above that for the corresponding week of last year, and 0.3 above that for the previous week of the present year. The lowest mortality was recorded in Dundee, viz., 15.0 per 1,000; and the highest in Greenock, viz., 30.4 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 3.6 per 1,000, or 0.3 above the rate for the previous week. Whooping-cough continues to be the most fatal epidemic in Glasgow. Of the 11 deaths from fever in Edinburgh, 10 were attributed to typhoid. Acute diseases of the chest caused 125 deaths, or 7 more than the number registered during the previous week. The mean temperature was 55.4°, being 2.3° above that of the week immediately preceding, but 4.7° below that of the corresponding week of last year.

THE TEACHING OF DEAF-MUTES.

AN interesting lecture was recently delivered at Greenock by Professor Graham Bell, the inventor of the telephone, on the teaching of deaf-

mutes, when he gave an exposition of the "lip system" of teaching, with suggestions as to how it should be carried out. He considered that the day school established in the Greenock academy was to his mind the ideal school for the deaf and dumb, the deaf children being together in small numbers among large numbers of children, with full power of hearing. Professor Bell also pointed out that he thought it was the duty of school boards to assist parents who might be in poor circumstances to educate their deaf children. At the close of the lecture, which was listened to with much attention, four girls who had been taught in the academy were brought forward and examined, the results being of a most gratifying and successful character.

HEALTH OF GLASGOW.

THE report of the medical officer of health for the fortnight ending May 27th, states there were 533 deaths registered, representing a death-rate of 27 per 1,000 living. In the corresponding fortnight of last year the weather was warmer, more equable in temperature and wetter. The death-rate was 23, or 4 per 1,000 less, a difference almost wholly arising from the greater fatality of pulmonary diseases this year. There were 138 such deaths in the corresponding period last year, against 201 this year—an increase of 46 per cent. There were six deaths from fever, all being enteric. The number of deaths from infectious diseases of children was 38, viz., 27 from whooping-cough, 9 from measles, and 2 from scarlet fever. It would appear, therefore, that while infectious diseases are remarkably in abeyance as causes of death, pulmonary diseases have not been so fatal since April of last year. The number of deaths so classified during the last fortnight considerably exceeds those of any fortnightly period this year. The number of cases of fever registered was 32, viz., 27 of enteric fever, 1 of typhus, and 4 undefined. There were also 78 cases of whooping-cough, 68 of measles, 25 of scarlet fever, and 7 of diphtheria registered, of which 12 were removed to hospital, and the remainder kept under supervision at home.

THE NEW GLASGOW DISTRICT ASYLUM.

THE proposal of the Glasgow District Board of Lunacy to establish their new asylum near to Carnwath, about thirty-six miles from Glasgow, is meeting with a good deal of opposition. The City Parochial Board, at their recent meeting, passed resolutions condemning the proposed site, on the grounds that the distance from Glasgow added to the difficulties, discomfort, and even danger connected with the conveyance of insane patients, and that there will be incurred a continual loss of time, and expense in reaching the patients, both on the part of the authorities and the friends of the patients resident in the asylum. Matters are not either rendered any smoother by a feeling that has arisen that there was a tacit understanding that any new asylum would not be fixed at a greater distance from Glasgow than about twelve miles. The whole subject has yet to come under the official cognisance of the General Board of Lunacy, and no doubt they will weigh carefully all sides of the question before coming to a decision.

CONTRAVENTION OF THE PUBLIC HEALTH ACT.

AT Glasgow, on June 7th, a conviction was obtained, at the instance of the local authority, against a manufacturer or cleaner of gut, the business being certified by the medical officer to be injurious to the public health. Dr. Russell stated that the locality was a poor and crowded back court, and that the business was carried on at night in a shed, without precaution, and was extremely offensive. As the defender had paid no attention to requests from the authorities to discontinue the work, a severe fine was inflicted.

THE CHAIR OF SURGERY IN EDINBURGH UNIVERSITY.

FOR this chair, vacant by the death of Professor Spence, rumour is already busy with the names of various candidates. One of these, Mr. Chiene, has already issued his application. The others mentioned are Dr. P. Heron Watson, Dr. Joseph Bell, and Dr. John Duncan—all of

whom are at present lecturers on surgery or on clinical surgery in Edinburgh; so that local men show a good number from which to elect. The names of Mr. Lister, and of Professor Macleod of Glasgow, have also been mentioned in Edinburgh; but perhaps with as little ground as there often is for such rumour. This chair, apart from its position and the beds it confers in the infirmary, is of considerable pecuniary value, as it is attended by fourth as well as second years' students. The appointment is in the hands of the Court of Curators of the University, in which the representatives of the Town Council are in a majority. No time has been fixed as yet for the election.

THE DUNDEE ROYAL INFIRMARY.

At the annual meeting of the directors and supporters of the Dundee Royal Infirmary, held there on Monday, a report was read by the chairman on the question, whether a children's hospital or a separate children's ward should be erected in connection with the infirmary. It was resolved not to proceed further with the matter at present, until it has matured by being before the public for some time. During the past year, 1,652 cases had been admitted, showing a slight decrease on the admissions of the previous year; 1,670 cases had been treated to a termination in the last year, as compared with 1,677 in the year before. The total number of cases of fever had risen to about the average of the previous six years; but the deaths from typhoid only numbered 19, as compared with 45 in the previous year. The mortality all over the hospital was seven per cent., as compared with eight the preceding year. In the different divisions of the hospital, the respective mortalities were: medical, 9 per cent.; surgical, 4 per cent.; and fevers, 11.9 per cent. Financially, the Dundee Infirmary is to be congratulated, as the revenue amounted to £6,487, and the expenditure to £6,083; while the debt of former years has been reduced to £1,289. It is, however, to be noted that £1,500 will have to be expended in renewing dilapidated portions of the stonework of the building, owing to decay, and also on chimneys. The sum of £4,911 was received as legacies during the year.

IRELAND.

DR. PETIT, Medical Superintendent of Donegal District Lunatic Asylum, has been appointed, by His Excellency the Lord-Lieutenant, to a similar position in the Sligo Lunatic Asylum.

THE vacancy on the medical staff of the Mater Misericordie Hospital, caused by the death of Dr. John Hughes, physician to the hospital, has been filled by the appointment thereto of Mr. Michael Boyd, late surgeon to St. Michael's Hospital and Dispensary, Kingstown.

THE outbreak of fever at Lurgan, which was checked for a time, has again begun to assume alarming dimensions, and it is feared that the epidemic, which is of a virulent type, will be attended with a high rate of mortality.

LIGATION OF THE INNOMINATE ARTERY.

MR. THOMSON, of the House of Industry Hospitals, ligatured this vessel for subclavian aneurysm in the Richmond Surgical Hospital on Friday, the 6th instant. The patient is aged about 50 years, and up to the present no unfavourable symptom has appeared. The vessel was tied with the kind of ligature suggested by Mr. Barwell.

THE ROYAL UNIVERSITY OF IRELAND.

For the first medical examination, which begins on Monday, June 19th, there are 130 candidates; for the second examination, 110; and for the third and final degrees, between 70 and 80. The examinations will be continued till July 3rd. By permission of the Board of Trinity College the practical portion of the examinations will take

place in the School of Physic of the University of Dublin. The other portions of the examinations will be held in the Earlsfort Terrace Building and in several of the city hospitals.

CORK FEVER HOSPITAL.

At a recent meeting of the Committee, Dr. W. Beamish, senior physician of the hospital, sent in his resignation. Dr. Beamish has been one of the visiting staff for the past forty-six years, having succeeded his father, who held a similar post for upwards of fifty years, in 1836. He was attached to the hospital in the famine years, when typhus fever was prevalent, and was attacked by that disorder in the discharge of his duties. The Committee expressed their regret at his resignation, which they understood was final, otherwise they would have requested him to reconsider his determination, and have appointed him consulting physician, and intend to present him with an address in recognition of his long and valuable services to the hospital. Dr. Macnaughton Jones succeeds Dr. Beamish as Senior Physician, while Dr. Moriarty fills the post vacated by Dr. Jones.

LISMORE UNION.

We recently referred to the decision of the guardians in reference to their treatment of Dr. O'Reilly, medical officer of the workhouse, whom they requested to resign, in consequence of some disputes between him and the master and fever hospital nurse. The Local Government Board, last week, wrote in reference to the recent resolution of the guardians, censuring the master and nurse, and calling upon the medical officer to resign; and pointed out that, having regard to the facts elicited at the sworn inquiry, the course pursued with regard to the medical officer was scarcely fair to that gentleman. They requested the guardians to reconsider the matter, with a view to adopting a similar course with the master and nurse, as that which they had felt it necessary to pursue in the case of Dr. O'Reilly. We may add, that Dr. O'Reilly has been fifteen years connected with the workhouse, during which he attended several outbreaks of small-pox and typhus fever; that he contracted two attacks of fever while in the discharge of his professional duties; and that there never has been a single complaint brought against him. After some discussion, it was decided to convene a special meeting of the guardians to consider the matter.

ROYAL MEDICAL BENEVOLENT FUND.

THE fortieth annual meeting of this Society was held on Monday, June 5th, at the King and Queen's College of Physicians. There was a numerous attendance of members. The chair was taken by Dr. George Johnston, President of the College. Dr. Arthur Benson, honorary secretary, read the report, which stated that during the year *ad interim* grants had been made in ten cases. In five of these, assistance to the amount of from £30 to £5 was granted. Of the applications for consideration at the annual distribution five were from medical men, eighty-seven from widows of medical men, and twelve from orphans. The amount at present available for distribution was £1,210, of which £1,024 had been adjudicated, viz. £155 to medical men, £741 to widows, and £128 to orphans, leaving a balance of £186. The total of applications in the year had been 104, as against 113 last year. The donations and bequests during the financial year had amounted to £46, and £100 had also been received from the representatives of the late Dr. Hans Irvine. Eighty-five pounds had been added to the funded property of the society. Reports had been received from the branch societies throughout Ireland, and also from Bombay and Madras. Dr. William Thomson, honorary treasurer, read a statement of accounts, which showed a balance in bank to the credit of the society of £1,254. A cheque for £20 had been received from Dr. Chaplin, outgoing President of the College of Surgeons.

SOCIETY FOR FURNISHING NURSES FOR THE SICK POOR, DUBLIN.

DUBLIN is a large manufacturing town, employing many thousands of people, and its chief trade being carried on to a considerable extent in heated rooms, very often not sufficiently ventilated, and injurious to

the inmates, it necessarily follows that there must arise a corresponding amount of disease. Consumption prevails to a considerable extent among the factory hands, and as these cases, more especially in the advanced stages of the disease, are not admitted to the only general hospital in the town, the nurses provided by this society are of great benefit, visiting as they do the sick poor in their homes. They also supply the sick with nourishment and medical comforts, and also with articles of clothing, and are further of use by instructing the families of the poor in the preparing of food and in the management of the sick. Only eight years established, the benefits of the Society have been incalculable, and the good accomplished by its means has surpassed the most sanguine expectations of its founders. The work is now being carried on in six districts, but funds are urgently required that the work may be extended over the entire of Belfast. The cases attended have been more numerous last year than usual, and the financial condition of the Society appears satisfactory, as there was a balance in hand of £310 12s. 9d.

ROYAL COMMISSION ON THE MEDICAL ACTS.

THE report of the Royal Commission on the Medical Acts is completed and signed. It will shortly be published, and will, we understand, be found to include a concession of the two capital points for which the British Medical Association have from the first contended, viz., the direct representation of the medical profession in the General Medical Council by elected members, and the formation of conjoint boards for examination. It will be recommended that four direct representatives be included in the remodelled Council; that the number of representatives allotted to universities and corporations be reduced to eight; and that the Crown, as at present, have the right of nominating six representatives. In a minority report, opinions will be found expressed, representing the well known objections and arguments urged against direct representation of the profession in the Medical Council.

On the question of Conjoint Medical Boards to provide an adequate minimum examination and qualification to practise, the Commission are, we understand, agreed in favour of such Conjoint Boards; and they recommend a machinery by which such Conjoint Boards can be formed without injury to higher qualifications.

ROYAL COLLEGE OF PHYSICIANS.

AT an extraordinary meeting of the College, on May 30th, the PRESIDENT drew the attention of the College to advertisements of medical works which had recently appeared in newspapers. He added that, feeling it to be part of his duty to watch over the honour even more than the interests of the College, he could not but express his strong disapproval of the practice of advertising medical works in non-medical journals, and the custom, now too prevalent, of giving certificates commendatory of preparations either medicinal or alimentary—certificates which were generally used for trade purposes, often contrary to the wish or intention of those who gave them. The opinion he had expressed was entirely in accord with that formerly entertained by the Fellows, who had passed a resolution in June 1873 as follows, and which was sent to every Fellow and Member of the College: "That the practice of medical authors frequently advertising their own works in the non-medical journals, and especially with the addition of laudatory extracts from reviews, is not only derogatory to the authors themselves, but is also injurious to the high interests of the profession."

The SENIOR CENSOR then gave notice of his intention to propose the following resolution at the next meeting of the College: "That the system of extensively advertising medical works in non-medical journals, and the custom of giving laudatory certificates of medicinal and other preparations, whether for publication or not, is misleading to the public, derogatory to the dignity of the profession, and contrary to the traditions and resolutions of the Royal College of Physicians."

The following were elected Fellows: James Alexander Grant, M.D., and Henry Blane, M.D.

Thanks were voted to Sir William Mac Cormac for a number of photographs of the statue of Harvey.

The Murchison Scholarship was formally presented to Mr. Charles F. Coxwell.

The report presented to the College by the Committee appointed to consider the report of the visitors of the examinations was discussed,

and the following resolution adopted: "The College acknowledges the receipt of the visitors' report, and desires to say that it will continue, as it has hitherto, to use every means at its command, for securing the completeness and efficiency of its examinations, in both their scientific and practical aspects."

The report of the Committee was referred to the Council.

Dr. QUAIN gave notice of his intention to propose the following regulation at the next meeting: "That the Council, on presenting the list of members nominated for election by the College to the Fellowship, shall briefly state the grounds on which in each case the member is proposed for election as a Fellow."

[The publication of this and other matter has been unavoidably delayed in consequence of unusual pressure on our space.]

THE CONVICT DEPARTMENT.

WE understand that the Home Secretary, besides inviting prisoners to complain of the medical officers on every possible occasion, for real or imaginary grievances, has directed that all such complaints are to be brought to his personal notice. We are also informed that he has taken the appointment of surgeons to jails and prisons out of the hands of the chairman of convict prisons, who has hitherto been entrusted with that patronage. The medical profession has, however, been always true to itself; and we trust that it will now again show that it has power to exercise some voice in the treatment of its members. We have often wondered how good men could enter such a service, with its enormous responsibility, inadequate pay, and no prospects. Now, however, with the sword of Damocles, in the shape of coroners' inquests and instant dismissal on the *ipse dixit* of a criminal, hanging over the heads of the medical department, it is not likely that many will aspire to the honour of an appointment as assistant-surgeon in Her Majesty's convict service. We certainly cannot recommend it, until it undergoes material improvement in many ways.

HISTORY OF THE JOINT COMMITTEE ON STATE MEDICINE

OF THE BRITISH MEDICAL AND SOCIAL SCIENCE ASSOCIATIONS.

AT the annual meeting held at Dublin in 1867, Dr. H. W. Rumsey read an elaborate and comprehensive paper on State Medicine in Great Britain. In the discussion which followed, Mr. G. W. Hastings, referring to a notice, which had been given by Dr. Stewart, of a motion for the appointment of a Committee on Legislation in State Medicine, suggested that it should be an instruction to the Committee to co-operate with the Health Committee of the Association for the Promotion of Social Science. As Secretary of the latter Association, he promised that any co-operation on the part of the British Medical Association would be cordially received.

On the proposal of Dr. Stewart, the following resolutions, embodying the valuable suggestion made by Mr. Hastings, were adopted.

"That the Committee of Council be instructed to direct their early and special attention to the amendment of the sanitary laws; to invite the co-operation, for this end, of the Council of the National Association for the Promotion of Social Science; and to urge the Branches of the Association to promote the same important object by local efforts, by representations to individual members of Parliament, and, if need be, by deputations to Her Majesty's Government."

"That a Committee be appointed, consisting of Dr. Acland, Dr. Symonds, Dr. Falconer, Dr. Lankester, Dr. Rumsey, Dr. Burke, Dr. Mapother, Dr. A. T. H. Waters, Dr. Tindal Robertson, Dr. Gairdner, Dr. Ransome, Dr. J. E. Morgan, Dr. Philipson, and Dr. Stewart, to collect information, in such manner as they may think best, on the subjects brought before the Association by Dr. Rumsey; and that the Committee of Council be empowered to make such pecuniary grant as the funds of the Association will permit towards the expenses of this inquiry."

The Committee thus appointed met twice before the meeting of the Association broke up, and appointed Dr. Acland chairman and Dr. A. P. Stewart secretary. They resolved that every endeavour should be made to induce the Government to undertake the inquiry referred to in the resolution; and, in the event of this responsibility being declined, they thought it advisable that it should be undertaken by the Committee, either singly or in connection with the Social Science Association. They determined to limit the inquiry for the present to the subjects of registration, medico-legal investigations, and sanitary administration; and schedules of queries on these subjects were drawn up, at the request of the Committee, by Dr. Rumsey and Dr. Stewart. They were, however, left for the consideration of the Joint Committee, the appointment of which was contemplated.

In April, the Committee adopted a series of resolutions in reference to the Artisans' and Labourers' Dwellings Bill then before Parliament, and also a memorial to the General Medical Council, praying them to take steps for defining the special training and qualifications required for medical officers of health. The request met with prompt and gratifying attention from the Committee of Council, who appointed a committee on the subject.

The Council of the Social Science Association having appointed a Committee, with Sir J. P. Kay-Shuttleworth as chairman and Mr. William Clode as secretary, the Joint Committee of the two Associations met on May 1st. Two questions came under consideration; viz.: 1. "What should be the mode, nature, and extent of the inquiry"; 2. "What steps should be taken to prevent the introduction of further complications by fresh legislation".

With regard to the first question, the Committee was unanimously of opinion in favour of the inquiry being conducted by a Royal Commission. The nature and extent of the inquiry, in their opinion, involved the questions of areas of administration, the appointment and removal of the officers required, or proposed to be required, for the administration of the law, the subordination or independence of those officers, their remuneration and duties, and the appointment of specially trained officers for large districts. The desiderata were, in the opinion of the Committee, an amendment of the system of Registration of the causes of death; the institution of returns of still-birth and of cases of sickness not proving fatal; the appointment of skilled Medical Assessors as advisers in all medico-legal inquiries; and the compulsory appointment in large districts of highly trained and well paid Officers of Health. On May 22nd, the Committee had an interview, to explain these views, with the Lord President of the Council, the Secretary of State for the Home Department, and the President of the Poor-law Board. A large number of the members of the Joint Committee attended this deputation, which was accompanied by Sir Thomas Watson, Dr. Burrows (President of the General Medical Council), Dr. Sibson (President of the Council of the Association), and several members of Parliament. In November 1868, the appointment of a Royal Commission was announced; but, to the disappointment of the Committee, it was found that its investigations were restricted to England and Wales, excluding the metropolis, Scotland, and Ireland. They therefore readily acceded to a request conveyed to them by the Metropolitan Counties Branch of the British Medical Association, that they should solicit an interview with the Home Secretary and the Chancellor of the Exchequer in reference to the extension of the inquiry to the metropolis, to Scotland, and to Ireland. A memorial to the same effect was also prepared, and was adopted at the annual meeting of the Association held in 1869. In the following year, the Committee again applied to the Home Secretary to reconsider his decision as to the area to be included in the inquiry, but without success. Dr. Rumsey was appointed chairman of the Committee.

At the annual meeting at Plymouth in 1871, the Joint Committee presented an elaborate report, containing the results of their examination of the report of the Royal Sanitary Committee, which had been published. The Committee, while recognising the general value of the report, pointed out certain defects in the method and scope of the inquiry, and errors of conclusion which had resulted from these defects. They expressed regret at the limitation of the inquiry to England and Wales, and the absence of personal local inquiry for the purpose of supplementing written answers to schedules of questions; as well as at the absence of provision for uniformity in constitution, mode of elections, and duties of local boards. Reasons were given for preparing the formation of wider administrative areas than the urban and rural districts; one of them being that the large areas would supply a superior machinery for the appointment of scientific officers, whether medical or engineering. With regard to the duties of medical officers of health, the Committee, while concurring with many of the statements and recommendations of the Report, pointed out that some of the principles asserted and suggestions made were open to objection. They deprecated the tendency of the Report of the Committee to assume that the duties of health-officers were to be performed by the medical practitioner as a subordinate part of his work, notwithstanding the recommendations contained in two important Minutes issued, several years previously, by the General Board of Health. The Committee observed that—

"The very position and duties of the Poor-law Medical Officers at once point to the valuable assistance they would render the chief officer of health of a district, as reporters of sickness and its causes; and as dischargers and controllers in sub-districts their services would be indispensable. Our estimate of the functions to be discharged by the medical officer of health, of the special qualifications requisite, and of the time to be devoted to the discharge of these duties, contemplates a class of

officers entirely special, and without the distractions and difficulties which ordinary practice would necessarily entail."

They also pointed out that the report of the Commission contained no complete statement of the special duties of the medical officers of health; that there was no suggestion as to a definite arrangement for co-operation between urban and rural sanitary authorities; and that, while the Commissioners suggested that assistance and encouragement should be given to medical officers of health to study sanitary questions, they did not state how this suggestion was to be carried into effect. The Committee also protested against the idea that the duties of medical officers of health could be discharged by "young men entering on practice". They also pointed out that the Report of the Commission omitted to recommend the enactment of special regulations for the suppression of infectious diseases. They expressed the opinion that the right of separate appointment of chief health-officers by municipalities should be limited to large towns, and that, for other places, the health-officers should be appointed by a county or other intermediate authority. They recommended that, in the absence of officers specially appointed, the Poor-law medical officers might be authorised to act, with suitable remuneration, as assistant or deputy health-officers. In conclusion, with reference to a central authority, they expressed their appreciation of the importance of providing that every existing department relating to the public health, "including several under the Home Office, the Privy Council, the Board of Trade, and the Poor-law Board, besides the General Register Office, the Lunacy Commissioners, and the General Medical Council," should be represented in a supreme Council of Health, to be presided over by one minister. The report was adopted by the meeting, and the Committee was re-appointed.

In February 1872, a Public Health Bill was introduced in the House of Commons by Mr. Stansfeld, President of the Local Government Board. Soon afterwards, a deputation of the Joint Committee waited on him, and brought under his notice the following resolutions which had been adopted by the Committee.

1. That we support the principle of consolidation of divers authorities, as adopted in the Local Government Board Act with regard to the central authority; and we ask that this principle may be more fully carried into effect in the constitution and jurisdiction of the Central Board itself, by including the sanitary work of other departments of central administration (if any) not yet included in that consolidation.
2. That we urge the extension of the same principle to local authorities; and that, in any improved organisation of local authorities, all the objects of local government may be included, as far as practicable, under one authority in each district.
3. That there should be one uniform and high class of intermediate authorities, except in certain cases (such as those of the largest towns) hereafter to be defined, but all subject to the control of the central authority.
4. That in every county, or part of a county, having a separate commission of the peace, there should be constituted an administrative and financial board or court, composed of an equal number of justices of the peace and of members elected by the several local authorities, respectively governing the districts, or any parts thereof, situate within such county, with power to exercise, by joint committees, jurisdiction over water-borne areas extending beyond a county.
5. That such county boards or courts be empowered to adjust the boundaries of the subordinate and represented districts, subject to the approval of the central authority; to make good any defects of local sanitary administration; to compel the execution of sanitary measures; to superintend the construction and care of the roads and drains; to control the provision of medical post relief, workhouses, hospitals, and other institutions, maintained by the rate; and to appoint one or more highly qualified medical officers of health, whose whole time should be given to the performance of their special duties; as well as surveyors with civil engineering qualifications.
6. That the medical officers of districts for medical relief in dispensary districts, in all places where officers of health are not specially appointed, may be required to act, with proper remuneration, as deputies to the chief officers of health.
7. That, with regard to the registration of sickness, the completion of reports of sickness and its causes, from the returns of medical officers and medical relief institutions, and the revision of the returns of deaths and causes of deaths, be committed to the chief officers of health, within their respective districts, and be by them forthwith transmitted to the central authority.
8. That, following the precedent which has been wisely established in charging a moiety of the expenses of medical relief upon the Consolidated Fund, and bearing in mind that the objects of a more uniform organisation are, to a great extent, imperial, and that the machinery should be subject in a degree to central control, it is important that a moiety of the whole expense of medical

officers of health and other scientific officers, and of the registration of sickness, should be borne by the National Exchequer.

On March 14th, the Joint Committee met, and passed the following resolutions with regard to the Bill:—

"That no legislation can be satisfactory which does not consolidate the existing sanitary laws." "That no legislation can be satisfactory which does not constitute one local authority under one law in each sanitary district." "That there can be no efficient compulsory action without the constitution of an intermediate authority of a high order acting over an independent district."

Resolutions were also passed in favour of the appointment of chief medical officer of health in districts, and of the charging a moiety of the expenses on the Consolidated Fund. The committee afterwards had an interview with several Members of Parliament for the purpose of explaining their views.

At the annual meeting of the Association in the same year, the Joint Committee presented a report, in which regret was expressed that the principles laid down by the Committee as essential to reform of the laws relating to public health, had been ignored in the Public Health Bill which had passed through Parliament. In the expectation that the amendment of the sanitary laws would have, in accordance with the promise of Her Majesty's Government, to be considered in the next session of Parliament, they suggested to their successors the importance of collecting particulars of information relating to medical appointments under the new Act.

In 1874, the Committee issued a large number of circulars asking for information as to the working of the Public Health Act of 1872.

In 1875, another Public Health Bill was introduced into Parliament, but the Committee took no part in the proceedings with regard to it, as it was almost entirely a measure for consolidating existing statutes, and was a step in the right direction, inasmuch as it would enable the subject to be studied in a single Act. They observed with satisfaction that, during the discussion on the Bill, there had been a steady approximation to the views constantly maintained and the principles persistently brought forward by the Committee; and that several important principles, such as the adoption of larger areas, and the readjustment of boundaries, seemed likely to be adopted.

In the early part of 1876, the Joint Committee determined on summoning a Sanitary Conference to discuss the necessity for further sanitary legislation. To it were invited the Mayors of Boroughs in England and Wales, of 25,000 inhabitants and upwards, Chairmen of Local Boards, Chairmen of Improvement and Rural Districts, Medical Officers of Health, Engineers, Surveyors, Solicitors, and Sanitary Authorities, and others interested in sanitary matters. The Conference was held on May 11th, 1872, and was attended by about 150 gentlemen from all parts of England and Wales. Lord Aberdare occupied the chair, and Lord Alfred Spencer Churchill, Dr. Lyon Playfair, and Dr. Wm. Farr, acted as Vice-Presidents. After discussion, a series of resolutions were adopted, which agreed in the main with those passed in 1872.*

* The resolutions were as follows. "1. That the existing division of the country into urban and rural districts does not enable local authorities to fulfil their obligations in the most effective manner. 2. That the same sanitary laws be applied to the whole area of the country without distinction. 3. That, in any reconstruction of local areas, it is desirable to keep in view the advisability of securing one subdivision of the country for sanitary and other purposes of local government; such subdivision to be, as far as possible, on the lines of the existing municipalities, unions, and counties. 4. That, in the opinion of this Conference, it is desirable that a Commission be appointed to consider and readjust, with the concurrence of the Local Government Board, the boundaries of the existing districts, or any new districts to be hereafter formed. 5. That the appointment of a County Board, consisting partly of elected members and partly of others nominated by the Court of Quarter Sessions, is desirable. 6. That the duty of such county boards, as far as they relate to sanitary matters, should be to exercise a control over the salaries and dismissals of the officers of local boards, not being municipal boroughs; to hear appeals from one portion of a district against the decision of their board as to the incidence of expenditure for works of only partial advantage, and to undertake the conduct and supervision of such works as, from their nature and expense, cannot be undertaken by separate local boards. 7. That the powers and machinery at present possessed by local sanitary authorities are inadequate to the purposes for which they are intended; especially, but not solely, in respect of means for preventing the spread of disease, from the want both of early information of its existence, and also of the means of checking its progress; from want of power to prevent the erection of houses on unhealthy and improper sites, and to secure in certain cases due provision of water; and from want of means to acquire, with sufficient facility and economy, land for public purposes. 8. That the incidence of taxation for sanitary and other purposes of local government should, as nearly as possible, be proportional to the direct benefit accruing to the several parts of the districts. 9. That the officers of sanitary authorities should, as far as is practicable, be restricted from other than the official duties for which they are specially engaged; and that, in order to promote this object, it is essential that the area of supervision should be made as large as can be efficiently worked. 10. That a health-officer or assistant should, where it is practicable, be appointed (a) to every local government district, or combination of districts, such districts to be constituted, as to area and population, as already suggested; and (b) to every county. 11. That the several officers should be in communication with each other, and with the health officer especially attached to the County Board. 12. That the salaries be such as to insure the services of first-class members of the medical profession, devoting themselves entirely to the health-

In June, 1877, the Committee drew up a memorial carrying out the spirit of the resolutions adopted at the meeting held in May 1876, and concluding with suggesting the following changes in the existing law as being calculated to materially aid those charged with its administration:

"That the present existing distinctions between urban and sanitary authorities should be removed; and that all sanitary authorities should be clothed with similar powers; and that these powers should be extended in order to enable them to carry out all purposes of local administration within their districts.

"That, in each county, or division of a county, a representative authority of a high order should be constituted for the execution of joint works, to aid, and, in case of default, to exercise control over sanitary authorities."

This memorial was presented to Lord Beaconsfield, the Prime Minister, with a request that he would receive a deputation on the subject. His engagements, however, prevented him from complying therewith.

At the annual meeting in 1877, the Joint Committee, in their report, expressed satisfaction that a Bill had been introduced into Parliament, in which it was proposed to place the metropolis, as well as the provinces, under the control of the Local Government Board in regard to sanitary matters.

In June 1878, at a meeting of the Committee, it was resolved, that an inquiry should be addressed to the extra-metropolitan medical officers of health, asking (1) whether they report periodically as to the sanitary condition of their districts; (2) if so, how often and in what form; (3) whether such reports are printed, and, if so, whether circulated, and the number published. Dr. Stewart, Mr. Michael, Mr. Clode, Mr. Ernest Hart, and Mr. Liddle, were appointed a subcommittee to report on the answers received.

At the same meeting, the Committee agreed on a memorial to the Duke of Richmond and Gordon, Lord President of the Council, recommending that clauses should be inserted in the Bill for the Amendment of the Medical Act, providing that the conjoint boards should examine candidates in the subject of State Medicine, and grant certificates of competency, to be registrable as qualifications in State Medicine for medical appointments in the public health service. Copies of the memorial were ordered to be forwarded to the Duke of Richmond, Mr. Secretary Cross, Mr. Slater-Booth, and Dr. Acland, President of the General Medical Council; and Dr. Stewart, Dr. Tyacke, Dr. Corfield, and Mr. Ernest Hart, were appointed a subcommittee to confer with Ministers and others as to the best means of carrying out the wishes of the Committee in respect to the memorial.

In July 1878, the Committee presented a memorial to the Right Hon. G. Slater-Booth, President of the Local Government Board, with reference to the Bill which had been introduced into Parliament to amend the law relating to the administration of county business, and to make further provision for county government. They submitted: "1. That, until all powers of local government are intrusted to one body within improved areas of jurisdiction, registration districts offer the most suitable areas of representation in any scheme for improved county government and administration; 2. That the county board, to be constituted under the Bill, should be a representative body, having full powers to administer joint institutions, to execute joint work for all or some districts within the county, as the case might be; and to exercise control over all local authorities, when in default; and, when necessary, to join with adjacent counties for purposes affecting their mutual interests."

It does not appear that, for the last three years, any reports have been presented by the Committee to the Association. It is still, however, ready for active duty. At the last annual meeting of the Association, the following members were appointed: Mr. L. Angell, Dr. J. T. Arlidge, Dr. E. Ballard, Dr. C. O. Baylis, Dr. Beddoe, F.R.S., Dr. F. T. Bond, Dr. W. E. Buck, Mr. E. Chadwick, C.E., Dr. A. Carpenter, Dr. G. W. Child, Mr. W. Clode, Mr. R. R. Collins, Dr. W. H. Corfield, Dr. T. O. Dudfield, Dr. G. F. Duffey, Dr. R. Farquharson, M.P., Dr. Farr, C.B., F.R.S., Dr. Cornelius Fox, Dr. W. T. Gairdner, Capt. D. Galton, C.B., F.R.S., Dr. Grimshaw, Mr. Ernest Hart, Mr. G. W. Hastings, M.P., Mr. A. Haviland, Mr. B. Latham, C.E., Mr. J. Liddle, Dr. H. D. Littlejohn, Dr. R. D. Lyons, M.P., Mr. W. H. Michael, Q.C., Mr. F. G. P. Neison, Colonel Oldfield, Dr. H. F. Parsons, Dr. Phené, Dr. G. H. Philipson, Mr. F. S. Powell, Dr. A. Ransome, Dr. B. W. Richardson, Dr. Joseph Rogers, Dr. A. P. Stewart, Mr. G. J. Symonds, F.R.S., Dr. J. W. Tripe, Dr. N. Tyacke.

service of the country. 13. That it is desirable in future to appoint, at least to the higher offices, men who have passed an examination in State Medicine. 14. That the above regulations are equally desirable in the cases of surveyors and inspectors of nuisances, so far as they are applicable. 15. That, in the opinion of this meeting, the powers of the public health and other sanitary Acts which are of a permissive character should, as far as practicable, be made compulsory."

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL.

NOTICE OF MEETING.

A MEETING of the Committee of Council will be held in the Council Room of Exeter Hall on Wednesday, the 12th day of July next, at two o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary*.

161A, Strand, London, June 15th, 1882.

BRITISH MEDICAL ASSOCIATION:
FIFTIETH ANNUAL MEETING.

THE Fiftieth Annual Meeting of the British Medical Association will be held at Worcester, on Tuesday, Wednesday, Thursday, and Friday, August 8th, 9th, 10th, and 11th, 1882.

President: BENJAMIN BARROW, F.R.C.S., Consulting-Surgeon to the Royal Isle of Wight Infirmary.

President-elect: WILLIAM STRANGE, M.D., Senior Physician to the General Infirmary, Worcester.

An Address in Medicine will be delivered by W. F. WADE, F.R.C.P., Physician to the Birmingham General Hospital.

An Address in Surgery will be delivered by WILLIAM STOKES, M.D., F.R.C.S.I., Professor of Surgery in the Royal College of Surgeons, Ireland.

The business of the Association will be transacted in Eight Sections, viz.:

SECTION A. MEDICINE. (Council Room, Guildhall.)—*President*: Thos. Clifford Allbutt, M.D., F.R.S. *Vice-Presidents*: George W. Balfour, M.D.; William Henry Broadbent, M.D.; G. H. Philipson, M.D.; *Secretaries*: Edwin Rickards, M.B., 14, Newhall Street, Birmingham; H. Ashby, M.D., 13, St. John Street, Manchester.

SECTION B. SURGERY. (Recorder's Court, Guildhall.)—*President*: Augustus Pritchard, F.R.C.S. *Vice-Presidents*: T. W. Walsh, F.R.C.S.; Reginald Harrison, F.R.C.S.; T. H. Bartleet, M.B., F.R.C.S. *Secretaries*: F. E. Manby, F.R.C.S., 10, King Street, Wolverhampton; Richard Clement Lucas, M.B., F.R.C.S., 18, Finsbury Square, E.C.

SECTION C. CLINICAL MEDICINE. (Committee Room Assembly Room, Guildhall.)—*President*: William Leishman, M.D. *Vice-Presidents*: Henry Vacher, M.R.C.S.; I. G. Sinclair Coghill, M.D.; Arthur W. Edis, M.D. *Secretaries*: C. I. Cullingworth, M.D., 25, St. John Street, Manchester; Tom Bates, L.R.C.P., Worcester.

SECTION D. PUBLIC MEDICINE. (Civil Court, Shire Hall.)—*President*: Alfred Carpenter, M.D. *Vice-Presidents*: Alfred Hill, M.D.; Horace Swete, M.D.; E. T. Wilson, M.B. *Secretaries*: Geo. Haynes Fosbrooke, jun., M.R.C.S., Bidford, Redditch; Francis Leitch Anderson, L.R.C.P., Settle, Yorkshire.

SECTION E. ANATOMY AND PHYSIOLOGY. (North Wing Committee Room, Guildhall.)—*President*: George M. Humphry, M.D., F.R.S. *Vice-Presidents*: S. S. Richardson, M.D.; Frank Payne, M.D.; Gerald Vasey, M.D. *Secretaries*: J. B. Harcourt, M.D., Mason's College, Birmingham; James Hunter, M.B., L.R.C.S., 58, New Broad Street, London.

SECTION F. PATHOLOGY. (South Wing Committee Room, Guildhall.)—*President*: J. H. Jackson, M.D., F.R.S. *Vice-Presidents*: W. L. George, M.D.; H. T. Butlin, F.R.C.S.; Wm. Smith Greenhalgh, M.D. *Secretaries*: Henry C. Gifford, M.D., 14, Weymouth Street, London; J. Gwyn, F.R.C.S., 18, Gordon Square, London.

SECTION G. THERAPEUTICS. (City Grand Jury Room, Shire Hall.)—*President*: James Watson, F.R.C.S. *Vice-Presidents*: David Lister, F.R.C.S.; J. M. M. M.R.C.S.; F. A. A. M.D. *Secretaries*: Geo. Hyde, L.R.C.P., Worcester; J. A. Newell, M.D., 14, York Street, London.

SECTION H. MATERIA MEDICA. (City Grand Jury Room, Shire Hall.)—*President*: W. L. George, M.D. *Vice-Presidents*: Geo. I. F. M.D.; J. H. M.D.; J. C. M.D.; J. C. M.D. *Secretaries*: J. P. M.D.; J. P. M.D.; J. P. M.D.

SECTION I. CLINICAL SURGERY. (City Grand Jury Room, Shire Hall.)—*President*: J. H. Jackson, M.D. *Vice-Presidents*: J. H. Jackson, M.D.; J. H. Jackson, M.D. *Secretaries*: J. H. Jackson, M.D.; J. H. Jackson, M.D.

Honorary Treasurer: G. A. Sheppard, M.R.C.S., Worcester.

TUESDAY, AUGUST 8TH.

2.15 P.M.—Meeting of Committee of Council. (Committee Room off Assembly Room, Guildhall.)

3 P.M.—Meeting of the Council of 1881-82. (Council Room, Guildhall.)

4.15 P.M.—Service in the Cathedral, with sermon by the Dean of Worcester.

5 P.M.—General Meeting. President's Address; Annual Report of Council, and other business. (Assembly Room, Guildhall.)

Tea and Coffee after the Meeting.

WEDNESDAY, AUGUST 9TH. (Jubilee day).

9.30 A.M.—Meeting of Council of 1882-83. (Council Room, Guildhall.)

11 A.M.—Second General Meeting. Address in Medicine.

1.30 P.M.—Luncheon given by the Worcester and Hereford Branch to Members of the Association (limit 4 to 500), and afterwards presentation of bust of Sir Charles Hastings to the Mayor and Corporation of Worcester. (Great Hall, Shire Hall.)

3 to 5.30 P.M.—Sectional Meetings.

7.30 P.M.—Symposium Service in the Cathedral, at which, by permission of the Dean, Haydn's Sacred Oratorio, "The Creation," will be performed by the Philharmonic Society, assisted by members of the Gloucester and Hereford Choirs, and conducted by W. Done, Esq., Organist to the Cathedral.

THURSDAY, AUGUST 10TH.

9 A.M.—Meeting of the Committee of Council. (Committee Room off Assembly Room, Guildhall.)

11 A.M.—Third General Meeting. Reports of Committees. (Assembly Room, Guildhall.)

11 A.M.—Address in Surgery. (Assembly Room, Guildhall.)

2 to 4.30 P.M.—Sectional Meetings.

6 P.M.—Dinner. Tickets will not be issued later than twelve o'clock on the day of the dinner. (There will be two kinds of dinner ticket: one for those who take wine, and the other for abstainers, 21s. and 14s. each.) (Assembly Room, Guildhall.)

FRIDAY, AUGUST 11TH.

9.30 to 11 A.M.—Sectional Meetings.

1 P.M.—Fourth General Meeting. Reports of Committees. (Assembly Room, Guildhall.)

3 P.M.—Garden Party, at Madresfield Court, Great Malvern, given by the Lord-Lieutenant and the Countess Beauchamp.

Afternoon of the President and G. W. Hastings, Esq., M.P.

EXCURSIONS.

On Saturday, August 12th, there will be—1. An excursion to Malvern Hills, including the ancient British Camp, the chief interesting features of which will be explained to the visitors on the spot. 2. An excursion to Stratford-Avon to visit Shakespeare's house, the church and tomb, Shakesperian Museum, etc. The party will then proceed to Warwick and Kenilworth Castles, returning by way of Leamington. 3. An excursion to the Wye, by which the beautiful scenery on the banks of that river may be viewed either from the railway or by boats from Evesham or Malvern. Particulars of this excursion will be published in an early number. 4. There are steamers and pleasure-boats on the river Severn at Worcester, which will afford very enjoyable short trips up or down the river.

ANNUAL MUSÉEUM.

The sixteenth annual exhibition of objects of interest in connection with medicine, surgery, and their allied sciences will take place in the Market Hall, Worcester, during the second week of August, 1882. The floor space of this building amounts to 4,000 square feet. The Committee appointed to take charge of the arrangements for this Museum will be glad to receive—1. Pathological specimens (wet or dry); 2. Drawings or diagrams illustrating disease; 3. Casts or models; 4. Surgical instruments of importance; 5. Microscopical preparations; 6. Microscopical, physiological, and other instruments of investigation; 7. Instruments, drawings, etc., relating to investigations in anatomy and physiology; 8. New drugs, chemical, pharmaceutical preparations, and reagents; 9. Scientific apparatus, including drawings of models illustrating the mechanism of instruments or private drawings; 10. New medical books. It is intended that the surgical instruments, microscopical apparatus, etc., shall be arranged in sections, or improvements on the present arrangement. The pathological specimens will be arranged in alphabetical order.

The Committee are also glad to receive—1. A plan to arrange for the exhibition of specimens of disease, etc., in connection with the exhibition of the year 1883, and specimens relating to anatomy and physiology, etc., which will also be arranged, when necessary, in the order of anatomical or physiological action, or for special purposes in the exhibition of disease, etc.

The Committee are also glad to receive a catalogue, which will be as complete as possible, of the specimens to be exhibited. The Committee earnestly request that the specimens to be exhibited should be sent in early. They will be received at the Worcester Museum before the meeting, and will be on display on the 10th and 11th of August.

Communications, specimens, etc., to be addressed to the Secretary, J. H. Jackson, M.D., 14, Weymouth Street, 20, Salisbury, Worcester. During the week preceding the meeting all

[June 17, 1882.]

articles should be sent direct to the Music Hall, Worcester, and addressed to the care of the Curator of the Museum of the British Medical Association.

FRANCIS FOWKE, *General Secretary.*

London, April 13th, 1882.

BRANCH MEETINGS TO BE HELD.

SOUTHERN BRANCH.—The ninth annual meeting of this Branch will be held at the Masonic Hall, Southampton, on Thursday, June 22nd, 1882. (The President-elect has kindly undertaken to provide refreshments at the hall.) The general meeting will commence at 12 o'clock. Members desirous of reading papers or other communications at this meeting are requested to forward the titles to the Honorary Secretary before the 15th of June. No communication must exceed seven minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect at 2 P.M. Excursions will be made to the Royal Victoria Hospital, Netley, and Netley Abbey. Carriages will be provided (free of charge), leaving the Masonic Hall in time to cross the Itchen by the 3 P.M. floating bridge. By permission of Colonel Cooke, R.E., C.B., the Ordnance Survey Office will be open for the inspection of the members. The dinner will take place at the Masonic Hall, at 6 P.M. precisely, to allow time for those members who are desirous of leaving Southampton by the evening trains. Tickets, 12s. 6d. each, including light wine. The committee request that those gentlemen who intend to be present at the dinner will send in their names to Dr. Trend, on or before Tuesday, the 20th instant.—J. WARD COUSINS, M.D., Honorary Secretary and Treasurer.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—The annual meeting of the above Branch will be held at Wisbech, on Friday, June 23rd, at 2.15 P.M.; W. Groom Esq., President. The Great Eastern Railway Company have signified their willingness to facilitate the travelling of members by running a special train from Cambridge to Ely at 12.20 P.M., to catch the 12.38 P.M. train from there to Wisbech due at 1.42; and a special train from Wisbech to March at about 11 P.M. to join the up mail, for a payment of £5 in addition to the ordinary fares. If twenty members will make themselves responsible for 5s. each, the above arrangements may be easily accomplished. —BUSHELL ANNINGS, Honorary Secretary, Walthamsal, Barton Road, Cambridge.—May 31st, 1882.

GLASGOW AND WEST OF SCOTLAND BRANCH.—The annual meeting of this Branch will be held in the Western Infirmary, Glasgow, on Friday, June 15th, at 3 P.M. The President-elect, Professor George Buchanan, after taking the chair, will give a clinical demonstration on the Operation for the Radical Cure of Hernia; will discuss cases in which the operation has proved successful; and will perform the operation. Thereafter the President will conduct the members to the University, where they will inspect the Bute Hall, the Randolph Hall, and other new buildings which are approaching completion. The members will afterwards be conveyed into the city, and the annual dinner will take place at 5.30. N.B.—Members of the Association who have not joined the Branch are invited to do so by communicating with the secretary before the meeting.—**JOSEPH COATS**, Honorary Secretary.

SOUTH-WESTERN BRANCH.—The annual meeting of this Branch will be held in the Board Room of the North Devon Infirmary, Barnstaple, on Thursday, June 22nd, at 2 p.m., under the Presidency of Mr. Joseph Harper. Opportunity will be given after the meeting, if time permits, to visit places of interest in and near Barnstaple. The annual dinner will take place at the Lion Hotel at 6 p.m.; dinner tickets, exclusive of wine, 7s. 6d. each. Members intending to dine, or to read papers, or make communications, are requested to give notice to S. REES PHILLIPS, M.D., Honorary Secretary, Wonford House, Exeter. P.S.—The President invites the members to take luncheon at his house in Bear Street between the hours of 12 and 2 o'clock.

METROPOLITAN COUNTIES BRANCH.—President, EDWIN SAUNDERS, F.R.C.S.; President-elect, THOMAS BRIDGEWATER, M.B. The thirtieth annual meeting of this Branch will be held at the Crystal Palace, Sydenham, on Wednesday, July 10th, at 4 P.M. Dinner at 12. Tickets 12s. 6d. each, exclusive of wine.—ALEXANDER HENRY, M.D., W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

BATH AND BRISTOL BRANCH.—The annual meeting will be held on Thursday, June 29th, at the Mineral Water Hospital, Bath, at 4.30 P.M.; when the President-elect, Dr. J. K. S. BARNES, will deliver his address, and the general business of the Branch will be transacted.—R. S. FOWLER, E. MARKHAM SKERRITT, Honorary Secretaries.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH.—The annual meeting of this Branch will be held at the Medical Library, Peirpoint Street, Worcester, on Tuesday, June 27th, at 5 o'clock. Business: To elect Officers and Council for the ensuing year. To elect Representatives of the Branch in the General Council. The following new rules will be proposed: 1. That any gentleman wishing to become a member of this Branch shall pledge himself that he is not practising, and will not in future practise, homœopathy or any kind of irregular practice. 2. The name of any member to be removed from the roll of this Branch by a resolution carried by a two-thirds majority at a meeting of the Branch specially convened for this purpose, of which meeting fourteen days' notice shall be given. 3. That any member of this Branch whose subscription shall have remained in arrear for two years shall receive a written notice of the same from the Honorary Secretary, and should he not pay the same by the next quarterly meeting of the Branch, he shall cease to be a member of the Branch. Members wishing to read papers, or to exhibit specimens, etc., are requested to communicate with Dr. Crowe. The annual dinner will be held at the Star Hotel, at 5 o'clock. Dinner ticket, exclusive of wine, &c. 6d. Any member who desires to be present is requested to communicate with Dr. Crowe, not later than Saturday, the 24th instant.—GEORGE W. CROWE, Honorary Secretary, Shaw Street, Worcester.—June 12th, 1882.

SOUTH-EASTERN BRANCH.—The thirty-eighth annual meeting of this Branch will be held at the Royal Kentish Hotel, Tunbridge Wells, on Thursday, June 22nd, at

two o'clock precisely. The President-elect, Mr. Blackall Marsack, kindly provides luncheon at his own house, Mount Zion, from 12.30 to 2 p.m. After the meeting members will be afforded the opportunity of visiting the following places: 1. Eridge Castle and Grounds, by the kind permission of the Marquess of Abergavenny; 2. Broomhill (where there is a fine collection of pictures), by the kind permission of Sir David Salomons; 3. Sherwood, by the kind permission of Dr. Siemens. Carriages to convey the visitors will be provided by the local committee. Dinner will be served at the Kentish Hotel at 5.30 p.m. Tickets (not including wine) 7s. 6d. each.—CHARLES PARSONS, M.D., Honorary Secretary, 2, St. James's Street, Dover.—June 7th, 1882.

SOUTH-EASTERN BRANCH.—A meeting of the Executive Council of this Branch will be held at the Royal Kentish Hotel, Tunbridge Wells, on Thursday, June 22nd, at 1 o'clock.—**CHARLES PARSONS, M.D.,** Honorary Secretary.—Dover, June 14th, 1882.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual general meeting of this Branch will be held on Tuesday, June 20th, at the Grand Hotel, Colmore Row, Birmingham, at 4 p.m. An address will be delivered by the new President, Dr. E. Dewes. A ballot will be taken for members of the Branch. A resolution will be submitted that a committee be appointed in connection with the Association called "The Local Collective Investigation Committee". The annual dinner will take place at the Grand Hotel after the termination of the annual meeting, at 6 p.m.; dinner tickets, exclusive of wine, 5s. each. Members have the privilege of introducing one friend each to the dinner, whether a member of the medical profession or not.—E. MALINS, M.B., E. RICKARDS, M.B., Honorary Secretaries.

EDINBURGH BRANCH.—The annual general meeting of this Branch will be held at 5, St. Andrew Square, Edinburgh, on Tuesday, June 27th, at 4 o'clock.—CHAS. E. UNDERHILL, Honorary Secretary.

NORTHERN COUNTIES (SCOTLAND) BRANCH.—The annual meeting of this Branch will be held at Nairn on Wednesday, July 12th. Members desirous of reading papers or other communications are requested to forward the titles to the Honorary Secretary by the 30th of June.—J. W. NORRIS MACKAY, M.D., Honorary Secretary and Treasurer, Elgin.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held at the Town Hall, Chester, on Wednesday, June 28th, at 2 P.M. The Council will be held at 1 P.M. The medical practitioners of Chester will entertain the members at lunch at the place of meeting. Dinner at the Grosvenor Hotel at 5 P.M.; tickets 7s. 6d. The gardens and part of the house at Eaton Hall will be open to visitors during the day.—A. DAVIDSON, Honorary Secretary, 2, Gambier Terrace, Liverpool.—June 12th, 1832.

SPECIAL CORRESPONDENCE.

GLASGOW.

Medical Classes—Antiseptic Surgery—Glasgow Science Lectures—Food Supply—Ambulance Work.

THE medical classes of the summer session are in full working order at our different medical schools. At the University, all the practical classes are very largely attended, and the fresh entries of students are quite up to former years. The final examinations are to commence shortly, and I understand that no fewer than one hundred and six students purpose presenting themselves, which is the largest number that have ever come forward at one time. All this seems to show that our Universities are still highly valued for their medical degrees. The prospect of having a Scotch University Commission causes no anxiety in the medical department of our Glasgow University. In fact it would be rather welcomed, for it might benefit several of the chairs by pointing out how much they are in need of pecuniary grants. Without mentioning any special department, it is well known that the expenses incurred in working them are a heavy tax on the professional incomes.

The question that has been so much of late agitating the professional world, as to the advisability or non-advisability of employing Listerism in abdominal surgery, is watched with much interest by surgeons in Glasgow, which must be regarded as the birth-place of antiseptic surgery. So far, I think, our surgeons have not seen their way to relinquish the use of the spray, and of recent years the successes in ovariectomies at our infirmaries have been very gratifying. On the morning of Wednesday, May 31st, Professor Geo. Macleod operated at the Western Infirmary for a large fibroid tumour of the uterus, which was increasing considerably and causing a good deal of disturbance of the health. The operation was a tedious one, lasting over an hour, but the growth was removed, together with the greater portion of the uterus, which was cut through a short distance above the os externum. The amount of blood lost was small. The pedicle was treated with the ligature, and antiseptic precautions were adopted all through the operation, including the use of the spray. The progress of the case was most satisfactory until the eighth day, when sudden pain came on followed by collapse, from which the patient never rallied. This was found to be due to the bladder, which was accidentally injured during the operation, having suddenly given way, setting up general peritonitis.

I am sorry to see that our Glasgow Science Lectures have not been a success, financially, last winter. The report shows that there has been a marked falling off in the number of tickets sold, and also in the subscribers. No fault can be found with the scope of the lectures or the lecturers who delivered them, nor, as it was put by Dr. Fergus, the chairman of the Association, does there seem to be in Glasgow less cultivation of science, or less desire for scientific information.

Seeing how intimately connected with the health of a community is a sufficient and good food-supply, a recent occurrence possesses much interest. I refer to the arrival in Glasgow of a quantity of refrigerated New Zealand mutton, which was found to be in excellent order and condition, and none the worse for its conveyance over the ocean and through the tropics in a sailing-ship. The beautifully scientific mechanism by which the preservation of this meat has been accomplished—the Bell-Coleman refrigerating machine—cools and dries the air, so that the meat is maintained in a natural condition. Any one going into the atmosphere so cooled experiences a very chilling effect, and gets some idea of what is felt in the Arctic regions. Whether in time any suitable modification of the plan can be worked out for application to surgery it is hard to say.

Ambulance work in Glasgow cannot be said at present to be progressing very satisfactorily. It is true that the St. Andrew's Ambulance Association has been furnished with a constitution; but its working, so far, has given rise to a good deal of friction. It is to be hoped that progress will be made in what is undoubtedly an excellent work, and for which there is a large field in Glasgow. Attention has been drawn to the want in our city of a good ambulance transport service, such as exists in New York and other American cities, and which has been started recently in connection with the London Hospital in the metropolis, and also in Liverpool, in a great measure by the exertions of Mr. Harrison. Considering the size of Glasgow, the large number of works that it contains, the severity of the accidents occurring in them, and the distance separating our two chief hospitals, there is great need of a rapid and safe means of transit for persons who are badly injured. The St. Andrew's Ambulance Association cannot do better than direct its attention to this matter and have it fully worked out.

ABERDEEN.

THE history of this Medical School is one of continued prosperity, if one may judge from the attendance of students and the assiduity with which they apply themselves to their studies. The present students of Aberdeen amply justify the reputation of this School for being one where good honest work is done. The number of students attending the various classes is quite equal to last year, and in some cases considerably exceeds it. The number of men beginning medicine, as already mentioned in this JOURNAL, is larger than for many years. The facilities for teaching are now so complete—thanks to the new Anatomical Department, and to the generosity of Sir Erasmus Wilson—that little more is to be desired, or can be obtained, within the walls of Marischal College. The Professors of Botany, Anatomy, Zoology, and Physiology, have large classes; and in all of them practical work goes on daily. The newly appointed Professor of Zoology, Dr. Nicholson, is proving himself to be an able and popular teacher, and will be a source of strength to the scientific staff. Students in the Zoology class are encouraged to spend a considerable portion of their time in the Laboratory, where the class-contents and the professor assist them in working practically at zoology. By dint of rearrangement of one or two class-rooms, it has been found possible to secure to Dr. Hamilton, the professor of Physiological Anatomy, an excellent and well lighted suite of rooms, with room access to his class-room and to the Biological Museum. Dr. Hamilton will commence his lectures next winter, and we have no doubt that his well known success as a teacher will greatly extend the reputation and activities of this school. We are glad to be able to state that Dr. Pirrie, the veteran professor of Surgery, has now almost recovered from his recent severe illness, and that he is expected to be able to undertake his duties next winter, which will be a great aid and comfort to him. Not only has the Aberdeen School grown twenty-five years last year, but several medical hospitals have been founded; and now, on a large and what it is hoped will be a permanent basis of Pathology and Anatomy, through the timely and judicious patronage of Sir Erasmus Wilson.

THE LECTURES.—The late Mr. J. A. Fergus, of Carlisle, has been the first to deliver the post-mortem. Of this year, 22 cases have been taken up since the Fraser Hospital, North Infirmary, Mercy, and St. James's Hospitals, and the Infirmary, in Glasgow.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

PRIVATE BILL LEGISLATION.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

A NUMBER of Bills have been introduced into Parliament this session by various corporations, containing provisions for police and sanitary regulations, and for the compulsory notification of infectious diseases. Representations were last year made to the Government by the Parliamentary Bills Committee of the British Medical Association, as to the desirability of further Parliamentary investigation of Local Bills containing such provisions: and a series of reports to that effect by Mr. Ernest Hart, Chairman of the Committee, were forwarded to leading Members of Parliament. This year, upon the motion of Mr. Hopwood, Q.C., M.P., to whom these reports had been forwarded, and of certain members of Parliament representing "The Vigilance Association," those Bills containing provisions interfering with the freedom of the subject were referred to a special Select Committee appointed by the House to consider and report on these provisions.

By the aid of the Local Government Board, the Committee obtained returns of the working of such regulations in all the towns in which they exist, namely, Barrow-in-Furness, Birkenhead, Blackburn, Blackpool, Bolton, Bradford (Yorks), Burton-on-Trent, Derby, Huddersfield, Jarrow, Lancaster, Leicester, Llandudno, Manchester, Norwich, Nottingham, Oldham, Preston, Reading, Rotherham, Stafford, Stalybridge, and Warrington. The return set forth the answers to various questions as to the mode of working these clauses and their success: in every case the report was in favour of the provision. Further, it appeared from the report that in all the towns the duty of notification was cast upon the medical man in attendance: and in seventeen the duty of notification was placed on the occupier whether there was a medical man or not. The fees paid for notification generally are 2s. 6d., and in some cases 1s., while the penalty for disobedience varied from £2 to £10.

At the suggestion of the Committee, the five corporations, namely, Accrington, Macclesfield, Chadderton, Bolton (which sought amendments of the clauses already in force), and Newcastle-on-Tyne seeking these powers agreed upon a uniform set of clauses, and on Thursday, June 25th, these clauses were proceeded with.

Mr. Michael, Q.C., appearing for all the Corporations, in opening the case said that, as far as the most important section of the community, namely, the medical authorities, were concerned, there was no opposition to the clauses before the Committee, and that the only petition against those clauses by the medical men of Bolton was withdrawn.

As sanitary measures had in the past so they must in the future very largely depend upon the co-operation of the medical profession, and that an adverse bearing on their part to anything suggested in the way of legislation, anything which even went against their prejudices, would expose the successful working of any such clauses as those suggested to very great difficulties.

Referring to the return obtained by the Local Government Board, Mr. Michael pointed to the unanimity of opinion in favour of these provisions, and that in no single case had they been otherwise than conducive to a very highly improved state of sanitation in every locality in which they had been enforced. In the case of Leicester, in which alone there had been any opposition by the medical men, the operation of these clauses had not only been of the greatest public benefit, but they had resulted in entirely draining the streets, and showing that the apprehensions of the medical authorities were not founded on fact.

Throughout the whole of the medical profession, however, a hard application of these clauses, that is to say, interfering with the medical man in the exercise of their profession, there was no objection, leading in favour of these clauses; and if such hard application were put against, there was no unanimity of opinion that they must and for the benefit of the community.

As far as Mr. Michael was aware, there were, he said, but two reasons urged on the part of the medical profession against an extension of these clauses, and these reasons were connected with the Local Government Board. The first was, that, in asking upon the medical man in attendance to send in to the Local Government authorities a declaration of the existence of infectious disease in any family, it was asking upon him to do an act which was in reality a breach of the confidence existing between the patient or the family of the patient and himself. He said that, the Local Government Board had suggested that it might be entirely removed by placing a stamp on the notification

—namely, an onus upon the occupier of the house, or person in charge of the sick man, in addition, to that upon the medical man, thus removing the allegation as to breach of confidence. This became of importance with regard to the second objection —namely, that, especially amongst less educated portions of the community, if there was an obligation on the medical man alone to send in a certificate of the presence of infectious disease, and if that were to bring about the whole of the consequences which almost logically followed from the presence of an infectious disease, such as isolation of the sick person from others, it would tend to make ignorant people chary of availing themselves of medical attendance. But that was entirely removed by the insertion of the duty to notify being cast upon the householder as well as upon the medical man; and, though this provision seemed cumbersome, it was rendered necessary, that it might ensure against any such possible disadvantage to the medical profession from the working of these provisions. The learned counsel cited Hastings, to show that where notification was obtained, even without legislation, prompt knowledge and careful isolation by the medical officer of the local authority had tended almost to banish from the borough the presence of small-pox and scarlatina.

In conclusion, Mr. Michael pointed out how previous experience had shown that public legislation on sanitary matters had been based on local experience, which had found its way into local Acts of Parliament. Waiting the good time when there should be a general Act embodying these provisions, he hoped that the Committee would assent to them, confident as he was that their passing into law could only conduce to the public advantage.

Mr. H. E. Armstrong, Medical Officer of Health for the Borough of Newcastle-on-Tyne, was then examined, and said he had had great experience on the question of infectious diseases, and was of opinion that disease such as small-pox, scarlet fever, typhus, enteric fever, measles, and cholera, ought to be notified as early as possible to the medical officer of health. He had found great difficulty in protecting the community from the spread of infectious disease, because of the absence of such notification; and that, without early information that a specific person is suffering from such disease, it is impossible to act properly in order to prevent the spread of epidemic disease. As an instance of the utility of compulsory notification, the witness stated that, in Newcastle, returns of typhus were obtained from the dispensary; and, since those returns had been obtained, there had been no typhus epidemics. Typhus being a disease almost limited to the poor, it was by means of the dispensaries that they had been enabled to get a direct hold upon it. Scarlet fever, on the other hand, affecting as it did all classes, they had no means of getting notification of cases occurring in better class families, and hence had not been able so successfully to resist it. In the case of Jarrow, with a population of 35,000, almost entirely of a working class—the only place in the North of England in which these provisions were in force—they had been found to work well. The witness further stated that he believed the general feeling of the medical profession in his borough was decidedly in favour of compulsory notification.

Dr. Nicholas Hardcastle, practising at Newcastle, was called to speak to the feeling of the profession in Newcastle as to the compulsory notification clauses. The witness said that, collectively, the medical men were not opposed to these provisions; and that, if allowed, independent medical gentlemen in large towns will be led to acquiesce in and work with the new provisions. The witness was medical officer of health for a small district outside the borough. He confirmed Mr. Armstrong as to the impossibility of dealing efficiently with any epidemic unless the provisions asked for were obtained; and, further, these provisions would be of advantage also in districts of a small population. They would not be difficult to work. As medical officer to such a small district, he had felt their want.

After hearing these gentlemen, the Committee intimated that they were satisfied. Several medical men were called to give evidence concerning other sanitary questions in relation to infectious diseases; e.g., closing schools in which cases of infectious disease had occurred, etc. These gentlemen were, Dr. George Bland, Medical Officer of Health for Macclesfield; Mr. Edward Sargent, Medical Officer of Health for the Borough of Bolton; Dr. Richard Clayton, Alderman of the Borough of Accrington; Dr. John Livy, practising at Bolton; Dr. Thomas Paterson, practising at Chadderton.

On Friday, the 26th, the Committee formally gave their consent to the provisions for the compulsory notification of infectious diseases, casting a duty both on the medical man and the householder to notify; the fee payable to be 2s. 6d., and the penalty for wilful disobedience to be £2.

N.B. The members of the Committee were: The Right Hon. G. Solater-Booth (Chairman), Mr. H. W. Fowler, Mr. Garnier, Sir Gabriel Goldney, Mr. Hastings, Mr. Tempest, Mr. Parker, and Mr. McLaren.

Monday, June 12th.

Unqualified Practitioners.—Mr. H. SAMUELSON asked the Secretary of State for the Home Department whether his attention had been called to recent cases of the treatment of the sick by unqualified medical practitioners at dispensaries at the East end of London, to the death of two children so treated, and to the observations of the coroner at the inquest upon them on June 5th; whether he could take any steps to prevent such illegalities; and whether he could obtain power, either by the appointment of Government inspectors, the issue of Government licences, or some other efficacious means to prevent the sick poor from being attended by unqualified medical practitioners at the metropolitan dispensaries.—Sir W. HARCOURT: There is no legal authority which could deal with the matters referred to by the hon. member. The proper course would be for him to call the attention of the Medical Council, which has power to act by the 21 and 22 Vict., to these cases, and ask them to put the Act in force against them.

Lard-Cheese.—Mr. CHAMBERLAIN, in reply to Mr. E. PAGET, said that his attention had been called to an article called cheese, imported from America, which was composed of skimmed milk, lard, and oleomargarine. The Custom House authorities could not give him any particulars as to the extent of this importation, because the present classification did not distinguish between this kind of cheese and other sorts. A small departmental committee had been appointed to consider the whole question of the classification of the export and import statistics, and he should refer this question to their consideration, to see if more distinctive classification could not be made.

The State of the Thames.—Sir WILLIAM HARCOURT, in answer to Mr. THOROLD ROGERS, stated that it had been determined to appoint a small Royal Commission to report on the state of the Thames between London Bridge and Gravesend.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE DONCASTER BOARD OF GUARDIANS AND MR. SYKES.

WE learn from the *Doncaster Chronicle* that at a recent meeting of the Doncaster Board of Guardians, the clerk, Mr. J. Falconer, informed the Board "that he had withheld a cheque which he had drawn for Mr. Sykes because it was not right. When he looked at the account he found it was for amputation of fingers, for which two guineas were charged. Before a medical man could amputate a finger he was bound to get another medical man to attend and certify that it was a case for amputation, or whether he could not preserve the finger, but Mr. Sykes had done nothing of the kind. This should have been done at Mr. Sykes's own expense. He had mentioned that it could not be allowed, and Mr. Sykes had sent a letter in reply."

On the letter being read by the chairman, it appeared that "in both cases the need was urgent. A poor fellow came with an order signed immediate. In each case the finger was shattered, and there was considerable hæmorrhage. It would have been inexcusable barbarity to send the man two miles to the nearest surgeon, with the probability of his being from home, to obtain his opinion, and he, Mr. Sykes, did not hesitate to say that, considering the amount of blood which he was losing, it might have been dangerous to the man's life to have done so. He thought the consolidated orders referred to operations done to relieve chronic diseases." Mr. Atkinson, a guardian, said, "Mr. Sykes might have stopped the bleeding without amputating the fingers." Possibly, and left the poor fellow in an agony of expectation and of pain. The clerk said there was a similar case at Asker. Mr. Hindle had charged £1 for a fracture and he had no power to do so. The clerk withheld the cheque there also. Ultimately it was decided to apply to the Local Government Board for permission to pay the bill to Mr. Sykes. The regulation under which the clerk acted is very properly described by our contemporary the *Globe* "as having been conceived by some very distinguished red tapeist;" and again the *Globe* writes, "the absurdity is that guardians should not be allowed to exercise their own discretion in such a little matter." We agree with the *Globe*, and have no hesitation in expressing our opinion that the action of the clerk in raising so petty a matter would have been "more honoured in the breach than in the observance."

THE LAW OF LUNACY.

SIR,—From Mr. H. Meymott's letter, the guardians of Ludlow appear to object to pay, when a medical man's opinion is asked in the usual way as to the state of mind of a pauper, unless the magistrate send the case to an asylum. This, I believe, is quite contrary to the law. When a case of supposed insanity is brought

before a magistrate, he is directed to call to his assistance a registered medical practitioner, and must do so previous to sending a person to an asylum. To maintain that only on the surgeon's proving the person insane to the satisfaction of the magistrate is he to get his fee, is evidently not the intention of the Act; as this would be making him interested in the result, not merely giving his professional advice to the magistrate. I have no doubt Mr. Meymott could recover his fee in the County Court; whether it would be wise to do so is another matter; but I think the case should have been put before the Local Government Board.

The evident object of the Act is to take everything with regard to lunatics (except payment of expenses) out of the guardians' power; and I would further state, that it is only by courtesy that the Poor-law medical officer is usually the one called in. The magistrates may, and every now and then do, call in another practitioner.—I am, sir, yours truly,
JOHN WOODMAN, M.D., F.R.C.S.
2, Chichester Place, Southernhay, Exeter, May 27th, 1882.

FEE TO WORKHOUSE MEDICAL OFFICERS.

SIR,—Will you kindly reply to the two following questions in the next number of the JOURNAL? 1. Is the medical officer to a workhouse, at a distance from his residence, entitled to a fee for attending and giving evidence at a coroner's inquest held at the workhouse? 2. Is he entitled to a fee for giving evidence at the magistrates' bench concerning cases that have occurred at the workhouse?—Yours truly,
WORKHOUSE DOCTOR.

* * 1. Until the question was raised adversely to the interests of the workhouse medical officer by Dr. Danford Thomas, the coroner for Central Middlesex, there was never any hesitation on the part of coroners to pay the fees laid down in the Coroners' Witnesses Act. We are of opinion that Dr. Thomas is in error. We learn that he has submitted a case to the Lord Chancellor, but we have not heard that his lordship has given his decision. 2. Most assuredly. No stipendiary magistrates or justices of the peace can demand the attendance of a workhouse medical officer without giving him a fee for such attendance. The only persons who can by law require such attendance are: first, the board of guardians sitting as a board or as a committee of the same, and the Poor-law inspector when directed to make an official inquiry. No fee, in these latter instances, can be demanded, as it forms part of his duty.

CLUB-PATIENTS AND PARISH RELIEF.

SIR,—May I ask your opinion on the following case? A man breaks his leg in a public-house quarrel. His club refuse to allow him sick pay or pay his club doctor the extra fee. He then applies for and is granted relief from the parish. The club doctor attends. My (the district medical officer) attention has never been called to the case. Have I any ground for complaint against the guardians? Can the guardians legally pay the club doctor? If not, who should? What course should I pursue?—I am, sir, faithfully yours,
THE DISTRICT MEDICAL OFFICER.

* * Under the special circumstances named in our correspondent's letter, we do not see that he can establish any claim on the board of guardians, as his services have not been ordered nor rendered; but we doubt whether it be competent for the guardians to grant the customary fee to the club doctor should the latter apply for it; or, if granted, whether the auditor would allow it. The club was perfectly bound to maintain the man so long as his resources having failed him, he became dependent on them for assistance. The club doctor should have left the case in charge of the district medical officer; but as he has elected to do otherwise, we advise our correspondent to bear it, for he has sustained no real injury.

OBITUARY.

THOMAS BEVILL PEACOCK, M.D., F.R.C.P.

CONSULTING PHYSICIAN TO ST. THOMAS'S HOSPITAL.

THIS well-known and highly esteemed physician, who was born at York, December 21st, 1812, died on Thursday, June 1st, in the wards of St. Thomas's Hospital from paralysis. He had been showing some friends over the hospital on Wednesday afternoon, and while doing so was seized suddenly with a paralytic attack, from which he never rallied. Dr. Peacock was consulting physician to St. Thomas's Hospital, to which he was first attached in 1849, and to the City of London Hospital for Diseases of the Chest. In the earlier part of his career he had been attached to the Royal Free Hospital. Dr. Peacock's scientific contributions to medicine were of the first order, and were distinguished by a laborious conscientiousness which stamped all he wrote with the impress of trustworthiness. His work on the *Malformations of the Heart* has long been one of the medical classics. It has been quoted widely abroad, and in itself would have more than sufficed to build up the solid reputation of its author. Dr. Peacock, however, contributed in his Groonian lectures further valuable information to our store of knowledge in cardiac disease. He also published in 1865 a careful report on the diseases of metalliferous miners. He wrote, during a long, successful and honorable career, numerous other papers in various medical and scientific journals. He was in 1868 appointed the first examiner in medicine at the Royal College of Surgeons with Dr. Wilks, with whom he collaborated harmoniously in that capacity for some years. During the whole of his long professional career, Dr. Peacock resided in Lambeth. Once in a while he saw his colleagues and friends of Guy's and St. Thomas's leave the city for the west end, but he was contented to remain where he was.

Dr. Peacock's great passion, outside his professional studies, was

travelling. Nearly every year he took a long and interesting tour, returning refreshed in body and laden with an increased store of knowledge of the world. In 1855 and 1856 he went two voyages to Ceylon, for the benefit of his health. He made an unusually large and interesting collection of photographs of places visited in his annual peregrinations. In 1876, the College of Surgeons presented Dr. Peacock with its Honorary Gold Medal, in recognition of the valuable additions made by him to the pathological preparations in the Hunterian Museum. He graduated as a doctor of medicine in the University of Edinburgh in 1842, and in 1850 he was elected Fellow of the Royal College of Physicians, of which college he held the offices of councillor, censor, and Croonian lecturer. Dr. Peacock was a member of the Society of Friends. He was a student at University College and St. George's Hospital, and commenced his connection with the medical profession as an apprentice to Mr. John Fothergill of Darlington.

JAMES SPENCE, F.R.C.S.E., F.R.S.E.,

PROFESSOR OF SURGERY IN THE UNIVERSITY OF EDINBURGH.

IN the death of Mr. James Spence, which occurred on Tuesday, June 6th, the profession has lost one of its most distinguished and useful members, and the Edinburgh University one of its most respected Professors.

Born in 1812, and receiving his general education partly in Galashiels and partly in Edinburgh, he commenced his professional life in the latter place by (what at that time was not at all uncommon) an apprenticeship with a firm of chemists and druggists, while at the same time he studied in the University. His curriculum ended when he was eighteen years of age. He then studied in Paris, and in 1832 he received the diploma of Licentiate of the Royal College of Surgeons, Edinburgh. Immediately after this, having passed an Army Board examination, he entered one of the ships of the East India Company, and for three years was engaged in that service. He now directed his attention specially to anatomy, and became a prosector and demonstrator of anatomy in the University with Professor Monro (tertius). It was in this division of work that Mr. Spence made himself famous by his dissections; those of the arteries of the foot it would be impossible to excel, and they are retained with pride in the rooms of the University and College of Surgeons, Edinburgh. Leaving the University, he, conjointly with Drs. Handside and Lonsdale (both of whom died before him), conducted a course of anatomy in the Extra-Academical School, and in this joint enterprise the dissecting room was the special territory of Mr. Spence. In 1849, he passed the examination for the Fellowship of his College, and about this time was appointed an assistant-surgeon in the Royal Infirmary. In 1854, he attained to the position of Surgeon to the Royal Infirmary, and devoted himself to the prosecution of surgery with such earnestness and success, that, on the Chair of Surgery in the Edinburgh University becoming vacant through the death of Prof. Miller, he was appointed to it by a majority of the Curators, his principal opponent being Mr. Lister. For 28 years, then, Mr. Spence was in unbroken control of surgical wards (for his professorship entitled him to beds in the infirmary after the expiry of his surgeonship); and it may be said, without fear of contradiction, that he made ample use of all the cases that came to his care, not only as regarded the treatment of the patients and the instruction of the students, but in the extension of the fame of the Edinburgh school on the surgical side. A professor for eighteen years, he did much to dignify his office; and the successive generations of students, who as graduates, have gone forth from the university, will this week remember, with much regret, at his death, the teacher who in his unparing use of himself in the conscientious discharge of his duties, taught so much by example as well as by precept. That his merits were recognised and appreciated, is evident by the fact that he held so many positions of high responsibility. In 1855 he was a mounted surgeon in the 1st Army to Her Majesty the Queen at Scotland, succeeding Dr. David Macleod as such. In 1870, on the death of Professor Syme, he was appointed consulting surgeon to Lambeth Hospital; he was also consulting surgeon to the Sick Children's Hospital, the Royal Public Dispensary, and the Dental Dispensary, Edinburgh. He was a Fellow of the Royal Society, Edinburgh; was for two years President of the Royal College of Surgeons, Edinburgh; also President of the Medical Chirurgical Society; and at the time of his death he was the representative of the College on the General Medical Council, having succeeded the late Dr. Andrew Wood last year. It is therefore obvious that his long and honorable career was not without its rewards; and if it be asked on what his success depended, the answer undoubtedly is, on his unswerving integrity and honesty of purpose, added to the thoroughness with which he discharged every duty, professional and personal. No matter whether a dissection or an operation, it could not be too carefully per-

formed, and it is in respect of his care at operations, and subsequently in the treatment of the patient that he had such a wonderful run of success (not of luck, for it was all honestly worked for), that he remained unconverted to the tenets of Listerism at a time when that system became triumphant in Edinburgh. One cannot blame a man like Spence, so long wedded to his own methods, and withal so successful with them, for remaining, as he did, a believer in the simpler methods, although he never refused to operate with the spray and other precautions where it was considered desirable. Such a hold had Mr. Spence on the profession that, last year, he was presented by his admirers in it with his portrait, painted by Mr. James Irving, a replica of this being hung in the Royal College of Surgeons; and the President of the Royal College of Physicians (Dr. Rutherford Haldane), in presenting the testimonial, fittingly stated that "No man was more worthy of such an honour; from the very commencement of his medical career, he had set himself to the scientific study of his profession—working first at anatomy, at which he attained almost unsurpassed dexterity. Not only was it anatomy to which he devoted attention, but also to surgical pathology; and latterly, and more particularly, to practical surgery, until he had earned a position as surgeon second to that of no one in the kingdom. It was not, however, only for his professional qualities he was esteemed, but quite as much for the honourable feelings that had invariably characterised him, and for that kindness of heart which always marked him in putting his services at the disposal of his friends." These expressions of Dr. Haldane's will find an echo in many a heart, not only among his old pupils, but among all his former patients: for, although somewhat austere in manner, there never was a more thoroughly kind nature than that of James Spence—not the kindness that expresses itself gushingly, but the kindness that prompted him, on many an occasion, to visit at midnight his Infirmary wards, when one or other of his patients there was the subject of his anxiety. It is impossible, in this imperfect notice, to take the full view of the career of one who had such a busy and useful life; but those who desire to become more familiar with a man who, without wealth, name, or influence, rose by sheer hard honest work to the pinnacle of his profession, may know him professionally by his *Lectures on Surgery*, a new edition of which is now issuing. In that volume will be found recorded much valuable experience; and it is a fitting termination to the professional labours of him whose loss is now felt keenly by many a member of the profession who never knew him personally, and still more keenly by all who knew him, friend and opponent alike (there never could have been a man so firmly rooted in his own opinions who had not opponents); for, while he was loved by many, he was respected by all. He delivered the Address in Surgery at the meeting of the British Medical Association when it met in Edinburgh in 1875.

He had been overworked during the last winter session, and was particularly troubled towards the end of the session with his foot. In April, this became so painful that he had to take to bed, several small abscesses occurring, and being treated. Ultimately, the toes became seriously affected; and, on the Saturday but one previous to his death, three of them were amputated. This, however, did not arrest the disease; and he died early on Tuesday morning.

He was buried on Friday, June 9th, in the Grange Cemetery, Edinburgh. The funeral was a large one, and was attended by the Principal of the University, Sir Alexander Grant, many members of the Senatus Academicus, a large number of lecturers and members of the profession, and a considerable number of students, in addition to public and private friends.

A SINGULAR circumstance happened at Croydon last week. A man was charged at the Petty Sessions with riotous conduct, and in his reply to the charge, the prisoner startled the court by stating that when he was taken in custody, he was assisting in removing his landlord, who was suffering from small-pox, to the hospital. The magistrate was considerably puzzled how to dispose of the case. If he remanded him he would perhaps carry the infection into the prison; and if he were discharged he would probably carry it about him wherever he went. The prisoner was finally discharged, with strict injunctions to get away as quickly as he could, and the police were instructed to disinfect the cell in which he had been confined.

GLASGOW UNIVERSITY MEDICO-CHIRURGICAL SOCIETY.—The following gentlemen have been elected office-bearers for the ensuing year. *Honorary President-Elect*: M. Charteris, M.D.; *President*: Robert Beith; *Senior Vice-President*: R. Bruce Young, M.A.; *Junior Vice-President*: J. Innes Dunlop; *Corresponding Secretary*: C. O. Hawthorne, Esq.; *Minute Secretary*: H. Rutherford, M.A.; *Treasurer*: G. M. Hogg.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on the 8th instant.

Messrs. Thomas Edwardes, L.S.A., Llansaintffraid, Oswestry, diploma of membership dated May 8th, 1835; and Alexander Harkin, J.P., M.D. King's College Aberdeen, College Square North, Belfast, June 26th, 1840.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 8th, 1882.

Faulkner, Henry William, Kennington.
Gettings, John Salter, Chase Lodge, near Walsall.
Littlewood, John Oscroft, Guy's Hospital.
Macphail, Archibald Lamont, Glasgow.
Waddell, William, Belfast.

The following gentlemen also on the same day passed their Primary Professional Examination.

Vinrace, Edward Dennis, Queen's College, Birmingham.
West, John Arthur, King's College, London.
Dowsing, Herbert Leopold, St. Bartholomew's Hospital.
Middlton-Gavey, Edward Herbert, St. Bartholomew's Hospital.
Smith, James Edward, Charing Cross Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:—

- BELFAST UNION.—Medical Officer for No. 8 (Carrmoney) Dispensary District. Salary, £115 per annum, with £20 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 19th instant, when candidates are expected to attend.
- BIRKENHEAD BOROUGH HOSPITAL.—Junior House-Surgeon. Salary, £60 per annum. Applications by the 19th instant.
- BOSTON UNION, Lincolnshire.—Medical Officers for the Sutterton and Chapel Hill Districts. Salary, £50 and £20 per annum respectively. Applications by June 17th.
- CHILDREN'S HOSPITAL, Birmingham.—Assistant Resident Medical Officer. Salary, £40 per annum. Applications by June 20th.
- CHILDREN'S HOSPITAL, Birmingham.—Resident Medical Officer. Salary, £80 per annum. Applications by June 20th.
- CUMBERLAND INFIRMARY, Carlisle.—House-Surgeon. Salary, £100 per annum. Applications by June 27th.
- EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by June 22nd.
- EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Bridge Road, S.E.—House-Surgeon. Salary, £70 per annum.
- FRENCH HOSPITAL AND DISPENSARY, 10, Leicester Place.—Resident Medical Officer. Salary, £60 per annum.
- GREAT NORTHERN HOSPITAL, Caledonian Road, N.—House-Surgeon. Salary, 60 guineas per annum. Applications by June 30th.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Mount Vernon, Hampstead.—Physician. Applications by July 6th.
- HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street, W.C.—Assistant Physician. Applications by the 21st instant.
- HOSPITAL FOR WOMEN, Soho Square.—House Physician. Applications by the 27th instant.
- IRVINESTOWN UNION.—Medical Officer for Irvinestown No. 2 Dispensary District. Salary, £100 per annum, with £15 per annum as Medical Officer of Health, registration and vaccination fees. Election on the 21st instant.
- LIVERPOOL DISPENSARY.—Assistant Resident House-Surgeon. Salary, £100 per annum. Applications by the 26th instant.
- LONDON HOSPITAL, Whitechapel Road, E.—Fifth Surgeon. Applications by June 20th.
- MARKET BOSWORTH UNION.—Medical Officer and Public Vaccinator. Salary, £35 per annum. Applications by June 27th.
- METROPOLITAN FREE HOSPITAL, 81, Commercial Street, Spitalfields, E.—Assistant House-Surgeon.
- NEW ZEALAND.—Inspector of Lunatic Asylums. Salary, £300 per annum. Applications by June 20th.
- ROYAL FREE HOSPITAL.—Assistant Dispenser. Applications, between 11 and 1, to J. S. Blyth, Secretary.
- ROYAL UNITED HOSPITAL, Bath.—Resident Medical Officer. Salary, £80 per annum. Applications by June 22nd.
- SEAMEN'S HOSPITAL (late Dreadnought), Greenwich, S.E.—Surgeon for the Dispensary. Salary, £63 per annum. Applications by June 20th.
- ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, 54, Berners Street, W.—House-Surgeon. Applications by July 1st.
- STANLEY HOSPITAL, LIVERPOOL.—House Surgeon. Salary £100 per annum. Applications by the 23rd instant.
- STANLEY HOSPITAL, LIVERPOOL.—Junior House Surgeon and Dispenser. Salary £70 per annum. Applications by the 23rd instant.
- ST. MARY'S HOSPITAL.—Clinical Assistant. Applications by July 1st.
- THE INFIRMARY, Halifax.—Assistant House-Surgeon. Salary, £50 per annum. Applications to the Senior Physician of the Medical Staff by June 20th.
- UNIVERSITY COLLEGE.—Resident Medical Officer. Applications by July 1st.
- WESTERN OPHTHALMIC HOSPITAL, 155, Marylebone Road.—Clinical Assistant. Applications to the Hospital any afternoon from 1 to 3 o'clock.
- WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Resident Assistant. Applications by the 26th instant.
- YORK COUNTY HOSPITAL.—Honorary Physician. Applications by June 24th.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 2 P.M.

WEDNESDAY.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.50 P.M.

FRIDAY..... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th., 2; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th., 2; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F., 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. T., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal College of Surgeons of England, 4 P.M. Mr. Jonathan Hutchinson: On Temperament, Idiosyncrasy, and Diathesis in Relation to Surgical Disease.

TUESDAY.—Statistical Society, 7.45 P.M. Dr. W. A. Guy: Two Hundred and Fifty Years of Small-pox in London.

WEDNESDAY.—Royal College of Surgeons of England, 4 P.M. Mr. Jonathan Hutchinson: On Temperament, Idiosyncrasy, and Diathesis in Relation to Surgical Disease.

FRIDAY.—Royal College of Surgeons of England, 4 P.M. Mr. Frederick S. Eve: On Cystic Tumours of the Jaws.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE HISTORY OF THE ASSOCIATION.

WE intend to publish in next week's JOURNAL, as a complement to the historical sketch of the Association, the histories of the Branches, as supplied to us by the local Secretaries. An account of the proceedings of the Association in regard to Medical Reform and other matters, will also appear as soon as possible.

UNIVERSITY DEGREES.

SIR,—Seldom has such an amusing piece of Communism as that advocated by "M.R.C.S.E." been broached in England. He wishes to extend the creed of *sans-culottism* to medical men; the English universities, on the other hand, prefer to give their degrees to the aristocracy of the profession only. According to "M.R.C.S.E.," our universities exclude "applicants" for degrees; true, but they do not exclude men willing to work and wait from their degrees. If "M.R.C.S.E." so pines after an university "diploma" (*sic*), the elastic portals of Durham are ready to receive him. We must, however, disagree with "M.R.C.S.E.," and sincerely hope that neither Oxford nor Cambridge will ever give degrees without residence. An university is not a place the sole object of which is to give degrees, as "M.R.C.S.E." would probably learn if he were to reside at Oxford. There are men at both universities who are also M.R.C.S.E.; men who have held hospital appointments, then think it worth while to go to an university afterwards; and yet such men do not agree with "M.R.C.S.E." The universities, therefore, do not "disregard the wishes of all Englishmen."—Yours truly,

ANOTHER M.R.C.S.

SIR,—May I suggest to the general practitioners who are interested in the matter of medical degrees, that the matter lies very much in their own, or rather our own, hands? If we would only recognise our own strength, and use it, we might do what we thought best for ourselves. The general practitioner has an enormous amount of influence in politics; and a combination of the medical men in almost any constituency can seriously influence the result of an election. My advice, therefore, is that we should draw up a memorandum on the above question, and that a copy of it should be handed to every member of Parliament by a deputation of medical men from his constituency. Such action would soon bear fruit, and place the medical man in his true position. Should my suggestion meet with approval, I shall be happy to co-operate in forming a committee to carry it out. The first step would be to form a committee or association which, for a small subscription or donation from those interested, could commence operations. Awaiting observations on the subject, I am, sir, yours truly,

L.R.C.P.

CORONERS AND MEDICAL WITNESSES.

SIR,—Will you kindly inform me if it is not the usual custom for coroners to call in the house-surgeon, in the case of an accident brought in dead? The coroner here repeatedly ignores taking any medical evidence in accidental deaths.—I am, sir, yours truly,

J. W.

* It is entirely within the discretion of the coroner to call in medical evidence. It is, however, the usual practice to call the medical officer of a hospital or infirmary as a witness; and we do not understand the motive for not doing so, as no fee is payable.

THE CLAIMS OF LAW AND OF MEDICINE.

SIR,—I had often asked myself whether, in case of being subpoenaed to a court of justice, a call to attend a midwifery case, for which I had been previously engaged, should receive prior consideration. It happened, a little time ago, that I was summoned to such a case on the morning of the holding of a county court to which I had been subpoenaed. Not knowing what to do, I procured for my patient the services of a neighbour; and, on the judge's appearance in court, I applied for his advice under the circumstances. His reply was that, had I shown my respect for the court by sending him notice of the cause of my absence, he would have relieved me of any penalty under my subpoena, and have adjourned the case, "as considerations of 'life or death' must come before everything else;" and he immediately took my evidence (though the case was not called for hours afterwards), and set me at liberty. This occurrence may be of interest and service to others.—I am, yours truly,

THOMAS M. WATT.

SOCIETIES FOR WIDOWS OF MEDICAL MEN.

SIR,—I should feel extremely obliged if either you, or any of the readers of the JOURNAL, would inform me if there is any Society for the Relief of Widows of Medical Men to which provincial practitioners can become subscribers. The one in Berners Street, London, is only applicable to those residing within a twenty mile radius.—I am, sir, faithfully yours,

ENQUIRER.

* Our correspondent is, of course, aware of the existence of the Royal Medical Benevolent College at Epsom, and of the British Medical Benevolent Fund, the claims of which have been frequently advocated in this JOURNAL. In the country, there are the following societies—and perhaps others, of the names of which we are not at present aware: The Birmingham Medical Benevolent Society (Secretary, Dr. J. Sawyer, Temple Row, Birmingham); The Essex and Herts Medical Benevolent Society (Secretary, Mr. Stephen Austin, Hertford); the Kent Benevolent Medical Society (Treasurer, Mr. G. Rigden, Canterbury); the Lincolnshire Medical Benevolent Society (Secretary, Dr. C. Harrison, Lincoln); the Surrey Medical Benevolent Society (Secretary, Dr. J. Walters, Reigate); the Sussex Medical Friendly Society (Secretary, Mr. R. V. Skinner, Winchelsea); the West Riding of Yorkshire Medical Charitable Society (Secretary, Mr. C. G. Wheelhouse, Leeds).

MEDICAL ETIQUETTE.

SIR,—Ought I, or ought I not, to meet in consultation a neighbouring practitioner who advertises himself on his plate "advice gratis"? I am inclined to think that we ought to give such an one the cold shoulder, as he refuses to be bound by the etiquette of his profession.—I remain, yours truly,

A. I.

* In accordance with the principle laid down in the *Code of Medical Ethics* (a copy of which we wish were in the hands of every practitioner), ch. ii, sect. i, rule 3, p. 27, we are of opinion that "A. T." is justified in declining to meet in consultation the practitioner above alluded to.

A MEMBER.—The course taken by the medical man to whom you refer was not in accordance with the usual etiquette. He ought to have communicated with you before calling to examine your patient.

M.B.M.A.—The world is wide, and there is room for all. To deserve goodwill of his colleagues, our correspondent has only to observe the accepted rules of conduct in professional life; and he is not likely to fail in this if he observes carefully the one rule: "Do unto others as you would have them do unto you."

REMARKS

ON
CODEIA IN THE TREATMENT OF
DIABETES.

By R. SHINGLETON SMITH, M.D., B.Sc.LOND., M.R.C.P.,
Physician to the Bristol Royal Infirmary.

In alluding to the subject of diabetes, one cannot forget what has been done by experimental physiology to place the disease on a true scientific basis: the discovery of glycogen by Bernard, and the demonstration of the connection of glycosuria with vaso-motor paralysis of the liver and with irritation of the vaso-motor centre in the medulla oblongata, are the foundations for a scientific treatment of the disease. The nervous system having been shown to be the agent by which diabetes could be most readily induced, physicians had not long to observe before they found that nature's experiments gave exactly the same results as those on the medulla of the lower animals; and cases of glycosuria associated with disease in the cervical region of the spinal cord are now known to be far from uncommon.

Glycosuria having been shown to depend primarily on disease of the nerve-centres, it is not a little interesting to observe that the drug which most controls it is one which affects nerve-tissues more especially. Opium has, indeed, been used empirically in the treatment of diabetes ever since the time of Aetius. Lecorché observes that since the time of Willis opium has become, so to speak, the panacea of diabetes. Few will agree in the remark of Niemeyer (French edition, vol. ii, p. 761) that "up to the present time, we possess accurate observations on the alkaline carbonates alone which show a positively favourable influence on the course of the disease." The cure at Karlsbad is advocated by Niemeyer as the prescription which merits the greatest confidence in this disease; and he mentions no other treatment. He considers it useless to insist on prescriptions based on purely theoretical ideas; and he argues that opium has been given in this way on the theory that it would diminish the irritability of the kidneys. The experience of our ancestors, who administered opium in the form of Theriaca Mithridatis; the advice given by Willis, Prout, Darwin, Christison, Ormerod, and many other authors; and the more recent, and perhaps more accurate, observations given by Pavy and Thompson, show that the practice is the result of well established experience, and not the result of any temporary fashion or fancy.

Dr. Lauder Brunton states that under the influence of opium the thirst diminishes, the excretion of urine becomes correspondingly less, and the proportion of sugar present in it falls. He might have added that the weight of the patient ceases to diminish, and generally improves. Recent observers have not been content to rest with this knowledge, but have endeavoured to ascertain to which of the alkaloids contained in opium the beneficial effect is due. Morphia has been found to act in a way similar to that of opium; and there appears to be little or no difference of opinion that the one drug, morphia, is equally useful as the other, the watery extract or some other preparation of opium. Codeia was first recommended by Pavy, and was preferred by him, inasmuch as it might be given in large doses without producing drowsiness.

The narcotic action of codeia has been established by various observations on the lower animals; the minor poisonous effects, as noted in human beings, are semi-coma instead of sleep, nausea, vomiting, severe pain in the stomach, sometimes tinnitus aurium, slight salivation, feeling of pressure in the temples, weakness of sight, and a somewhat remarkable retardation of the pulse (Phillips's *Materia Medica*). The potency of codeia as a soporific would appear to have been much exaggerated; the highest dose employed by Krebel was about one grain, and he recommended only one-fifteenth or one-sixteenth of a grain for sensitive subjects. Of late, it has been much employed, as recommended by Dr. Saundby, in the treatment of the cough of phthisis, where one grain dissolved in a drachm of syrup gives very great relief to the cough, and has also an appreciable soporific effect. But it is more particularly in the treatment of diabetes that codeia has proved to be of the greatest service, as the cases to be detailed will tend to prove.

This question of dose is an important one, and is at the root of the use of codeia in diabetes. Some authors recommend small doses; but

Dr. Brunton states that "diabetics bear large and sometimes enormous doses of opium and codeia; and, in administering these remedies, it is well to push the dose until the sugar either disappears from the urine, or until increasing drowsiness obliges us to discontinue it." Dr. Brunton (*Practitioner*, vol. xii) says: "The two remedies which are most serviceable in lessening the excitability of the nervous centres in diabetes are opium and its alkaloid, codeia. The latter may be given in doses of a quarter to half a grain three times a day at first."

Dr. Pavy (*Guy's Hospital Reports*, vol. xv) gives a remarkable series of cases, in which daily records of the composition of the urine were made, and in which careful analysis of the urine showed that the sugar disappeared entirely under the influence of opium, morphia, or codeia, with the aid of restriction in diet. The drugs were given in gradually increasing doses: opium in doses of one grain up to nine grains thrice daily, morphia up to three grains, and codeia up to ten grains three times a day. The great advantage of codeia over opium and morphia was found to be that, whilst equally efficacious in controlling the disease, it does not exert the same narcotic effect. When given in a small dose to begin with, and increased gradually, nothing may be perceived beyond its effect upon the disease.

Dr. Cavafy, in the *St. George's Hospital Reports*, has subsequently reported a case in which he gave fifteen grains thrice daily with a good result.

Dr. Ord has also reported the case of a woman aged 33, with diabetes of four months' standing, who gained seven pounds in one week with one grain of sulphate of codeia twice a day, after diet alone had failed to produce any good effect.

It is remarkable that so experienced a physician as Trousseau should not allude to the use of opium and its alkaloids in the treatment of diabetes. He says that alkalies are unquestionably beneficial; and that other medicines, tonic remedies, such as rhubarb, may be associated with them; and yet he does not mention the fact that opium has ever been given, and he does not discuss its utility. (*Clinical Medicine*, vol. iv.)

It is equally remarkable that Dr. Heineman of New York, in the American edition of Zeimssen's *Cyclopadia*, omits all mention of codeia and of opium in diabetes. He gives details as regards dietary, and states that preparations of ammonia are destined to take an important rank in the treatment of this disease.

On the other hand, Budde states that his observations show that alkalies have no special influence in diminishing the excretion of sugar.

Dr. Kratschmer gives results of a series of observations with a view of testing the value of carbonate and sulphate of soda, and of morphia, upon the excretion of sugar. He finds that neither the carbonate nor the sulphate appeared to exert any influence on the amount of sugar excreted, but he has satisfied himself that in morphia we possess an agent that is not only capable of materially reducing the excretion of sugar, but also of diminishing to a remarkable extent the general tissue-metamorphosis of the body (*Practitioner*, vol. xii).

Carbolic acid and the salicylates have also been much lauded, as also more recently boracic acid. Numerous observations have shown no good result from these drugs; and I submit that time should not be wasted in therapeutical experiments on patients, and that such drugs should only be given when codeia has been found to be either useless or injurious.

Although I cannot claim such satisfactory results as those given by Dr. Pavy, yet the cases to be reported show that the drug employed has a remarkable power of checking the elimination of sugar, and that a corresponding improvement in the health of the patient results. It would appear that alkalies, and all other methods of treatment, are far inferior to the treatment by codeia, which may be considered to have almost a specific action on the disease. The facts before us seem to justify decided language with regard to the use of codeia, which should not be permissive, but imperative, in all cases of advanced diabetes mellitus: whatever else may be given, codeia should first be given, and in fairly large doses, until some physiological effect is produced. Even dieting appears to sink into insignificance by the side of codeia; in one case given by Dr. Pavy, the codeia alone was sufficient, without any restriction of diet, the patient being on a mixed diet the whole time.

It has been supposed that codeia is a dangerous drug. Barnay (*London Medical Record*, October 1877) says: "The tendency of codeine to produce convulsions is so great, that it should be excluded from therapeutics." It has been stated, as a result of Bernard's experiments on the opium-alkaloids, that whilst narceine is the most soporific element, codeine is that which most tends to convulsions. The literature of codeia does not bear out this statement, and I have never observed anything to support it.

I have now endeavoured to show that the utility of codeia is by no means universally recognised, but that it is fully deserving of confidence

—nay, more, is imperatively demanded—in the treatment of diabetes where treatment other than dietetic is required.

CASE I.—Robert C., aged 27, clerk, had been feeling weak and losing weight for four months, as much as 14 lbs. in three weeks. He was admitted October 3rd, 1879, with symptoms of diabetes. The urine was 230 ounces daily, of specific gravity 1032, containing 2 per cent. of sugar, and a trace of albumen. His weight was 7 st. 13 lbs.

Date.	Ounces.	Spec. Grav.	Date.	Ounces.	Spec. Grav.
Oct. 5	Urine 360	1030	Nov. 8	Urine 134	1032 g
" 6	" 250	1031	" 12	" 116	1031
" 7	" 370	1030 a	" 16	" 116	1033 h
" 8	" 255	1031	" 20	" 100	1030
" 9	" 274	1030	" 24	" 94	1030
" 10	" 300	1031	" 28	" 86	1028
" 11	" 274	1031	Dec. 3	" 78	1041
" 12	" 272	1029 b	" 8	" 129	1040 l
" 13	" 140	1030	" 10	" 86	1037
" 14	" 140	1020 c	" 11	" 70	1039
" 15	" 150	1027	" 23	" 78	1040m
" 16	" 128	1031	1880.		
" 17	" 170	1031	Jan. 27	" 120	1030
" 18	" 144	1029	" 30	" 180	1031 n
" 19	" 180	1031	Feb. 2	" 120	1041 o
" 20	" 250	1031	" 4	" 90	1032
" 21	" 194	1030	" 8	" 80	1035 p
" 22	" 170	1030	" 12	" 90	1035
" 23	" 160	1030	" 12	" 84	1037
" 24	" 150	1036	" 13	" 110	1035 q
" 25	" 170	1030	" 14	" 80	1037
" 26	" 124	1031	" 15	" 60	1035
Nov. 1	" 110	1030 f	" 18	" 52	1036 r
" 4	" 140	1033	" 27	" 68	— s

a Ordered gluten bread. b Codeia, one grain three times a day. c Weight, 7 st. 12 lbs. d Codeia, three grains three times a day. e Weight, 8 st. 3 lbs. f Morphia, one-sixth of a grain three times daily. g Morphia, half a grain three times daily. h Morphia, two-thirds of a grain three times a day. i Morphia, one grain three times a day. k Morphia was discontinued. l Codeia, two grains three times daily. m Weight, 8 st. 4 lbs.; codeia was discontinued. n Codeia, two grains three times daily. o Weight, 8 st. 5 lbs. p Codeia, three grains three times daily. q Codeia, four grains three times daily. r Weight, 8 st. 7 lbs. s Weight, 8 st. 11 lbs.

He was now made an out-patient.

CASE II.—Albert B., aged 23, clerk, had rheumatic fever four years ago. Before that he had a cough, and was supposed to have disease in the upper lobe of the left lung. His father died of phthisis.

Five months ago he began to notice that he was languid and thirsty; then he found he was losing flesh, and that he passed more urine than usual. Four weeks ago he was hit on the nose with a cricket-ball, and since then symptoms had been worse. He had always had a slight cough, especially in winter; had had a little expectoration and occasional hæmoptysis.

On admission, July 12th, 1880, he was a thin, delicate looking youth, weighing only 7 st. 6 lbs., although of average height. The evening temperature was 98°; pulse 108, small. The skin was dry, the tongue slightly furred. At the left apex some obscure râles were heard, but there was no dullness. The heart sounds were normal. The urine was abundant, clear, acid, of specific gravity 1035, containing no albumen, but six to seven per cent of sugar.

From the 12th to the 19th he was put on a diabetic diet with bran-bread, and he took codeia in doses of two grains three times daily. The fall in the quantity of urine passed was considerable, from 206 ounces on the 12th to 150 on the 19th. Gluten-bread was then given instead of bran-bread, but milk to a pint was continued. On the 21st the codeia was increased to three grains per dose, and on the 24th the urine had fallen to 80 ounces. The milk was then discontinued, and the urine fell still further to 64 ounces on the 25th, and 66 on the 26th. On August 3rd, the patient had gained three pounds in weight; the urine amounted to 64 ounces, of specific gravity 1036. One pint of milk was re-ordered, and also cod-liver oil in drachm doses, three times a day. Four days later the patient had lost two pounds in weight, and the urine had risen to 85 ounces of specific gravity 1040; the milk was then left out on the 7th, and the codeia and cod-liver oil continued as before. Two days later the patient took some white bread surreptitiously, as was discovered by the fact that the urine amounted to 100 ounces; but, in spite of this drawback, the urine fell to 64 ounces on the 12th. On the 14th, the weight being now stationary, the codeia was increased to four grains in each dose, and in seven days the weight had increased by three pounds, and the urine on the 21st was 74 ounces, of specific gravity 1037. On the 27th the patient was very drowsy, could sleep at any time, and seemed apathetic from a state of anaemia. The urine being 60 ounces at 1035, the weight being 7 st. 11 lbs. At this stage the codeia was discontinued, and twenty minims of liquid ferri perchloridi, three times a day, ordered instead. One week later, September 4th, the patient had lost two pounds, but passed not more than 68 ounces of specific gravity 1040. He then

left the infirmary, and was lost sight of for two months. At first, after leaving, he spent two weeks at Weston-super-mare, and improved whilst there. On returning home he had an attack of vomiting, and began to be troubled with cough and expectoration. He grew rapidly weaker, and the vomiting recurred occasionally.

On November 6th he was re-admitted to the infirmary, having lost eleven pounds in weight during two months. He now passed 153 ounces of urine of specific gravity 1032, clear, acid, containing a trace of albumen. The tongue was furred; he complained of pain after food and constipation, but his appetite continued good. The sputum was purulent and nummular; there were clicking sounds to be heard at both apices, but no dullness. He was now put on a modified but not rigid diet, brown bread being allowed; and on November 9th, codeia was ordered, with the result that the urine fell from 181 ounces on the 8th to 96 on the 12th. On the 16th, cod-liver oil was ordered, and the codeia was gradually increased from one up to five grains three times a day. On December 14th, the weight had increased to 6 st. 12 lbs. (one pound), and the urine was 96 ounces, of specific gravity 1035; at this time, the albumen had disappeared. On December 28th, there was a loss of three pounds in weight, and the urine was generally about 100 ounces of average gravity 1035. A trace of albumen had reappeared. The expectoration was now profuse, and there was abundant evidence of breaking down at the left apex; but the temperature was always subnormal, ranging from 96° to 97°; the lowest reading was 95.6° on January 1st. On the following day, the temperature rose to 98.8° in the evening; and on the 2nd, it was 100.2° at 8 P.M. This pyrexia was associated with evidences of consolidation at the base of the left lung of inflammatory character, and death took place on January 6th, about ten months after the commencement of his illness. A post mortem examination was not permitted.

REMARKS.—The lung-symptoms gave a special double indication for the use of codeia, inasmuch as it was of great benefit in checking the cough, as well as in diminishing the production of sugar.

CASE III.—Henry B., aged 29, married six years, with three children, a farm-labourer, of good family history, had never heard of diabetes in his family. His father, mother, three brothers, and one sister were all living. Two years ago, he fell with a sack of flour on his back, but was not laid up, and did not appear to have injured himself. For the last twelve months, he had passed a large quantity of urine, and complained of insatiable thirst. During this period, he had been unable to do any work in consequence of weakness. His weight was formerly twelve stone. There was no history of syphilis, of alcoholic habits, or of any previous disease.

On admission, March 21st, 1881, he was found to be rather thin; his weight was 10 stone; he was of average height, and fair complexion. The skin was dry and rough; the pulse 60, regular, and full; temperature 98.4; tongue white. He had a tendency to constipation. There was no cough. The sounds of the heart and lungs were normal. His sight was good, but the edges of the optic discs were rather ill defined. His urine was abundant, 205 ounces, of specific gravity 1038, acid; it contained no albumen, but much sugar. He was ordered a mixed diet, including meat, eggs, milk, and brown bread, without potatoes or sugar; and treatment by codeia was at once commenced.

On April 11th, after nearly three weeks' treatment, the quantity of urine had come down from over 200 ounces in the twenty-four hours to 170 ounces; the specific gravity remained as before; and the quantity of sugar amounted to about ten ounces daily. Gluten-bread was then ordered, four ounces daily; and the bran-bread was discontinued. The milk was still allowed, two pints each day.

On April 18th, the milk was discontinued; and from this date all saccharine and starchy food was rigidly excluded.

The codeia, at first given in doses of a grain three times daily, had been increased to two grains on March 28th, to three grains on April 2nd, to four grains on April 7th, five grains on April 18th, and six grains on May 7th, when the urine had come down to 143 ounces, of specific gravity 1044. From May 9th to 17th, the pills were omitted, and a saline mixture substituted. The omission of the pills made no apparent difference in the patient's condition; there was no difference in his mental state, no difference in pulse or in pulse; and the quantity of urine ranged from 140 ounces on the 12th to 152 on the 17th. The codeia was then resumed, three grains being given three times in the day on the 17th, and six grains three times in the day on the 18th; on the 20th, six grains were taken four times; and on the 23rd the quantity was increased to nine grains three times daily. The quantity of urine then fell to 80 ounces, of specific gravity 1054, on the 27th; and 70 ounces, of specific gravity 1050, on the 29th. The highest gravity observed was on May 31st, when the quantity was 96 ounces, and the specific gravity 1063. On May 6th, the codeia was discontinued, as the patient complained of drowsiness, and his pulse was 66,

small and weak. This was immediately followed by a considerable increase in the quantity of urine, which rose to 130 ounces on the 13th and 20th. The codeia was resumed on the 21st, in doses of four grains and a half, and on the 30th was increased to nine grains daily, with the same result as before—an immediate fall in the urine from 130 to 90 ounces.

On July 5th, morphia (half a grain three times a day) was substituted for the codeia, and a few days later in grain doses, whereupon he was made an out-patient, and ordered to continue the morphia and cod-liver oil steadily for a month.

These three cases all exhibited marked improvement whilst taking codeia, which improvement ceased when the codeia was withheld, and was renewed on its repetition. Morphia had a good effect in two of the cases; but the improvement was much less marked with it than with the other alkaloids.

NOTE ON UTERINE HÆMOSTATICS.

By J. BRANTON HICKS, M.D., F.R.S., etc.

Obstetric Physician at Guy's Hospital, and Lecturer on Obstetrics, etc.

As a small contribution to the practical portion of the subject of uterine hæmostatics, I venture to make a few remarks on the mechanical kinds, which we know by the name of plugs or tents. In doing so I must be understood to refer only to those cases where the cavity of the uterus is not sufficiently large to contain blood in quantity, the loss of which from the circulation is likely to produce anything of serious detriment.

If we go back to former practice and to text-books, we find it recommended that, in case of threatened abortion with much hæmorrhage, a vaginal plug should be used.

The vaginal plugs recommended are the tampon, cotton or wool, silk or cambric handkerchief, rags, or sponges passed in till the vagina is filled up. An India-rubber ball also has been suggested, covered with felt or such like material. Now, even with the best management, there is much of distress to the patient in the use of the vaginal plug; and with regard to its hæmostatic effect very much of uncertainty, and generally partial failure; and in the hands of the unskilful and careless there is positively no restraint of bleeding worth the mention. If at any time any good results be produced, it is rather by the reflex irritation that it causes, whereby the uterus expels its contents. It is not so very rare an occurrence that one finds, on removal of the plug, the ovum on the uppermost part of it.

But besides its palpable inefficiency, a vaginal plug, being of a porous texture, absorbs a large quantity of blood and thus conceals it from our sight; it also favours decomposition, and this, as is well known, occurs within a few hours; and thus we have a new element of danger.

Again, in many cases, when called to such a case, we have no specimen at hand; and although we may extemporise one out of card-board, book-covers, or such like material, yet, before we have thoroughly and firmly filled the vagina, we must have given the patient considerable pain and distress, besides having occasion to put such pressure on the urethra as may necessitate subsequent catheterism. For these reasons, namely, the imperfection of action, pain in introduction, and danger if left in long—in other words, its general crudity, it seems to me that as a general rule the vaginal plug should, in the cases I have supposed, be discarded.

And as a substitute I would urge the employment of the cervical plug as being more precise in action, as well as being capable, if we use a dilating kind, of expanding the canal for the purpose of exploration, or for the expulsion or removal of its contents.

If, then, in any case of uterine hæmorrhage, where we have the conditions above alluded to, we desire, besides immediately checking the bleeding, to dilate, we can use the compressed sponge-tent; the best form of which I have found to be those made, after Sir James Simpson's plan, by Duncan, Flockhart, and Co., of Edinburgh. These can be introduced by a long pair of forceps, and retained *in situ* by placing a piece of sponge, with tape attached, in the upper vagina. Of course, even these materials retain some secretions, etc., and tend to facilitate decomposition; but their removal and cleansing can be effected much more readily than the vaginal plug, because it requires but a small portion. The sea-tangle tent, by reason of its slipperiness, is unreliable as a plug in hæmorrhage. If we desire, however, only to plug the cervix, we can very easily extemporise a plug from materials to be found in every house.

For instance: take a stick (say a flower stick) about a foot long, and taper it at one end to about the size of an uterine sound, or rather larger; wind round this end, for about three inches down, strips of cambric

rag, lint, or sponge to the required thickness, judging from the size of the os. Strips of sponge can be readily obtained from cup-shaped sponges of compact texture, and they can be tied on by thread, layer after layer, till the requisite conical form is obtained. The strips of the other materials can be laid on similarly. After the covered end has been well greased, it is passed into the canal, and the stick retained *in situ*, after the manner in which we tie in a catheter; an elastic tape, if obtainable, is to be preferred.

A catheter or bougie, or the end of the long injection-tube, can be treated in the same way. If we require great precision of application, then it is best that the hand should hold the external end till the hæmorrhage has ceased. If the catheter and stilet be used, then I have found it convenient to bend the external portion backwards, between the buttocks, tying the tape round the ring of the stilet—the ends of the tape being carried, as usual, to back and front of the waist-band.

These more homely adaptations I have recommended, rather than the especially made kinds, because they are often wanted at times when we cannot send home for a more showy sort. In any case, a cervical plug, expanding or not, is more precise, less crude and painful in application, than the vaginal, and, in my experience, nearly always successful. In all cases of abortion, where a plug is necessary, I would lay it down as a rule, that the expanding tent should be employed. In cases of flexion with abortion (and it is this complication which so frequently increases the hæmorrhage) it will be found that the covered stick or stemmed plug, above described, is very useful: for, if the fundus be elevated during its introduction, the uterine cavity is straightened, and evacuation of the contents thereby facilitated.

ON STERILITY.

By ARTHUR W. EDIS, M.D., F.R.C.P.,

Assistant Obstetric Physician to the Middlesex Hospital, etc.

It is somewhat surprising that more notice has not been taken, in our modern works on gynecology, of the frequency with which married women miscarry during the first few months of their matrimonial existence, or become mothers within the first twelve months, and yet never afterwards conceive.

The mere fact of conception occurring once, shows that the reproductive organs are in a normal physiological condition to start with. Some new factor must, therefore, have been introduced to explain this sudden cessation of fertility. Can it be that the effort is too great, and the capacity for further child-bearing exhausted? Is it not rather from some of the numerous complications likely to follow the act of parturition? That these latter will explain the occurrence of sterility in many cases, may be readily admitted; but there are a large number of cases where parturition is safely accomplished at full term, where there is no history of subsequent inflammatory mischief, and where, beyond a somewhat tedious convalescence, with possibly prolonged or profuse vaginal discharge, no active symptoms are present, such as to necessitate a local investigation.

A history by no means unfrequently met with is, that the patient was perfectly well up to the time of marriage, menstruation being normal, and unattended by pain or any serious discomfort. The first few periods may be somewhat painful and profuse, and followed by more or less mucous discharge. Cessation of the catamenia and other well recognised symptoms soon warn the patient that pregnancy has commenced. Increased leucorrhœal discharge, pain in the back, inability to stand or walk far, are naturally attributed to her condition, and no steps are taken to relieve them. Miscarriage occurs before the first half of pregnancy has been reached, due really to gradually extending inflammatory mischief of the cervix uteri, aggravated, it may be, by some imprudence in the way of over-fatigue or undue excitement, such as dancing, riding on horseback, travelling, etc. The miscarriage being attributed solely to some apparently preventable cause, no steps are taken to ascertain the exact condition of the uterus. After resting up for a longer or shorter interval, generally the latter, the patient begins again to take her place in society and attend to her domestic duties. Although warned by her own sensations in the form of backache, leucorrhœa, menorrhagia, and other distressing symptoms, that all is not as it should be, the patient imagines that these are but the sequelæ of her miscarriage; and, beyond resting up a little more than usual, simply because she cannot endure fatigue as heretofore, nothing is done to improve the state of the uterus, which meanwhile is in a very unhealthy condition.

Now, what is the interpretation of this? In many of these cases, the patient has become infested with latent gonorrhœa, as pointed out

Lying in the prone position, or resorting to the genu-pectoral position from time to time, will also assist in encouraging a return of the uterus to its normal position, where it is retroverted; though at first the patient will probably experience much inconvenience, and perhaps state that it is impossible for her to carry out the suggestion. The importance of so doing must be explained to her, and she must be encouraged to persevere in her attempts, gradually prolonging the time as she finds it practicable. The patient must avoid long standing or prolonged exertion of any kind, more especially just before, during, and after the menstrual period. The diet and bowels should be carefully regulated, and the general health improved in every way possible. Skirt-supporters and garment-suspenders, by taking off pressure round the lower abdomen, assist in relieving congestion of the pelvic organs, and may be recommended if thought desirable.

I will not here enter into further details of treatment; but, from much practical acquaintance with these cases of acquired sterility, I can confidently assert that the difficulty may be overcome (if only sufficient time be allowed to follow up the treatment) in a fair proportion of cases, and that without any unreasonable trouble on the part of the practitioner, or prolonged rest on the part of the patient.

THE SCIENTIFIC PRINCIPLES OF INHALATION.

By ROBERT J. LEE, M.D., F.R.C.P.,

Senior Assistant-Physician to the Hospital for Children, etc.

THE important relation recently shown to exist between septic agents diffused in the atmosphere, and certain forms of pulmonary disease, is receiving so much attention, that it is well to consider the scientific principles on which it depends. Experiments show that it is possible to diffuse antiseptic agents in the atmosphere by evaporation, and that organic substances may be preserved in such atmosphere without decomposition; or, in other words, that the air may be treated as a fluid, and be charged with antiseptics which prevent bacterial development. Now, when we burn any of the hydrocarbons or gum-resins, we do not volatilise them, and the air is not rendered antiseptic, except to the extent that a certain amount escapes unburnt and is diffused. It follows from this, that destruction of the antiseptic agent must be avoided. After numerous experiments—and the general results of those made a few years ago were presented at the Cambridge meeting of our Association—it appears that carbolic acid is the only antiseptic, as far as I know, which can be volatilised in a definite and constant manner. This is a most important fact in treatment, and deserving attention. If a solution of 1 part of carbolic acid in 80 of water be distilled under slight pressure, the vapour will contain the same proportion of the acid as the solution during the process of boiling; so that we can obtain vapour of any strength, and diffuse it in the atmosphere. Other antiseptics are either more or less volatile: as, for example, thymol, which comes off very rapidly from the boiling water, as does also benzoic acid; so that they are not convenient for inhaling.

It is also necessary to observe that vapourising a solution in the form of spray does not volatilise the antiseptic to any great extent, since the dew settles quickly on the nearest surfaces, and does not rise and diffuse itself as the vapour of steam does.

Again, the sprinkling of solutions on clothes does not necessarily secure diffusion of the agent; for, at the ordinary temperature, the agent may not evaporate, but will remain in the texture of the cloth. There are other details which will occur to those who reflect on these matters, and will secure such success as may fairly be expected from the scientific use of atmospheric disinfectants. I trust that I shall be forgiven for egotism in saying that I think the small inhaler exhibited by Maw, Son, and Thompson for me at the International Sanitary Exhibition, at the present time affords the most convenient and scientific means of atmospheric disinfection; and that, until more perfect methods are offered to the profession, I believe it will be found deserving of more general attention than it has yet received.

SYMPTOMS SIMULATING THOSE OF ANGINA PECTORIS, ARISING UNDER THE LOCAL APPLICATION OF ERGOTIN.

By T. NESLEY MILLS, M.A., M.D., L.R.C.P. Eng.,
Assistant-Professor of Physiology, McGill College, Montreal, Canada.

THE Rev. J. C., aged 36, came under my care for a growth on the left vocal cord. After making trial of the usual remedies for diminishing such growths, it occurred to me to try the effect of applications of ergotin. To one ounce of glycerine one drachm of tincture of iodine

and fifteen grains of ergotin (increased on March 24th to thirty grains) were added. This was freely applied (with a laryngeal brush dipped in the mixture four or five times) every morning. This treatment was begun on March 20th, and continued till March 26th, without any special developments. That day being Sunday, the patient did not visit me; but on the following morning he made complaint of having had an attack of pain in the cardiac region of the most alarming and agonising character. It had then almost or quite disappeared; but had been severe after the onset for three or four hours. He stated that the action of the heart was rapid "throbbing", and that there seemed to be interference with respiration. He also made special mention of a sensation of coldness around the heart. An examination of the chest revealed no disease that could explain these symptoms. No special complaint was made in the interval up to April 1st, of anything except a marked "oppression on the chest", which the patient attributed to a cold.

On the evening of April 1st, the patient called to state that he was suffering from peculiar symptoms. There was pain extending down the neck, along the inner border of the sterno-cleido-mastoid muscle, outwards beneath the clavicle, and down the arm to the finger-tips; there was numbness and partial loss of power in the arm and hand. These symptoms were confined entirely to the left side, and passed off gradually within twenty-four hours. The ergotin being now suspected to be the cause of these disturbances, it was discontinued; though its use may have been beneficial as far as the growth was concerned; for, on April 6th, a portion of it was coughed up. I could discover no pallor of the arm affected, and no difference in the pulse of that side. Unless certain of these symptoms are to be referred solely to the use of the ergotin, such as coldness in the cardiac region, and numbness, etc., of the arm and hand, it seems difficult to explain them.

These are symptoms almost peculiar to angina pectoris; and this case seems to confirm, in a most remarkable manner, Dr. Lauder Brunton's theory as to the causation of angina pectoris, at least one of its possible modes of causation. This man had had no such symptoms at any period of his life previously, and the most careful examination revealed no aneurysm or any form of cardiac disease. Moreover, there were no such symptoms while under my observation prior or subsequent to the use of ergotin. I resolved to use nitrite of amyl should such symptoms arise again; but had none at hand when the patient called upon me suffering with the second attack.

ABSTRACT OF LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND ZOOLOGY OF THE EDENTATA.

Delivered at the Royal College of Surgeons of England.

By W. H. FLOWER, LL.D., F.R.S.,

Hunterian Professor of Comparative Anatomy.

LECTURE VI.—ANATOMY OF THE ANTEATERS (MYRMECOPHAGIDÆ—continued).

THE second genus of true Anteaters, *Tamandua*, has also one species, *T. tetradactyla*, generally admitted by naturalists; but, as different individuals vary much in their coloration, it is possible that there may be more. It is an inhabitant of the dense primeval forests of South and Central America, and differs from the Great Anteater, essentially in its habits, living mainly among the branches of trees. Its size is usually that of a large cat. It closely resembles *Myrmecophaga jubata*, but its head is much less elongated; the fur is short and bristly; the tail, tapering and prehensile, with the under side throughout, and the whole of the terminal portion, naked and scaly. The tongue, salivary glands, and buccal apparatus generally, resemble those of the Great Anteater; the stomach is also similar, but with the muscular pyloric gizzard not quite so strongly developed. There are a distinct ileo-colic valve, and a short globular cæcum. The fore foot has a very large claw on the third toe, moderate sized claws on the second and fourth, a very minute one on the first, and none on the fifth, which is entirely concealed within the skin. The hind foot has five subequal claws. The vertebrae are seven cervical, seventeen dorsal, two lumbar, five sacral, and thirty-seven caudal. There are rudimentary clavicles. The placenta has been described by A. Milne Edwards; it is dome-

She strictly kept to the recumbent position for fourteen days, and then got up and resumed the daily use of the alum injections, which she still continued. On May 30th, she told me that she had neither bearing-down nor the least discomfort, and was able to attend to her house-work.

VERE G. WEBB, L.K.Q.C.P.I. & L.M., Colehill.

TONICOLOGICAL MEMORANDA.

CASE OF MUSSEL-POISONING: RECOVERY.

ON January 28th, 1882. I was called to a patient, whom I found in the following condition. He was reclining in a chair, in an extreme state of collapse. His cold hands and feet were being vigorously rubbed by the attendants. The pulse at the wrist was almost imperceptible, though not much increased in frequency. The face was pale, except when occasional hectic flushes appeared on the cheeks. The nose was particularly white and pinched, looking quite bloodless. The pupils were natural; tongue clean. There was loud wheezing and rattling respiration, interrupted by frequent yawnings and sighings. The patient was continually fainting, notwithstanding the large quantity of brandy which was being poured into him; he had also frequent attacks of clonic spasms, which apparently implicated all the muscles of the body. He was perfectly calm and conscious; had no pain anywhere, but he complained of great thirst, and suffered from itching all over, as if his "clothes had all turned into lice." There was no feeling of constriction of the throat, nor headache, but "everything looked misty." A rash, exactly like ordinary erythema, was seen on his chest. Two and a half hours before, he had eaten about twenty mussels, which he had just taken out of Morecambe Bay; he had eaten them without picking out the "moss," as he had often done before with impunity, though not so many at a time. On this occasion, however, he almost directly began to feel sick and to have griping pains, and in the course of half an hour he vomited, and was also severely purged five or six times. He then began to feel faint and dizzy; and, these symptoms becoming more and more aggravated, he sent for me. I gave him frequent doses of hot brandy and water, and drinks of hot milk flavoured with ginger. His feet were placed in mustard and hot water, and a mustard poultice was placed over his heart; he was constantly kept in the horizontal position. The attacks of syncope with convulsions still, however, continued. I therefore gave him a mixture of tincture of opium and spirit of ether, every ten minutes. He showed decided signs of improvement directly after the first dose, and the mixture was then gradually given less frequently. An hour later the patient could sit up, and was able to talk freely about his case. Next morning the patient was quite well, complaining of nothing but the incessant thirst. He is sixty years of age, of regular and temperate habits, strong, and well-built.

With regard to such cases the question arises, Which is the poisonous part of the mussel? Is it, as commonly believed, "the moss" (*byssus*) which lies at the root of "the tongue" (foot), and which is nearly always carefully removed before the mussel is eaten? or is it the viscous secretion contained in the special gland to which the foot is subsidiary, and out of which secretion the *byssus* is moulded? Or, whatever part of the common mussel be poisonous, why should it exert toxic powers in some cases only? Mussel-poisoning is not, I believe, a common accident. This is the first time I have met with a case in my professional experience.

J. FARRAR, L.R.C.P. Ed., etc., Morecambe.

POISONING BY CARBOLIC ACID.

A CASE of poisoning by carbolic acid occurred in my practice on May 16th. A housemaid, aged 14, after being reprimanded by her mistress, swallowed intentionally, as nearly as I could ascertain, about six drachms of the undiluted acid. I saw her twenty minutes afterwards, when she was breathing stertorously; her face was livid, as if she had taken an overdose of chloral; her pulse small and irregular; she was quite comatose; and the pupils firmly contracted, but not so small as in opium-poisoning. With the assistance of my friend Dr. Gibson, I washed out the stomach thoroughly with soap and water, and also milk and water; and, after persevering for nearly an hour, the lividity became less, and consciousness slowly returned; and, two days afterwards, she was able to be sent to her home in the country.

From the above facts, we must infer that carbolic acid is a powerful narcotic, and rapidly absorbed; but, from its volatility, the injurious effects pass off, if it can be quickly removed from the stomach by the stomach-pump. It did not appear to act as an irritant, as the girl did not complain of any gastric discomfort afterwards.

R. H. WILBE, Finchley Road, N.W.

THERAPEUTIC MEMORANDA.

ON THE TREATMENT OF RINGWORM OF THE SCALP.

THE paper on this subject by Mr. Malcolm Morris (BRITISH MEDICAL JOURNAL, June 17th, 1882, p. 901) induces me to mention a somewhat similar plan which I have employed at St. George's Hospital for more than a year.

Thinking that the accumulation of sebaceous matter and epithelial debris in all probability prevents the penetration of remedies into the follicles, which are further blocked by the swollen diseased hairs, and that it should be our object to bring any parasiticide into contact with the most deeply seated fungus, it occurred to me that we might attain this end by the employment of a parasiticide held in solution in a fluid which should also dissolve fatty matters. It certainly seemed to me desirable to exclude fatty and oleaginous materials from the remedy, and to apply this in solution—i.e., the minutest form of subdivision. Accordingly, I determined to employ a solution of boracic acid, twenty grains in an ounce of spirit, to which a drachm of ether was added; and directed this lotion to be forcibly rubbed into the affected parts of the scalp with a rag or moderately stiff brush three times daily, the whole head being ordered to be washed every morning with plenty of hot soap and water.

The result of this treatment in severe chronic uninfamed cases is certainly excellent, when it is faithfully carried out. The frosted scaly aspect of the diseased patches is soon replaced by healthy-looking scalp; the broken and twisted hairs appear to be removed; and a healthy growth makes its appearance. When the scalp is seen shortly after the application of the remedy, it is found to be shining, owing to the presence of a fine glaze. This, I presume, consists of dissolved sebaceous matter mixed with boracic acid, deposited in a thin film after evaporation of the solvent; and for this reason I think its removal by soap and water is a necessary adjunct to the treatment. This would, perhaps, be best effected by alkaline spirit of soft soap; which, however, I have not used.

Now, will this treatment suffice to cure chronic uninfamed ringworm? I should hesitate to say. I have certainly seen many cases in which the disease appears to have been entirely removed; but (there is always a "but" in the treatment of ringworm) I must admit the possibility of a diseased stump or two having remained. I find it an extremely difficult matter to be quite certain that every hair is healthy on a scalp which has once been affected with ringworm, and in this I believe my experience is not singular. I have had cases, which seemed cured, brought back to me on a future occasion with distinct ringworm; and it is, no doubt, possible that this may have started afresh from an old, undetected, excessively minute focus. But, with our very imperfect means of observation of hospital out-patients, it seems equally possible that such cases may be due to reinfection, either from other children in the same family or from a new source.

I may say, in conclusion, that Professor Kaposi (*Hautkrankheiten*, ed. i, p. 740) recommends, among other remedies, the application of alcoholic and ethereal solutions of carbolic and salicylic acids. These would, no doubt, do very well; but the entire absence of any irritation by the use of boracic acid seems to me in its favour, while its efficacy as a parasiticide is unquestionable. The remedy may be, no doubt, varied in different cases; but, if our object is that it should penetrate into the hair-follicles, I certainly think that it should be employed in solution and forcibly rubbed in, and that the use of an oily or fatty vehicle is to be deprecated.

JOHN CAVAFY, M.D., Upper Berkeley Street.

SURGICAL MEMORANDA.

A CASE OF POPLITEAL ANEURYSM.*

IN forwarding the details of this case, there is no attempt to claim any novel method of treatment, but simply to show what good results may follow the use of ordinary means when one has not the advantage of the usual compressing agents to be found in hospitals.

J. S., aged 32, was admitted on May 4th, at sea, with well-marked aneurysm of the left popliteal space, of about six weeks' duration. Compression was at once begun, and kept up until 8.30 P.M., when the limb was freely flexed, and kept in position by bandage. On May 5th, a leaden weight of nine pounds, conical in shape, was cast. The smaller end was placed over the femoral at the groin, the skin having been protected by white leather spread with soap plaster. Diet was restricted, especially in fluids. Eight minims of tincture of digitalis were given every three hours. Pressure by this weight was maintained

* Forwarded by the Director-General of the Naval Medical Department.

from daylight to about 8 P.M., when the limb was flexed and placed in position for the night. The weight was at first suspended, but afterwards was held in position by the patient himself, who was an intelligent man, and who had the principles of the treatment explained to him. A common screw-tourniquet was applied to the vessel in Hunter's canal when the patient was taking his meals, using the bed-pan, or tired of holding the weight. This treatment was steadily kept up until May 12th, when I was gratified by finding that all pulsation had ceased, and that a cure had been established. A fortnight afterwards, the man continued well, and was walking about.

W. ROCHE, Staff-Surgeon R.N.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

CASES OF COLOTOMY FOR CANCER OF LARGE INTESTINE.

(Under the care of Mr. BENNETT MAY, B.S.)

Case I. Transverse Colotomy for Cancer of Transverse Colon.—The patient was a woman, aged 53, and the symptoms set in gradually with general disturbance, sickness, and flatulence, soon followed by weakness and paroxysms of severe abdominal pain. In about six weeks they culminated in an attack of acute intestinal obstruction, for which she was admitted to hospital, after which her condition became less urgent.

There was great difficulty in determining the position of the stricture, though the presence of an ill-defined movable tumour in the left iliac fossa, and great distension along the course of the left colon, appeared to indicate the sigmoid flexure as the probable seat of the disease. Further examination, however, under ether, pointed to some other and higher portion of the large intestine as the seat of obstruction. Accordingly, when the symptoms again became urgent, the ascending colon was selected for operation.

This was performed on February 17th, when rather more than the average difficulty in finding an empty colon was encountered, and it was only by keeping strictly in Allingham's line, and patiently searching there between the layers of a great length of meso-colon, that the intestine was reached, collapsed and empty. It appeared for a little that a less operation had been performed; but, soon after completion, there was very free escape of contents. There was little relief, however, to the general condition, which, prior to the operation, was at the lowest ebb; and she died exhausted on the fifth day.

The transverse colon was found displaced from its normal position, being dragged downwards towards the pelvis and over to the left side. Near the right bend of this portion of intestine was a tumour occupying the whole circumference and two inches of length of the colon, and had contracted adhesions to coils of ileum prior to a gangrenous necrosis of the size of a sixpence, which had occurred in it. Round the tumour was a considerable area of recent purulent peritonitis, but the rest of the peritoneum, including the neighbourhood of the operation-wound, was healthy.

The tumour, on examination, was found to be a fine specimen of cancer, of the epithelioid type, undergoing cellular change. The muscular wall of the intestine as far back as the ileo-cæcal valve was enormously hypertrophied in thickness, as well as dilated. There were no deposits of cancerous matter.

Remarks.—This case shows the interest and difficulty attending the treatment of cancer of the large intestine, and the necessity of a liberal and judicious use of the knife, and the necessity of a liberal and judicious use of the knife, and the necessity of a liberal and judicious use of the knife.

If the position and position of the obstruction could have been determined, the operation would have been performed at an earlier date. In view of the new operation in the treatment of cancer of the large intestine, the operation would have been performed at an earlier date. In view of the new operation in the treatment of cancer of the large intestine, the operation would have been performed at an earlier date.

CASE II. Colotomy for Cancer of Rectum with Fistulous Opening into Bladder.—The operation in this case was undertaken for relief of the distressing and disgusting condition arising from the uncontrolled admixture of faeces with urine, and their escape indiscriminately by urethra and rectum. The patient, a tailor, aged 53, stated that, in the autumn of 1880, he was attacked with shivers and dysentery. The bowels were very much out of order during the winter, there being almost continuous diarrhoea with discharge of blood and mucus, and loss of flesh and strength. In the autumn of 1881, he noticed that slime and sand began to pass with the urine; and, after several weeks of this, he had an attack of retention. A surgeon, called in to relieve him, found two damson-stones impacted in the urethra, which he removed; and in this way the existence of a fistulous communication was first discovered.

Ever since that time, feculent matter had continued to escape largely by the urethra, and, in consequence, he had suffered from painful cystitis. Not the least of his troubles was the entrance of flatus into the bladder, and its escape down the urethra; with a continuous escape of urine and slime from the rectum. Examination at once discovered the cause of his misery in a hard cancerous mass encircling the lower bowel, just within reach of the finger, and to which also his cachexia and emaciation bore tribute.

The operation (on the descending colon) was performed on the day following that of the preceding case; and similar, though less, difficulty was encountered, and was dealt with in the same way. Several small hard scybalous pellets were dug out of the colon at the time, and after that he had no further action for several days. On the fifth day, a dose of castor-oil produced free diarrhoea, on the abatement of which, the intestine below the artificial opening was quite empty. From the ninth day onwards, faeces passed solely by the lumbar opening, though urine continued to find its way into the rectum for some time longer, and often poured out of the artificial opening as he lay on his back. In a little time, however, this ceased; and the bladder, being completely relieved of fecal and gaseous contents, recovered its healthy condition. In little more than a month, he was able to leave the hospital; and, at the present time (four months after operation), his condition is one of great comfort, the bowels acting with regularity twice a day, and the functions of the bladder being under easy control. His strength, too, is so far restored, that he was able, one day this week, to take a railway journey, followed by a walk of two miles, in order to visit me at the hospital. The result has more than fulfilled the sanguine expectations that could have been formed of the operation.

LIVERPOOL ROYAL INFIRMARY.

STRICTURE OF THE URETHRA, WITH PERINEAL FISTULÆ: SEARCHING AND CONTINUOUS DRAINAGE: CURE.

(Under the care of Mr. REGINALD HARRISON.)

[FOR the notes of this case we are indebted to Mr. RAYNER, M.D., Surgeon.]

The following case illustrates some recent improvements in dealing with tight and complicated strictures.

A. M., a mechanic, aged 47, was admitted on December 20th, 1881. He stated that he had suffered from stricture for the last eighteen years. He was only able to pass small quantities of urine at a time, and then with great pain and straining. About the bulbous portion of the urethra, there was considerable induration, and, just behind the scrotum, two fistulæ of recent formation, through which urine escaped. On examination, a long and dense stricture was found in the membranous urethra, through which only a thin stream could be passed. The urine was very ammoniacal. The patient was treated by Mr. Harrison, and, after a few days, the urine was passed, and, after a few days, the urine was passed, and, after a few days, the urine was passed.

The patient was discharged on the 27th of December, and, on the 11th, it was found that the stricture was cured, and the patient was discharged on the 11th of December, and, on the 11th, it was found that the stricture was cured, and the patient was discharged on the 11th of December.

strument for himself, and enjoined to use it daily. January 19th. He was discharged well.

REMARKS.—Mr. Harrison drew attention to this case, as illustrating the great advantage of the process which he had described under the name of "stricture-stretching," as well as Mr. Chiene's method of drainage of the bladder. Here, in the short space of three weeks, a stricture, almost impassable, had been rendered readily amenable to treatment, without distress to the patient. He was of opinion, having regard to the local condition, as well as to the general state of the patient, that no other procedure could have given such good results with so small amount of risk to life. Mr. Harrison mentioned that, of the thirteen cases of tight stricture, which on that day were under observation in his wards, in five he should resort to this mode of treatment. Sufficient time had now elapsed, since he had begun to practise stricture-stretching, to enable him to state that, with an ordinary amount of care on the part of the patients—such care as all persons who have ever suffered from stricture ought to take—the permanent results were most satisfactory.

CHELTEMHAM GENERAL HOSPITAL AND DISPENSARY.

FRACTURES OF THE VERTEBRAL COLUMN.*

(Reported by G. AITKEN CARDEW, M.R.C.S., Honorary Medical Officer, Branch Dispensary.)

CASE I. *Fracture of Dorsal Spine: Plaster-of-Paris Jacket: Recovery.*—Charles M., aged 19, was admitted in July 1878, with fracture of the fibula, injury to the back, and severe contusions, the result of a crane-pillar falling on to him. Six weeks after admission, he was unable to rise in bed without great pain in the dorsal region of the spine. Examination revealed prominence of the tenth dorsal spine, with great thickening around it; manipulation or pressure gave pain; there were no symptoms of nerve-disturbance. Fracture of the spinous process of the tenth dorsal vertebra was diagnosed, the thickening being due to the callus.

A Sayre's plaster-jacket was applied without extension. In a few days, all pain had disappeared, he was able to walk about, and left the hospital fourteen days after the jacket was put on. Every two months the man came to have a new jacket, and each time, on removing the old one, less pain was caused by movement, and the prominence of the spine in the dorsal region lessened. By Christmas, the man was so well, that he was able to slide and skate. At Easter, he resumed his ordinary occupation of a blacksmith, having discarded his jacket in the previous February. The treatment occupied just nine months.

CASE II. *Fracture of Dorsal Spine: Plaster-of-Paris Jacket: Recovery.*—M. K., a man six feet high, whilst sitting on the ground working, was crushed by the fall of the doors of a shed; they weighed half a ton, and doubled him forward to the ground. On removal of the doors, he was found quite insensible, and was brought in that state to the hospital. On his admission, he was put to bed, and steadied by laying heavy sand-pillows along each side of his body. His urine was drawn off, and hot bottles applied to his lower extremities, which were icy cold. He recovered consciousness in twelve hours, and then complained of great pain in the centre of the dorsal region of his back, but none anywhere else. There was anaesthesia of the left leg from the hip downwards, and of the right one below the knee. Reflex movements could be obtained in both legs on tickling the soles of the feet, but he was unable to move them voluntarily. He was unable to retain urine or faeces. His temperature for the first three weeks was persistently below normal, ranging from 96.5° to 97.5° Fahr.

A fortnight after admission, it was decided to put on a Sayre's plaster-jacket. With the assistance of two porters and a nurse, he was held in an upright position, the porters grasping him under each axilla, and the nurse taking the weight of the head by placing one hand under the chin, and the other under the occiput. The case was completed and hard in fifteen minutes, and he appeared none the worse from the exertion. From this time, the pain gradually disappeared from his back, and power began to return to the legs, bladder, and rectum. He was ordered to sit up on the fifth day after the case was put on, and in a day or two afterwards he began to walk with assistance; in fourteen days, all paralysis had disappeared except a slight dragging of the left leg, which remained for upwards of twelve months. Every two or three months, he had a new case put on. A large hard mass of callus developed around the spinous processes of the lower dorsal region, forming a distinct prominence. From the time he had the case applied to the end of his treatment, his progress was sure and maintained. The treatment extended over eighteen months. This man is now working as a common labourer in the same works where he received his accident, and is able to do fairly hard work.

* Read before the Gloucestershire Branch of the British Medical Association.

CASE III. *Fracture of Cervical Spine: Death.*—A farm-labourer, fifty years of age, fell off the top of a load of hay, alighting on the back of his head, which was doubled forwards under his body: he was rendered insensible. Two hours afterwards, when admitted to hospital, he had regained consciousness, and complained of great pain at the back of his neck, increased by the slightest movement. There was total anaesthesia of the whole of his body, with paralysis of all the muscles of his trunk and limbs, except the diaphragm. He lived for three days, suffering no pain and being quite conscious the whole of the time, dying apparently of exhaustion, owing to defective respiration. Examination after death revealed fracture of the body and transverse processes of the sixth cervical vertebra, with laceration and contusion of the spinal cord.

REMARKS.—The first two of these cases demonstrate very forcibly the advantages to be gained in injuries of the spine by immobilising the trunk by external support. It would hardly be possible to apply a Sayre's plaster-jacket in cases of very extensive fractures of the spine; but the principle may still be carried out, although the method may be different. In such cases, the application of a case, after the Bavarian plan of encasing a fractured leg, may very well be adopted. This can be carried out without any serious amount of movement of the patient, as it is only necessary to roll him from his back to his side during the application. The third of these cases was so severe, that treatment was out of the question.

ASHTON-UNDER-LYNE INFIRMARY.

LITHOTOMY: PROLONGED RECOVERY.

(Under the care of Mr. E. ROBINSON.)

(Reported by Dr. HENRY PAYNE, House-Surgeon.)

W. H., aged 69, married, an engineer, was admitted on August 24th, 1881. Stone in the bladder had been previously diagnosed. He was tall and thin, of a nervous temperament. He had never had a day's illness. There was no family history of stone, nor of any hereditary disease. He had always lived in the district of Ashton, where the drinking-water is soft. About two years before admission, he had passed a small stone, about the size of a grain of wheat, which caused some slight pain and a little bleeding from the urethra. He had never had renal colic, nor any symptom of stone, except increased frequency of micturition; this symptom had become very severe three months before admission.

On August 27th, he was sounded, and a calculus about an inch long, rough and hard, was detected just at the neck of the bladder. He had been sounded two or three times before, the stone being always found in the same position. Nothing was felt in the prostate on examination by the rectum. The urine was acid, specific gravity 1017; it contained albumen (one-tenth) and blood.

Owing to the stone always being felt in the same position, and to the absence of the symptoms due to the irritation from a calculus free in the bladder, it was thought that a prostatic concretion was possibly present, and median lithotomy was resolved upon.

On September 5th, the patient was put under chloroform for operation, when, upon sounding, the stone was found to have altered its position, and to be freely movable in the bladder. Lateral lithotomy was therefore performed by Mr. Robinson in the usual manner. The only difficulty in the operation was the extraction of the stone, owing to the great depth of the perineum and the close proximity of the ischial tuberosities. The stone was of uric acid, oval in shape, compressed laterally, smooth, hard, of a brownish colour, and weighed eleven drachms. After the operation, there was free oozing, the bladder became distended, and the patient suffered much pain. A catheter was passed by the urethra, the bladder washed out with warm water, all clots removed, the petticoat-tube reinserted, and the oozing gradually ceased.

Two or three days afterwards, the perineum, scrotum, and lower part of the abdomen became discoloured; the wound showed no tendency to heal; very little urine was being passed; and the old man was very irritable and restless, complaining of great pain and tenderness about the abdomen. The wound afterwards became sloughy, discharging much offensive pus; the patient had delirium at night, and delusions, and refused food and medicines. This condition lasted two or three days. The wound, discharging freely and showing no tendency to heal, was treated by passing a catheter and injecting a solution containing ten grains of tannic acid and ten minims of tincture of iodine in an ounce of warm carbolic acid solution (1 in 60); and allowing this to flow over the wound from the bladder. A pad of lint soaked in the following lotion was kept over the wound: Spiritus vini rect. ʒj; glycerini ʒj; aquæ carbolic. (1 in 40) ad ʒxij. This syringing was continued

daily, with marked improvement in the condition of the wound. The patient's appetite improved, and he did well. No urine was passed by the urethra for five weeks after the operation. The wound gradually contracted; and by October 30th all the urine passed by the natural passage, and the wound was perfectly healed. Up to October 2nd, the temperature was always above 100°. He got up on November 13th, and was discharged perfectly well on the 18th.

REMARKS BY DR. PAYNE.—This case is interesting for the following reasons: 1. the age of the patient; 2. the only symptom of stone being the great irritability of the bladder; 3. the stone always remaining just at the entrance of the bladder, from spasm of the bladder; 4. the effect of chloroform in relieving this spasm, and so altering the diagnosis; 5. the great bruising to which the parts were subjected in extracting the stone; and (6) the long period of time elapsing (five weeks) before any urine came the right way.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 13TH, 1882.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

The Action of Salts of Potash, Soda, and Ammonia on the Frog's Heart. By SIDNEY RINGER, M.D., and HARRINGTON SAINSBURY, M.D.—The paper described experiments, the special object of which was to compare the salts of soda and ammonia and potash, in respect of their action. The ventricle of the frog's heart was selected for this purpose: it was fed with a mixture of saline 0.75 per cent. and a solution of dried bullock's blood. To the circulating fluid the drug to be tested was added. The contractions of the heart were recorded on a revolving cylinder. The drugs were tested in two directions: 1. As to their influence on the spontaneous working of the heart; 2. As to their influence in modifying the effect of continuous faradisation on the heart. The results are summarised were these. In no case examined was the action exclusively on either excitability or contractility. This probably held in all drugs. The degree in which one or other suffered varied with the drug. Thus, with the chlorides, bromides, and iodides of sodium, ammonium, and potassium, salts of sodium and ammonium affected excitability but slightly; whilst those of potassium affected excitability markedly; and thus, whilst it was the exception in the case of the latter not to get permanent arrest of spontaneous beats before contractility was destroyed, with the salts of ammonium and sodium it was the exception when spontaneous beats did not continue up to the very end; and, moreover, with a final frequency little short of—often in excess of—the original frequency. In respect of influence on excitability, ammonium and potassium formed the extremes. Sodium was intermediate, though much nearer ammonium than potassium. As to the action on contractility, the quantities of the drugs used controlled the measure of the activity. Potassium and ammonium came very near together, whilst a very wide gap separated these from sodium. Thus, the highest estimate would represent the sodium salts of the group as one-tenth as poisonous as the potassium and ammonium salts. It was important not to take action on contractility as the exclusive measure of poisonous action; for arrest might also be effected by action on excitability; and, from a clinical stand-point, "arrest" was of great importance. Hence, in order of poisonous action, there were: 1. Potassium salts most poisonous, both excitability and contractility being powerfully affected; 2. Ammonium salts, excitability being powerfully affected, contractility powerfully affected; 3. Then (a) a wide gap, in which sodium salts, excitability being slightly affected, but contractility, suffering chiefly. The therapeutic importance of these results was obvious: the more so, that the iodides and bromides of potassium and ammonium were very largely used. The experiments would support the substitution of the bromides and iodides of sodium, in preference to those either of potassium or of ammonium; and of these two, the ammonium salt would be preferred to the potassium salt. So much the more important was it, the salt of sodium and ammonium appeared to be as effective as those of potassium. One or two points remained to be noted. Throughout the salts of potassium examined, no difference in action was found in an cation. The same held for ammonium salts. The sodium salts were, for reasons given in the paper, unsuitable for comparison. Considering attention to the salts of ammonium and potassium, the latter appeared to be more active, along with chlorides, than the former, in the case of bromides. This implied that elements entering into combination did not lose their relative order of activity; and the right conclusion was, that in comparison of compounds between the results of the experiments were not far from accurate. As here given, the order of activity was: potassium, ammonium, sodium, and then the bromides.

iodides, and chlorides—a result quite opposed to clinical experience but not irreconcilable, if but one side, as it were, of a drug were taken into account. Experiments on the citrates of sodium, ammonium, and potassium were made. The results were very similar in kind to those already obtained, and the general statements applying to this chloride group might be extended to these salts. The chief points to be noted were these. In respect of the sodium salt, the citrate was, at the lowest estimate, doubly as poisonous as the sodium salts of the chloride group but one-fifth as poisonous as the ammonium and potassium citrates. The ammonium and potassium citrates were about as poisonous as the salts of these bases belonging to the chloride group. These numbers referred alone to the effect on contractility; for, in respect of excitability, there was much less tendency towards inhibition with potassium citrate than with the potash salts of the chloride group. The essential points which these experiments established were: 1. The twofold mode in which drugs might affect the cardiac tissue—viz., in respect of excitability and contractility; 2. The relative activity of the salts of sodium, ammonium, and potassium, under similar conditions. Both of these points, but especially the latter, had very practical applications.—The PRESIDENT made a few remarks on the scientific and practical value of the paper.

A Narrative of Additional Cases of Osteitis Deformans. By SIR JAMES PAGET, Bart.—The paper consisted of the relation of several cases of this disease observed by the author since the publication of his paper on the same subject in the sixtieth volume of the *British Medical Journal*. They all confirmed the description there given, and were adduced as further evidence that the disease to which the name was given had well defined and distinctive characters justifying its being regarded as a special form of inflammation of bones. This affection usually concerned many bones, most frequently the long bones of the lower extremities, the clavicles, and the vault of the skull. The affected bones became enlarged and heavier, but so weakened that those which carried weight or bore much muscular straining bent, and became curved or misshapen. The disease was slowly progressive, giving rise to rheumatoid pain in the affected limb, and increased heat in the tibia. These symptoms were not constant, nor felt in all the bones. No special disturbance of the general health attended this affection. In all the twelve cases except the last, the disease had begun in persons over forty years old. There was no inherited relation to any disease except gout. The posture, general appearance and movements of the patients had been alike in all the cases observed. They often suffered for the diagnosis.—Mr. BRYANT and Dr. BARLOW described similar cases which they had observed.

Two Cases of Malignant Pusule, together with a Further Statement of Cases treated at Guy's Hospital. By J. N. C. DAVIES COLLEY, M.B.—In this paper the author tabulated seventeen cases of malignant pustule or carbuncle which had occurred during the last nine years at Guy's Hospital, and gave more fully the details of two which were admitted into his wards last year. CASE I. F. R., aged 31, worked in a hide-warehouse, and had been engaged for eight days with Australian fleeces. On April 10th, 1881, a small red spot appeared on his right lower eyelid. It grew rapidly. On the 16th he was admitted with the eye closed, and with a partly dry, partly vesicular eschar, covering nearly the whole of the swollen lower eyelid. He was in little pain, but weak, trembling, and feverish; the glands were swollen. Immediate relief followed the excision of the eschar. In a few weeks the wound had healed, but the eyelid remained everted. Bacilli were found in the blood at the time of the operation. CASE II.—T. W., aged 50, a tailor, had been handling foreign hides until July 2nd, 1881. He then lost his work, and on July 6th noticed a red itching swelling on the cheek. It grew rapidly. On the 10th he lost appetite, and on the 11th he was admitted with a raised nearly circular patch of more than an inch in diameter in the middle of his cheek. The centre of the patch was slightly depressed, dry, and nearly black. The edges were covered with small, closely packed vesicles. There was swelling of the orbital glands and a lump of the neck. The eschar was excised, and chloroform was applied. He recovered rapidly. Attached was a coloured drawing of the carbuncle, and drawings of the microscopic sections of the eschar, showing the bacilli anthracis in the corium and round the hair follicles. The author called attention to the following facts: 1. Malignant pustule or carbuncle is not unfrequently among farmers or what labourers who have to handle foreign hides and fleeces. 2. It has not yet been observed at Guy's Hospital as a primary disease in the viscera, or in the form of erysipelas or tetanus of the integument. 3. It has been seen only on exposed parts of the body, viz., the face, neck, and arms, the most dangerous position being the neck, probably from its proximity to the larynx. 4. The seventeen cases were between the ages of 11 and 57, and the majority were young adults of the male sex. 5. Twelve out of seventeen cases occurred in September and October, 1881, being

months. 6. The disease may be confounded with malignant facial carbuncle, poisoned wounds, and primary chancres of the face. The chief points to notice are the painless character of the eschar, its vesicular margin, and slightly depressed, dry, blackish centre. 7. The nature of the disease is not unfrequently overlooked, and its symptoms have been attributed to such causes as the bite of a mosquito, or the absorption of arsenic through an abrasion. 8. It should be treated at once by excision or free cauterisation. Out of fifteen cases in which the eschar was excised, eight were already suffering from constitutional symptoms, and twelve had considerable oedema or glandular enlargement. The two cases in which excision was not performed, were admitted with dyspnoea and other serious symptoms, and it is probable that in them the operation would not have averted the fatal result. 9. Swelling of the most superficial part of the cutis with the formation of a ring of papules surrounding a zone of vesicles, at the centre of which is an eschar, is the earliest change recognised. 10. Bacilli are present in these papules but not beyond them, being numerous in the tissue of the cutis immediately below the eschar, and above to its borders, and most abundantly just below the Malpighian layer of the epidermis covering the outer part of the eschar.—After some remarks from Mr. BRYANT and the author, the Society adjourned until next session.

OPHTHALMOLOGICAL SOCIETY.

FRIDAY, JUNE 9TH, 1882.

GEORGE CRITCHETT, F.R.C.S., in the Chair.

DISCUSSION ON SCLEROTOMY.

THIS discussion was resumed, having been adjourned on the previous day.

MR. JAMES ADAMS had only performed the operation in chronic simple glaucoma with good central acuity of vision, because he had found iridectomy in these cases, followed by further deterioration of the field. He made the puncture and counter-puncture two millimètres from the corneo-sclerotic junction, and left a thin bridge of partially divided sclerotic at the centre; if the iris prolapsed he, following the recent practice of M. De Wecker, endeavoured to replace it, and to obtain a pupil free from deformity. As a rule his results were satisfactory, tension was reduced, and the field of vision was not narrowed. He did not use eserine until after the operation, as it narrowed the anterior chamber. If necessary, he repeated the operation, either in the same situation or in the opposite direction. In many cases the tension of an eye which had undergone sclerotomy could be diminished by pressure; a little fluid probably escaped each time the tension rose.

MR. BRUDENELL CARTER had been led to operate by witnessing the results attained in some cases which had been operated upon at Guy's Hospital. The position of the incision might, he thought, be of considerable importance. He entered the knife close in front of the iris, and divided the sclerotic entirely, leaving only the conjunctiva to cover the wound. He agreed with those who thought that a large prolapse of the iris might be harmless, for, after injuries which produced this, recovery might be complete. Large incarcerations of the iris did not, in his experience, cause as much mischief as small. He referred at length to two cases of sclerotomy where prolapse of the iris had been followed by no evil consequences. He had found the operation of advantage after extraction of cataract. He desired to know whether sclerotomy was likely to be of use in cases of high progressive myopia, and referred to a somewhat similar operation frequently performed by the late Mr. Hancock in this class of cases.

DR. BRAILEY pointed out the great difference existing between the various methods of performing sclerotomy. The original operation of De Wecker, making the puncture and counter-puncture one millimètre posterior to the cornea and cutting parallel to the plane of the iris, strictly speaking, could scarcely be called a sclerotomy, as the divided part was almost entirely corneal, the scleral part forming the undivided bridge. The more posterior incision, two millimètres behind the cornea, practised commonly in this country, cut more of the scleral tissue, but neither it nor the former operation divided the canal of Schlemm, and, as demonstrated on anatomical grounds and by examination of the microscopical sections, they often failed to cut even the *ligamentum pectinatum*. The same might be said of Bader's operation, with its large bulging of iris into the wound. Indeed, he regarded any operation designed to cut the canal of Schlemm as a most difficult and dangerous one, as this channel extended forwards less than half a millimètre from the iris angle, and consequently the incision must be made within narrow limits, and in dangerous proximity to the ciliary body. The reduction of tension which followed each of these operations he attributed either to the temporary evacuation of part of the contents of the globe, or to this combined with permanent filtration, either through

the scar or into the lymph-spaces of this region. The relief from evacuation seemed to explain how even those operations in which a knuckle of iris prolapsed were sometimes successful. In the later stages of glaucoma, atrophy of the ciliary body and the iris probably led to so diminished a rate of inflow as the remaining channels would be adequate to remove, if once the excess were removed by sclerotomy or any other form of puncture. Permanent filtration through the scar, together with the additional elastic area which it afforded, would explain the success of Mr. Bader's operation. He had not been able to examine scars after successful sclerotomy, but in some unsuccessful cases he had noticed a retraction of Descemet's membrane; this would leave a space through which (or the scar tissue filling it) aqueous fluid might escape outwards, into the lymph spaces of the corneo-scleral region. Prolapse of a knuckle of iris not only obstructed the escape of fluid, but was more liable to cause dangerous iritis than a larger prolapse. On anatomical grounds, he suggested a radial incision into the most peripheral part of the external wall of the aqueous chamber. The numerous equatorial elastic fibres of this region would, he thought, then retract, and allow free entrance into the canal of Schlemm without risk of prolapse of the iris.

MR. PRIESTLEY SMITH said that sclerotomy and iridectomy acted in glaucoma essentially in the same way, namely, by creating a channel for the escape of the pent up fluid; that the incision of the sclerotic was the essential part of the operation was shown, he thought, by the following facts. 1. Glaucoma was characterised by obstruction at the angle of the chamber, and to be successful the incision must pass through this region. 2. Excision, even of a large piece of iris through a corneal wound, did not cure. 3. The scleral incision by itself would effect a complete cure. 4. Clinical observation showed that variations of tension after operation were intimately connected with variations in the condition of the cicatrix. It was not necessary to suppose that, subsequently to the operation, the whole of the fluid had to escape through the filtration-scar. In those cases which were curable there was no solid adhesion at the angle of the chamber, and the slackening of the globe probably induced a reopening of the angle throughout the entire circle. With regard to Dr. Brailey's suggestion that the fluid might percolate the cornea centrifugally from the wound and thus escape, it should be noticed that Pfüger had recently given an almost conclusive proof that the lymph-streams traversed the cornea from periphery to centre, and passed backward from the cornea into the anterior chamber. Schoeler's experiments on rabbits, from which he inferred that the sclerotomy incision in glaucoma rather retarded than accelerates filtration of fluid, were fallacious, for the conditions of the experiment were not analogous. In spite of Mauthner's recent assertion to the contrary, it was certain that glaucoma was essentially due to pressure, that it was cured by the reduction of tension, and that this was due to restored filtration. He desired to know whether those who advocated sclerotomy made as favourable an incision in iridectomy. If the lance-shaped knife were used in glaucoma, with shallow anterior chamber, either the incision would lie too far forward, or the lens would be wounded. He attached great importance to using Graefe's knife in iridectomy for glaucoma, and cited cases considered least favourable for iridectomy. Ample proof had now been given that sclerotomy could effect cures in every form of glaucoma, but accurate statistics on a uniform method, and noting both tension and visual results, were wanted before it could be asserted that sclerotomy was superior to iridectomy. His impression was that the latter operation was slightly more dangerous in some cases with regard to the immediate occurrence of hæmorrhage, but that it afforded more trustworthy and permanent cures.

MR. GEORGE COWELL had performed sclerotomy in the manner recommended by M. De Wecker. He had been disappointed with the result, but his cases had been unfavourable. He had frequently performed the operation introduced by the late Mr. Hancock, and called by him "division of the ciliary muscle," though it had never been generally accepted as such. By it, however, tension was certainly relieved, and he regarded the operation as more desirable than De Wecker's. He had lately modified it by using a broad iris knife, and making the puncture very far back; a little serous fluid escaped, and sometimes a little of the vitreous body protruded; the anterior chamber was not opened.

MR. H. POWER said that he had only performed sclerotomy about half a dozen times, but he had found it successful in acute glaucoma, and Mr. Vernon had had one case of fulminating glaucoma which was completely cured by it. He had recently seen a woman upon whom he had performed Hancock's operation upwards of fifteen years before. She had never had any recurrence, and was now, when sixty years old, able to read the smallest type. In hæmorrhagic glaucoma iridectomy was most unsatisfactory; he would there use eserine, which he regarded

as a valuable remedy. If the pupil contracted well under eserine in any case, he would certainly go on with it. In the rare cases of glaucoma occurring in early life, from fifteen to eighteen, he would be inclined to try sclerotomy, since he had found that iridectomy always did harm; and in ladies he might also prefer sclerotomy, as it produced less deformity.

Mr. J. COUPER observed that sclerotomy was advocated on the Continent as a substitute for iridectomy, because the latter failed in a large number of cases, but this was not the experience in this country. The two operations were spoken of as essentially different, but he thought they were essentially the same. In performing iridectomy he made the section as far back as possible through the sclerotic, and tried to strike Schlemm's canal. Any knife might be used, but he preferred a very narrow angled knife.

Mr. McHARDY had done the operation eleven times. In eight cases the eyes were blind, the result in four was unknown, in two pain and tension had ceased; in one iridectomy, and in one enucleation had subsequently to be performed. In three cases of chronic simple glaucoma, where vision remained, the tension at first diminished, but again increased and necessitated iridectomy.

Mr. ANDERSON CRITCHETT preferred sclerotomy in hæmorrhagic glaucoma, and in glaucoma after operation for cataract. In the case of a patient with chronic simple glaucoma of both eyes, he had done iridectomy on one side and sclerotomy on the other, but, after four months, tension recurred in this eye, and iridectomy had to be done. He operated on De Wecker's method, and included a considerable arc of sclerotic.

The CHAIRMAN, in closing the discussion, observed that the importance of sclerotomy as an element in the treatment of glaucoma had been forcibly shown by the debate. No doubt there were cases where, if sclerotomy were really equal to iridectomy, it would be the preferable operation; but, for himself, he was still inclined to think that iridectomy was more likely to give good results, at least in so far as tension was concerned.

OBSTETRICAL SOCIETY OF DUBLIN.

SATURDAY, MAY 6TH, 1882.

J. BYRNE, Esq., President, in the Chair.

Uterine Fibroid Tumour.—Dr. MORE MADDEN showed an uterine fibroid tumour which he had removed from the posterior wall of the uterus of an unmarried woman. It was situated in the utero-rectal space, and was subperitoneal rather than submucous. It had been noticed by its effects for three years, producing great dysuria and difficulty of defecation. In removing the growth, the uterine structures gave way, and a large opening was made into the abdominal cavity, through which a coil of intestine came into the vagina and protruded through the vulva. This was pushed back into the abdomen, the vagina plugged with carbolised sponges, and the woman perfectly recovered, the rent healing by means of plastic adhesions after about ten days.

Asexual Fetus.—Dr. HENRY showed the results of his examination of the asexual fetus exhibited at the previous meeting. The intestine ended in a fleshy tumour, hollow and flattened, from which two small pockets extended down about three-quarters of an inch. There was no opening into it except that from the intestine; yet it was the sole receptacle of the kidneys, bladder, rectum, and genitals. The child was otherwise thoroughly natural in form. This *œdipus* was filled with yellow fluid like bile.

Ovarian Cyst.—Dr. HENRY showed, for Dr. Atthill, an ovarian cyst of very rapid growth, only seven months, and accompanied with pain. It was fixed in the abdomen, and the pedicle was found to have three twists in it. He also showed a second ovarian tumour which had grown since Christmas last, consisting of multiple cysts.

Anterior Presentation in Dr. Neville's Paper on Presentation.—Dr. MAY said that too much stress had been laid upon the action of gravity in the production of the presentation. Gravity was certainly not the only factor in the cases, for when gravity had most opportunity of acting, viz. between the sixth and eighth months, head-presentations were least common. Again, on the gravity theory, hydramnios should be accompanied by head-presentation, but this was rarely the case. So also in cases of twins, there were more than fifty per cent. of mal-presentations. He therefore considered that the active motions of the fetus produced by reflex actions were the most important factors; and moreover, where, in the latter months, a head-presentation turned into a breech, there must be something more than gravity at work. The factors he considered of most importance were, after the active fetal motions, contractions of the uterus in its long axis, the form of the uterus, and the position of the pelvis. The President remarked that

the gravitation theory was one of the oldest; he regarded the size of the pelvic brim a determining factor in the case, for, as the fetus revolved, if the pelvic brim were wide enough to accept the head, it would stop there; if not, it would seek another position.—Dr. DILL and Dr. CRANNY also joined in the discussion.—Dr. NEVILLE, in replying to Dr. Macan, considered that in pregnancy two periods should be distinguished; first, before fixation became pretty tight, up to which time gravity, besides being a constant force, was also the most potent factor in the production of head presentations. In the second period, the active fetal movements might easily overcome or modify the action of gravity, as in changing breech into head presentation.

On the Rational Treatment of Anterior and Posterior Displacements of the Uterus.—Dr. MACAN read a paper on this subject, in which he quoted various authorities as to the origin of the conditions under consideration. The first important point to be decided was the normal position of the uterus; and on this point authorities showed a singular want of unanimity. Most modern writers, following Schultze, considered the normal position to be one of antelexion when the bladder was empty, but becoming gradually pushed up in proportion to the degree of distension of the bladder—the chief factors in depressing it being abdominal pressure, and gravity. On this supposition, no single position could be regarded as the normal one, unless at the same time the degree of distension of the bladder and abdomen were stated. The neck of the uterus was supported by Douglas's folds, the fundus being at an angle of 90°, when the bladder was empty. Few cases, therefore, of antelexion required mechanical treatment, nor were any of the pessaries of any use in it, whatever might be their use in anteversion. Retroflexion and retroversion, both pathological conditions, required active treatment. Hodge's lever-pessary possessed no lever action whatever; it was useless; for either it was driven out by the action of the abdominal muscles, or it became rotated in the vagina, or it produced pain. Nor were any of the dozens of modifications in use of any more value than Hodge's; for all were based upon wrong notions of the conditions to be corrected. The bimanual method of Schultze, which consisted in first producing exaggerated anteversion, and then fixing the cervix posteriorly with his figure-of-8 pessary, was the most rational as well as the most successful method. For fixing the cervix in such cases, Hodge's pessary was equally good with the figure-of-8. The cause of retroflexions and retroversions he considered to mainly consist in parenchymatous inflammation of the uterus.—The discussion on this paper was postponed till the next night of meeting.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, MAY 5TH, 1882.

J. CARTER, F.R.C.S., Vice-President, in the Chair.

The Nature and Treatment of Acne.—Dr. J. HERBERT STOWERS, in a paper on the above subject, pointed out the frequency with which the varieties of this disease were met with in all classes of society; hence the necessity for their nature and appropriate remedies being well understood. After referring to the original classification of Willan and Bateman, and recommending that acne should be considered only in connection with the other cutaneous glandular affections, the author, in the first place, described common sebaceous acne, and pointed out that the subvarieties, A. punctata, coniformis, indurata, tuberculata, pustulosa, etc., were only stages of the same process, produced, in the first place, by a retention of the natural secretion of the gland and connected with debility, often general as well as local. The affection was most common upon the forehead, cheek, chin, nose, shoulders and back, and front of the chest, and seldom occurred before puberty. The treatment best adapted to remedy these conditions was washing with soap and hot water in the early stages, followed by the rubbing in of ointment, night and morning, composed of sublimed sulphur, ammonio-chloride and bisulphuret of mercury, creosote, and vasoline. As soon as comedones formed, they should be removed by local pressure, thus avoiding the secondary inflammation, and consequently the scarring which followed the permanent destruction of the follicle. After referring to syphilitic acne proper as a separate affection, the author narrated two well marked cases of bromide acne, occurring in children, one of whom had been treated for cerebral symptoms with bromide of potassium, the other with bromide of ammonium. In illustration of the former, a coloured drawing was exhibited. A typical case of follicle acne was also described and illustrated. Referring to acne rosacea, Dr. Stowers dwelt upon the necessity of simple diet, the avoidance of alcoholic stimulants, and the use of soap and water locally, and recommended the application as many as twelve or fifteen times daily of a lotion containing precipitated sulphur, camphor, glycerine, and lime-water. After speaking of the advantages of local depletion, the author

described an instrument devised by Volkmann for producing multiple punctures—a plan which had recently proved of much service in a patient under his care in whom considerable vascular hypertrophy of the nose co-existed with acne rosacea.—Dr. INGLE asked whether it was contended that there were three distinct forms of acne, or whether the varieties should be regarded as stages of the same disease.—Dr. BAXON observed that, though he had given for years bromide of potassium largely and also chloral daily, he had never seen any rash follow, and asked in what proportion of cases of acne this might be held to be a cause.—MR. SHANN advocated the use of potassa sulphurata, from which he had seen much benefit, even when other preparations of sulphur had failed.—Dr. STOWERS, in reply, said he recognised four varieties of acne: 1, acne sebacea, in which there were three stages of one morbid process, viz., congested follicles, inflammatory redness, and pustulation; 2, acne rosacea; 3, acne artificialis, due to accidental conditions such as drugs—bromide and iodide of potassium, etc.; and, 4, acne varioliformis, two cases of which rare affection were under his treatment. The bromide rash, when present, was generally due to some constitutional cause, or defect in the kidneys. He advocated the use of precipitated sulphur, in the proportion of four drachms to six ounces of lime-water, with three drachms of glycerine and a little spirits of camphor.

New Use of Drainage-Tubes as Dilators.—Mr. WHERRY exhibited India-rubber drainage-tubes distended with air or water, and a good brass ear-syringe, so that a fusiform dilatation was produced six or eight times the circumference of the tube. The only preparation necessary was a stretching of the tube at the spot where dilatation was to take place. A rubber catheter, so prepared with a stilette in the interior, was also shown; this had been used for dilating a stricture of the cesophagus in a child. A similar instrument might be used in stricture of the urethra, and would give continuous, gentle, even pressure. In the absence of Barnes's bags, the larger tube might be used for dilating the os uteri. The tube would also be of service in epistaxis, if a better apparatus were not at hand. If a stilette was not used inside the tube, a soft silk string should always be tied to the distal end for extraction. A pair of dressing-forceps could be converted into a clamp by drawing an inch of elastic tube over the handles; each blade was then thrust into a piece of tube—thus the forceps did no damage by their compression. This latter device had been used for securely and gently holding with the forceps, thus protected, a piece of bowel in the operation of resection for fecal fistula. Mr. Wherry thought that, in various surgical emergencies, this knowledge of the pathology of drainage-tubes might be of great service.

Dudgeon's Sphygmograph.—Mr. SHANN exhibited this instrument, for Mr. Macalister, and explained its mechanism and application.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, MAY 1ST.

S. LEE RYMER, L.D.S., President, in the Chair.

Extraction of Teeth during Pregnancy.—Mr. HENRY SEWILL brought forward this subject. Pregnant women were constantly applying for relief, but when extraction was proposed—it being evident that the tooth was past saving—one was met with the reply that the patient's medical man did not consider that it would be safe for her to undergo the operation; the patient continued to suffer, and her strength was reduced by the pain. His own opinion was that this was a prejudice very much on a par with the idea that it was wrong to extract a tooth during the acute stage of alveolar abscess; and his practice was, in the early stages of pregnancy, to give nitrous oxide gas and extract the tooth. In more advanced cases, one must be guided somewhat by circumstances; but even in most of these he believed that extraction did no harm. Even if the patient were weak and nervous, the slight shock of the operation did less harm than the exhaustion produced by long-continued pain.—Messrs. F. CANTON and A. COLEMAN said they had frequently been asked this question, and never hesitated to answer it in the affirmative. They preferred to give nitrous oxide in such cases, and took care to give it thoroughly. They had never seen any harm result from the extraction of teeth under these conditions.—Mr. GEORGE WALLIS never hesitated to operate in such cases when an operation was necessary. On one occasion he was called upon to extract a tooth for a lady who was very near her time, and the child was born within twelve hours after the operation; but the patient had previously been in great pain, and she had a much easier labour than she would have had with an aching tooth to add to her other troubles. Several other members spoke to the same effect.

Connection between Mechanical Injury and Caries of the Teeth.—Mr. STEELE of Croydon read a paper on this subject. He was of

opinion that the influence of mechanical injury of the teeth as a primary cause of caries, had not received the attention which its importance deserved. The main factor in caries appeared to be the effect of acid on the dentine, decomposing its earthy constituents. So long as the enamel was perfect this sufficed to protect the dentine; but if it was imperfect, whether from congenital deficiency, or as the result of undue concussion or mutual pressure, or from unfair use, the acid fluid would obtain access to the dentine and serious results would follow. More pains should be taken to impress upon young people, especially, the importance of not abusing their teeth. They should be assured that, in subjecting these organs, which appeared to them so hard and strong, to all sorts of rough treatment, they were laying up for themselves serious trouble in the future. He felt sure that the spread of a better knowledge of the evils of maltreatment, and the consequent exercise of greater care, would be followed by a perceptible diminution in the ravages of dental caries.—A discussion ensued, in which the President and Messrs. Charters White, Weiss, Sewill, Canton, and Stockton, took part.

REVIEWS AND NOTICES.

CLINICAL LECTURES ON DISEASES OF THE HEART AND AORTA, By GEORGE WILLIAM BALFOUR, M.D.St.And., F.R.C.P.Edin.. Senior Physician to the Royal Infirmary of Edinburgh. Second Edition. London: J. and A. Churchill. 1882.

WE gladly hail the second edition of this excellent work, and we may safely predict that it will be warmly welcomed by every physician. The first edition, which appeared six years ago, and has for the last two or three years been out of print, was much appreciated by the profession; and we may say with perfect confidence that the new appearance of the work will greatly enhance the reputation of its author. It has in great part been rewritten, so as to keep pace with the continued advance of physiological science, and it fully represents the latest teaching as well of the Continent as of our own country.

One of the greatest changes in the book is in the portion devoted to aortic regurgitation. In the first edition Dr. BALFOUR, following Stroem, Thibessius, and Brücke, upheld the theory that the heart was flushed with arterial blood during the diastole alone, and did so for the reasons—(1) That the aortic blood current flows at right angles to the axis of either coronary orifice; (2) That the heart in systole is so firmly contracted that the blood vessels would seem to be compressed, and thus limit the systolic supply; and (3) That the coronary orifices are placed within the valvular zone, and are covered by the segments of the valve during systole. If these reasons were correct, the theory of Brücke would be true, but the facts are altogether opposed to it. Gaskell has shown that even tetanic contraction aids the arterial blood-flow through a muscle. Hyrtl has pointed out that at least one of the coronary orifices is always above the margin of the aortic valves, and he states that on cutting across the coronary arteries in animals, the blood flows in systolic spurts; and Ceradini has demonstrated that the valve-segments are not closely applied to the aortic walls during the systole, but float in a position intermediate. These facts are quite conclusive, and give an intelligible explanation of the mode in which the heart is nourished and enabled to perform its duties, until the time arrives when the muscle has outgrown the feeding powers of the coronary arteries.

In order, as he says in the preface, "to obviate certain misconceptions to which some of the statements in the former edition seem to have been exposed," the author has largely rewritten the excellent but still disputed chapter on curable mitral regurgitation, and in doing so he has incorporated the recent observations by himself and his followers. In this chapter there is a full, descriptive, and historical account, of the hæmic murmur and its accompanying pulsation, and the facts in favour of its being a murmur of dilatations are stated with great cogency.

In concluding this short notice of a work which will long rank as a classic among our medical books, we would offer our hearty congratulations to the author, and express the hope that his *Lectures* will meet with the same success in the second as in the first edition.

AFTER a considerable amount of agitation on the part of the inhabitants at Cleator Moor, which contains a population of over 11,000, it has been decided to proceed with the construction of a reservoir for that town at Meadley Farm, to hold 40,000,000 gallons of water. For a long time past the population have been greatly inconvenienced on account of the inadequate water-supply; and the commencement of the reservoirs by the contractors, Messrs. Fleming and Murray, of Annan, is looked upon with much satisfaction.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1882.

SUBSCRIPTIONS to the Association for 1882 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 24TH, 1882.

A NEW FOOD AND HEALTH PROBLEM.

MUCH public interest has been excited during the last few weeks by a discussion on the nutritive value of the oleo-margarine cheeses now largely introduced into commerce, and their probable influence on health, or possible relations to disease. The subject is one on which the family medical adviser as well as the scientist is expected to form an opinion, and it is interesting to examine and discuss the facts.

A few years ago, a machine was brought into this country, by which it was possible to separate milk into cream and skimmed milk at the rate of about ten gallons per hour. The principle of Laval's separator is simply this, that, when milk is rotated in a drum at a speed of about three thousand to four thousand revolutions per minute, the oil-globules, being lighter than the skimmed milk, are drawn to the centre of the drum, the skimmed milk passing to the exterior. By a simple contrivance, the separated cream is led into proper receptacles, the skimmed milk being simultaneously withdrawn from the outer circle of the drum. This machine, and the very many similar ones which rapidly followed it, have caused a revolution in the manufacture of butter, which is now made in immense quantities at large butter-factories. The great production of butter, however, which daily takes place in these factories, leaves upon the hands of the manufacturer a very large quantity of blue skimmed milk, which, for the most part, has been hitherto wasted. The profitable utilisation of this skimmed milk is one of the manufacturer's greatest problems, and a question still unsolved. Of the few methods of utilising it, one is the manufacture of skimmed-milk cheese; but this seems to have met with little support, from which we may infer that skimmed-milk cheese can scarcely be manufactured at a price sufficiently low to compete with ordinary whole-milk cheese, or else that it does not suit the public taste. It is certain that skimmed-milk cheese is not a very palatable article, and this is generally considered due to the difference in which we have mentioned. The difference between skimmed-milk cheese and ordinary cheese is mainly the deficiency in fat in the former. To overcome this deficiency and utilise the blue skimmed milk of the factory, the practice has recently sprung up, in America, of adding lard to the cream added to the skimmed milk, and converting the addition into the so-called "imitation cheese". A full description of the method of manufacturing this cheese was published in the last *Journal of the Royal Agricultural Society*; and at the same time two cheeses were made from skimmed milk to which lard had been added, and the difference between these and the whole-milk cheese had been fully arrived at. Mr. Jenkins, the Secretary of the Royal Agricultural Society, to whom the cheeses were sent, at once forwarded samples to sundry men, to cheesemakers, and to cheesemongers, who were all unable to detect any difference between these and ordinary American cheese. It is remarkable, therefore, that if, from a superficial examination, and from the taste and appearance of these cheeses, those who have a general knowledge of cheeses are unable to detect them, that the general public will be especially ignorant of what they are doing when they take steps in the market by purchasing upon imitation cheeses being distinctly marked and sold as such. Indeed, the Government take this view. Dr. Voelcker having found that it is not possible to detect such cheeses, clearly and with certainty, by

whether a cheese be made from butter or some other fat, such as lard and oleo-margarine, the Government would not be taking up a position they could not maintain, as the public analysts would, by a method well known to them, be able to detect when imitation cheese was not being sold as such.

We are all anxious to welcome the advent of a cheap and wholesome food; and all praise is due to those who strive in this way to benefit their fellow men. That imitation cheese, if sold by its proper name, would be cheaper than whole milk cheese, is certain; but it is very doubtful whether the price will very materially differ from that of ordinary American cheese, unless this distinctive mark be insisted upon; and thus, instead of the public obtaining a cheap food, they will really be paying an unfair price for an article which pretends to be what it is not. The analyses of the two cheeses, as given by Dr. Voelcker, show that they contain far less fat and slightly less nitrogenous compounds than whole milk cheese, so that weight for weight they are not equally nutritious. But apart from relative composition, are their constituents equally nutritious with those of whole milk cheese? At present, perhaps, it is impossible to answer this question definitely. We know little as to the relative physiological properties of butter fat, as compared with lard and oleomargarine fats. It is rather improbable that the two are identical in value, for we know that whilst few children, or even infants, are incapable of assimilating milk fat, other so-called stronger fats are far from being easy of digestion. Even supposing the fats to be equally nutritious, there yet remains this question—a question of considerable interest to medical men in connection with these imitation cheeses: Are they wholesome?

The various fermentative changes which cheeses undergo are for the most part not productive of substances hurtful to man. But many medical men can probably call to memory cases of poisoning which have been caused by cheese. Certain it is that cheeses, in some cases, do undergo a fermentation resulting in substances not merely injurious, but most virulently poisonous, and several cases of death have been undoubtedly traced to the consumption of poisonous cheese. The manufacture of imitation cheese is in its infancy; what changes the cheeses may undergo upon keeping is at present only partially known, but we think it only right to draw the attention of our readers to a possibility which is not without precedent. Dr. Voelcker, in his report to the Royal Agricultural Society, drew attention to the fact that these cheeses are liable to be most rapidly overspread with various forms of fungi, and this corresponds to a well-observed fact with regard to oleomargarine butter. If either the oleomargarine cheese or lard cheese be placed in bottles closed simply with blotting-paper, and a piece of whole milk cheese be similarly treated, the former is in a very short space of time covered with fungi, and the same occurs if oleomargarine butter is thus treated. The milk cheese and milk butter are only slowly attacked by fungi. It is difficult to explain this phenomenon at once, and we cannot say what it may lead to. We were struck, however, in reading the account of the manufacture of imitation cheese, with the following passage: "One notable circumstance in adding lard or butter-oil to skimmed milk is that the weight of cheese from a given quantity of milk is increased, not only by the weight of lard added, but nearly as much more weight is gained by the tendency of the lard after the fat is added to retain the moisture. In other words, if one and a half pounds of lard is added to one hundred pounds of skimmed milk, it makes nearly three pounds more product than could be obtained from the skimmed milk if made up without any addition of fat." The increase in the moisture of the cheese, however, can hardly be the cause of these fungi, although it may subsequently help to develop them. We are naturally led to ask: Are the germs of these fungi present in the cheese, and only waiting for a favourable opportunity to develop themselves?

The question is one which the profession cannot ignore. The recent researches showing the communicability of diphtheria from man to animals, and vice versa, is only one more proof of the liability of man to receive diseases from his animal food. If the statement made by

Mr. Bowles in his recent letter on imitation cheese, is only a highly exaggerated view of the utilisation of diseased meat for the manufacture of oleomargarine, yet it is evident that with the introduction of imitation cheese, the temptation to make use of diseased meat for that purpose would be increased, and it would be greater for the manufacture of cheese than it has been for butter, where purity and perfect freedom from smell and taste have been an absolute necessity.

The researches of Professor Lister on the *oidium lactis* have already shown how wide a scientific interest and how close a medical relation attach to the study of these minute simple forms in milk and its derivatives. The investigations of Mr. Power for the Local Government Board indicate special applications of the study of the pathology of such products to human epidemiology. Just now, when the researches of Koch have set all our young and skilled observers to study bacteria in all their normal and pathological relations, this branch of the subject may readily attract fruitful investigation.

GUITEAUMANIA.

"Was there ever", asked Dr. William A. Hammond when recently addressing the New York Medico-Legal Society on the case of Guiteau, "was there ever a man whose whole career, from childhood to the present day, has afforded a more striking example of that form of mental derangement called reasoning mania?" and seeing that what Dr. Hammond calls reasoning mania is synonymous with what he might as correctly call arrant roguery, the answer which he anticipates and desires may be given to his question. That Guiteau has been an arrant rogue, or, according to this new self-contradictory euphemism, a reasoning maniac, from his youth up until now, will scarcely be denied by anyone who has glanced at the reports of his trial; and we fail, therefore, to perceive the necessity for the elaborate proof which Dr. Hammond adduces in support of this self-evident proposition. It may be well to examine Dr. Hammond's position, and inquire what justification he has for applying the term lunatic to the assassin of President Garfield.

We do not now enter upon the general question whether it is expedient to divide lunatics into two classes, one of which shall be amenable to penal discipline, and the other only to medical treatment, further than to say that to do so would be to run counter to all advances hitherto made in the medical jurisprudence of insanity, and to create difficulties greater than have yet been experienced in the administration of the law. Efforts have heretofore been directed to reconcile the legal definition of insanity with the scientific description of it; and the attempt to force these two asunder, to limit the former to a small group of idiots and raving madmen, and to extend the latter so that it shall include half the human race, can only end in inextricable confusion. Putting aside, however, general considerations, let us see what grounds Dr. Hammond has for applying the term lunatic in this particular instance, and for arguing that Guiteau, although worthy of death, is still the victim of a disorder of the mind and a diseased brain. What, then, are the evidences of Guiteau's insanity which Dr. Hammond, after much probing of his life, and ransacking of the records of his trial, is able to bring forward? They are as follows:

"That he had several insane relatives; that while at college he abandoned his studies, and entered the Oneida community; that he left it, and subsequently returned; that he again left it, and went to New York to establish a newspaper devoted to the dissemination of peculiar religious ideas; that he abandoned this project; that he studied law, and was admitted to the Bar; that he was married, and then divorced through his own procurement; that he became interested in religion, and delivered lectures on the subject; that, whilst thus engaged, he attempted to strike his sister with an axe; that though a physician could find neither illusion, nor hallucination, nor delusion, he pronounced him insane, 'because of exaltation of the motives, and explosions of emotional feeling, also excessive egotism, and that he was the subject of pseudo-religious feeling,' and advised his confinement in a lunatic asylum; that he soon afterwards gave up

lecturing; that he associated himself with the National Republican Committee, and prepared a speech, which, however, he only delivered once; that, after the election of General Garfield, he asked, by letter, for the appointment of Minister to Austria; that he went to Washington to urge his claims; that, not getting the position, he applied for that of Consul at Paris; that he earnestly and persistently followed up his application by verbal and written requests, having no special claims for this place except his own idea of the value of his services, and having the recommendation of but one person; that he unwarrantably inferred from a remark of the Secretary of State that he might be appointed; that, in spite of rebuffs from the officials in authority, he continued to expect the appointment; that he made inquiries about a pistol, which he subsequently purchased, borrowing money to pay for it; that he practised with it by shooting at a mark; that he followed the President on two occasions for the purpose of killing him, but was deterred once because his wife, who was sick, was with him; that, finally, he lay in wait for him at the railway station, and shot at him twice, intending to kill him, and inflicting a mortal wound. That, after the shooting, he attempted to get to the jail for protection; that he was arrested, and that a letter to General Sherman, asking for troops to protect him, was found upon his person; that, in two letters written several days before the shooting, he declares the President's nomination was an act of God, his removal an act of God; that, in another document, addressed to the American people, and dated as early as June 16th, he used this language: 'I conceived the idea of removing the President four weeks ago; I conceived the idea myself, and kept it to myself,' and other words of like character. That he subsequently claimed that he was inspired by the Deity to kill the President, and that he had had previous inspirations; that, for years before the shooting, he had procured a precarious living, not paying his board-bills, borrowing money, evading the payment of his railroad fares, retaining money collected by him as a lawyer, and being several times in prison on charges of fraud; and that, on the stand, he stated that he felt remorse for his deed so far as his personal feelings were concerned, but that his duty to the Lord and the American people was paramount."

Now, what does all this amount to but the description of the career of an unscrupulous and sanctimonious adventurer? Are there not thousands of men in the United States and every civilised country whose lives, if carefully reviewed, would present as many mad points as that of Guiteau—mad points which make a specious show when brought together, but which are really of no account when scattered over long tracts of commonplace rational conduct? An English psychological journal argued recently that the late Thomas Carlyle was a lunatic; and the proofs of that thesis which it adduced, such as his depression, hypochondriasis, irritability, and misanthropy, were quite as good in their way as Dr. Hammond's proofs of Guiteau's insanity. Taking these proofs individually, there is not one of them that bears the stamp of madness; and, taking them collectively, they are incompatible with any theory of mental aberration. Insanity is often regarded as a lawless condition, of which anything and nothing may be equally predicated; for it seems to those who look upon it carelessly from afar to be a wild storm of thought, blowing where it listeth, and without centre or limitations. To those, however, who have studied it more closely and discerningly, there are revealed order in its ravages, and system in its cycles; and to them it becomes possible to say, in many instances, what course it will pursue, what features are characteristic of it, and what conjunctions are never witnessed in it. And skilled students of mental meteorology of this kind, who are free from personal bias and the thralldom of premature judgments in print, will certainly say that Guiteau's case, as described by Dr. Hammond, is not classifiable under any variety of insanity with which they are acquainted. Dr. Hammond has evidently ranged through the medico-psychological literature of many lands in order to obtain precedents and opinions with which to fortify his position; and we may assume, therefore, that his quotations afford the nearest approaches to descrip-

tions of Guiteau's supposed malady that are to be found. Accepting these quotations, for the sake of argument, as fairly depicting genuine and recognised types of insanity—which might well be questioned—to which of them, we would ask, does Dr. Hammond's version of Guiteau's case correspond? To none of them, must be the reply. Were there in Guiteau those blind impulses to the perpetration of acts of violence, or even of sanguinary fury, which Pinel makes the prominent symptom in mania without delirium? Certainly not. Was there in Guiteau that sudden transition from propriety of conduct and goodness of nature to licentiousness and moral degradation which Esquirol makes characteristic of his "reasoning monomania"? It cannot be pretended that there was. Did Guiteau exhibit the delusions of persecution which Morel enumerates amongst the active principles of mania of character? There is no evidence that he did. Was there in Guiteau that blind submission to sexual desires, jealousy, ambition, vengeance, which Dagonet insists on as marking out reasoning mania? His history does not sanction such an idea. There is just one description of a form of insanity given by Dr. Hammond to which Guiteau's case bears a striking resemblance; and that is his own description of reasoning mania, not quoted from his published writings, but prepared for the occasion; and to pronounce Guiteau insane because this description fits him would be very much as if, having seen Arthur Orton, and drawn a portrait of him, and called it Tichborne, we should swear that Orton was Tichborne because he resembled the portrait.

But Dr. Hammond's description of reasoning mania is not in conformity with medico-psychological experience on this side of the Atlantic. Such lunatics are not to be met with in asylums. They are a new discovery in the fauna of insanity in the United States; and we would suggest to Dr. Hammond that, as Guiteau is the most striking specimen of this kind of lunatic that has yet been discovered, he should substitute for the cumbersome and inconsistent name that he has adopted, the unmistakable designation of "Guiteaumania". We should then, with greater facility, be able to discuss with him the symptoms and medico-legal relations of this unique variety of mental alienation, as he would call it, or of moral turpitude, as we should prefer to designate it.

We have said that Guiteaumania is not recognised in Europe as a form of mental disease either involving irresponsibility or calling for curtailment of liberty or medical treatment. It may be admitted at once that Guiteau had an ill-balanced and depraved mind; but to this admission it must be added that he was not, in these respects, a whit worse off than three-fourths of the inmates of our convict prisons, who are notably infirm of purpose and inconsequential in thought, but who are nevertheless treated like accountable beings. The shrewdness and perspicacity which Guiteau displayed in his running accompaniment of interruptions throughout his trial, render it impossible to argue that his intellect is in any degree enfeebled. His power of apprehension and of following the drift of any questions asked, was incontestably proved on innumerable occasions to be unusually acute; his memory was repeatedly shown to be tenacious and serviceable; and his judgment, when applied to the actions and motives of others, was often exhibited in a favourable light as regards its clearness and penetration. The anxiety which Guiteau displayed about his personal safety, and the precautions he took to secure it, are sufficient evidence that he is amenable to ordinary human motives; and the self-restraint which he more than once exercised when it suited his purpose to do so, belied the pretensions of complete volitional power at his command. His crime was not a crime of blind and senseless rage, nor can it be said that it was prompted by any delusive belief. Of course, but few crimes have one sufficient motive; most are the resultants of several causes, mixed motives; and in Guiteau's case it may be impossible to trace any single motive, or to assign the relative importance of the different motives, but it is hardly argued that, in the fullness of his intellect, his motives, his moral nature, there is enough to account for his guilty performance without resorting to any theory of insanity in explanation of it.

The bodily or physical symptoms or accompaniments of insanity are obviously of the highest diagnostic value in doubtful cases, for they cannot be assumed at pleasure, and often supply the key to intricate and obscure mental phenomena. Dr. Hammond does not assert that there has been observed in Guiteau any bodily indication of disease of the brain or nervous system; but he quotes from Campagne's *Traité de la Manie Morbide* a list of the peculiarities of cranial configuration which are supposed to be characteristic of this disorder; and he leaves it to be inferred that Guiteau conforms in these as in other respects to his delineation of reasoning mania. The cranial peculiarities which Campagne enumerates, and which are set forth with affected precision, amount in substance to this: that reasoning maniacs have heads smaller than those of sane persons and other kinds of lunatics, larger than those of idiots, about the same size with those of imbeciles, and presenting an antero-posterior curve less than that of sane persons, lunatics and imbeciles, and even of idiots. They labour, we are dogmatically informed, under a congenital atrophy of the posterior lobes of the brain, the skull having been diminished in size, to the detriment of the occipital region. But could anyone we would ask, stand up with gravity in the presence of men scientifically acquainted with cranial morphology—men like Professors Flower and Turner, and Mr. Parker—and allege that there is anything distinctive in the cranial characteristics of moral maniacs which are thus put forward? Before attaching the slightest value to Campagne's statements, we should require to have full and authentic histories of the cases in which his measurements were made, a detailed description of his methods of observation, and all his tables of figures. And even on finding, after these conditions had been fulfilled, that his conclusions were justified, we should tell him that all he had succeeded in proving is that wicked and weak-minded people have, on the average, smaller heads than those who are more virtuous and intelligent, a generalisation which could be of no service in any particular case. It would not be difficult to submit to Dr. Hammond scores of persons whose heads present all the peculiarities which he claims for the heads of reasoning maniacs, and who have never manifested a trait of mental abnormality; and scores of persons corresponding with his description of reasoning maniacs whose heads present none of the peculiarities which he enumerates as characteristic of that condition. To found on such cranial measurements as those to which he refers, the statement that there is atrophy of the occipital lobes, betrays a want of sufficient acquaintance with recent advances in cerebral anatomy and physiology.

TWO HUNDRED AND FIFTY YEARS OF SMALL-POX IN LONDON.

THE above was the title of a paper read on Tuesday last at the Statistical Society by Dr. William A. Guy, F.R.S. The somewhat remarkable exceptional prevalence of small-pox in London in recent years lent special interest to the subject; and Dr. Guy's laborious analysis of the information bearing upon small-pox afforded by the London bills of mortality is an useful contribution to the literature of that exceedingly controversial problem, the true relations of small-pox and vaccination. Making due allowance for the well-known deficiencies and inaccuracies of the old bills of mortality, there are no sufficient grounds for distrusting the relative trustworthiness of the series of facts elaborated by Dr. Guy, or their value for comparative purposes.

The most important conclusions which may fairly be drawn from this paper are those which bear upon the relative fatality of small-pox in London, judged by the proportion of deaths from this disease, to deaths from all causes, in the seventeenth, eighteenth, and nineteenth centuries. Statistics of these three centuries have special interest in the statistical history of small-pox, because those periods may fairly be described as centuries of natural small-pox, of inoculated small-pox, and of vaccinated small-pox, respectively. Dr. Guy shows conclusively that, whether judged by the frequency or intensity of epidemics, the fatality of small-pox in London during the seventeenth and eighteenth centuries, when small-pox was either natural or inoculated, was enor-

mous, compared with that which has prevailed in the present century, during which vaccination has been generally adopted. By far the largest fatality of small-pox occurred in the latter half of the eighteenth century, after the introduction and somewhat general adoption of inoculation. The concurrence of this increased fatality of small-pox with the practice of inoculation led to the abandonment of the practice, and it can serve no useful purpose now to attempt the well-nigh impossible task of distinguishing the true effect of inoculation upon small-pox fatality. The comparison of the experience of small-pox fatality in the seventeenth century, before inoculation or vaccination was heard of, with that of the nineteenth century, after the introduction and general adoption of vaccination, is not open to a similar objection. During forty-eight years of the seventeenth century for which statistics are available, there were ten small-pox epidemic years, in which the deaths from small-pox in London exceeded 10 per cent. of the deaths from all causes; whereas, in the forty-four years of civil registration ending 1881, no single epidemic of an equal intensity has occurred. Measured by the population standard, the average of mortality in the forty-eight years of the seventeenth century was more than fifteen times as great as it has been in the forty-four years of civil registration ending last year. Such figures appear conclusively to dispose of the favourite argument of antivaccinators that natural small-pox, as they term it, was a much less terrible disease than small-pox in these days of vaccination.

Dr. Guy's method of dealing, for the purposes of his paper, mainly with the proportion of deaths from small-pox to total deaths, and his using this proportion as a test of epidemic years, is open to obvious statistical objection during centuries when the numbers of total deaths in a series of years was subject to such violent fluctuations from epidemics of plague and other epidemic diseases. This method, however, has a distinct advantage and value in its bearing upon one of the main objects of the paper in question, which was to show the fall in the fatality, whether of all diseases, or of other such zymotic diseases as measles or whooping-cough.

The favourite argument of those opponents of vaccination who can be got to admit that there has been a recent decline in the fatality of small-pox, is to attribute this decline entirely to improvement in the sanitary condition of the people. Now it has been conclusively shown, in the Registrar-General's last annual report, that there has been no general decline in mortality from other causes, since the advent of compulsory vaccination, in any way commensurate with the decline of small-pox mortality.

Dr. Guy's figures go far to prove that, judged by the old bills of mortality, the fatality of measles and whooping-cough in the nineteenth century is somewhat higher than in either of the two preceding centuries; thus forming a striking contrast to the marked decline in the fatality of small-pox. The Registrar-General's figures on this branch of the question add much force to Dr. Guy's conclusions; and it now appears to rest with the opponents of vaccination to suggest some other reasonable explanation than the adoption of vaccination for the marked decline in the fatality of small-pox compared with that of other kindred diseases, and of mortality generally.

WE regret to say that Mr. St. George Mivart, the well-known biologist, is seriously indisposed through an attack of bronchitis. A few days since he appeared to be advancing towards recovery, but a relapse has occurred, and he is now suffering from great prostration.

MR. ASA LEES of the Soho Iron Works, Oldham, has bequeathed £10,000 each to Owens College, Manchester, and to the Oldham Infirmary.

SMALL-POX and measles are very prevalent in Ireland, and are making fearful ravages among the population. The infection was, it is believed, brought from Europe.

WE have to acknowledge the receipt of a contribution of £10 10s. from Dr. Joseph Griffiths Swayne (Bristol), to the fund being raised on behalf of the family of the late Sir J. Rose Cormack.

A WHOLE family, consisting of six persons, living at Murceaux, in the Department of the Seine-et-Oise, have been poisoned through eating poisonous fungi in mistake for mushrooms. Medical aid was sought, but to no avail, and all six died in great agony.

AT the Bristol Town Council, a communication has been received from Sir Greville Smythe offering to the citizens a pleasure park of 22 acres, on the borders of the crowded parish of Bedminster, and adjoining his residential estate of Ashton Court.

THE President of the Royal Academy of Belgium has been invited by M. J. B. Dumas, Perpetual Secretary to the French Academy of Sciences, to join in the subscription organised by the members of various French learned bodies for a medal to be presented to M. Pasteur for his scientific discoveries.

THE honorary degree of D.C.L. has been conferred by the University of Oxford on Sir William Muir, K.C.S.I., Member of the Council of the Secretary of State for India; and Dr. Allen Thomson, F.R.S., formerly Professor of Anatomy in the University of Glasgow.

DURING the last fifteen months, as many as two millions of persons have been vaccinated and revaccinated in the State of Illinois. To this general vaccination is undoubtedly due the small progress that small-pox has of late made in the State—the disease having been, in the majority of cases, confined to those first attacked.

MALARIOUS fever, in an epidemic form, has of late been very fatal in the Mauritius. During April alone, there were no fewer than five hundred and ninety-six deaths, and these, unhappily, included some of the prominent officials of the island. The death-rate from fever has been higher than in the previous five years.

A MEETING will be held at Grosvenor House on Friday, July 14th, under the presidency of the Duke of Westminster, K.G., when the medals and recompenses to successful exhibitors of the Smoke Abatement Exhibitions of London and Manchester will be publicly distributed, and the reports of the jurors officially presented.

MUCH sickness and mortality prevail among the labourers employed on the works of the Panama Canal. During the greater part of the year the heat is very intense; but the total absence of any proper sanitary arrangements is said to be a far greater factor in the production of disease than the unhealthiness of the climate. The French have, however, commenced the erection of hospitals.

THE Council of the Society of Arts have awarded the Albert Medal of the Society for the present year, to M. Pasteur, Member of the Institute of France, for "his researches in connection with fermentation, the preservation of wines, and the propagation of zymotic diseases in silkworms and domestic animals, whereby the arts of wine making, silk production, and agriculture, have been greatly benefited."

At a special meeting of the governors of the Chelsea Hospital for Women, held on Monday at the temporary hospital, King's Road, the following gentlemen were elected as additional members of the medical staff, in view of the early removal to the new hospital in the Fulham Road, and the consequent necessity for an increased staff:—*Physicians*: John James, M.B.; Arthur Wellesley Edis, M.D. *Assistant Physicians*: Fancourt Barnes, M.D.; John Phillips, B.A., M.B.

THE Select Committee of the House of Commons on the Contagious Diseases Acts is still engaged in preparing its report. It has been announced in some newspapers that some of the members who entered the Committee opposed to the Acts have been converted by the evidence which they have heard. On the other hand, we are requested to state that it is believed that there is no foundation for this statement, and that members of the Committee who joined it opposed to the Acts have not, by hearing the evidence, been since led to change their opinions.

Mr. A. H. PRIDEAUX is calling attention to the need which exists in the region of Southwark for public baths and wash-houses. In one small district, he says, there are no less than 6,000 persons crowded together in an area of less than a quarter of a square mile. There is no convenience for the women to do the family washing, and no possibility of a bath. The one tub which stands in the yard is the sole supply of water for each house of five, and six, and often seven families. Mr. Prideaux feels sure that it is only necessary to make the need widely known for some benevolent and enterprising person to come forward and aid so good a cause.

THE affairs of the Home Hospitals Association appear to be so far flourishing, that the Home Hospital in Fitzroy Square has been full throughout the year, and it is proposed to take steps for a further enlargement of the Home. Mr. John Walter, M.P., warmly advocated the claims of this association for public consideration at the annual meeting held last week. This association, it will be remembered, has been founded under a rule which prohibits any division of profits under heavy penalty, and, in fact, makes it legally impossible that any profits shall accrue to those who have so liberally subscribed a large capital for the purpose of the association. In this Home the practitioner follows his patient, and remains in all respects master of the treatment and nursing. Dr. Playfair, Mr. John Wood, and others, wrote expressing their strong sense of the value of the institution, and of the careful manner in which it is conducted. The advising committee on the internal administrative arrangements for the purpose of securing its efficiency includes the president of the College of Surgeons, the president of the College of Physicians for the time being, and other eminent and well-known medical men.

THE report, or rather the various reports, of the Royal Commission on the Medical Acts, will not be officially published, we believe, until next week, as we last week intimated in anticipating some of the main features of its contents. The reports of dissentient members will, it may be feared, do something to counterbalance the good effects of the recommendations of the Commission itself; although these also are not of so complete a character as to be likely to give unqualified satisfaction to the friends of medical reform and direct representation. This Commission laboured under the radical defect of including in its composition very diverse and discordant elements. Able men, with strongly preconceived views, are little liable to change them under circumstances such as those which attended the formation and accompanied the deliberations of this Commission. The able chairman of the Commission had indeed a most difficult task in endeavouring to reconcile in any degree the radical differences of opinion which divided the members, and possibly a less able and powerful man might have failed altogether in the endeavour. If the result should prove not to be as efficient and complete as the profession generally would have desired, the cause of the failure will be in the original composition and in the difficulty of reconciling the strongly accentuated differences, and of conciliating interests so opposed as these which were associated together in the composition of this Commission.

It is a sign of the times, and an indication of the continually growing influence of medical men, that more and more weighty medical names are at the head of important social movements, and pressing great large

bodies of influential persons on important public occasions. On Tuesday night, Dr. Andrew Clark, at the invitation of the managers of the East London Hospital for Children, took the chair at a festival banquet, which was graced by the presence of Cardinal Manning, Lord Enfield, Lord Crewe, and Mr. Charrington, Mr. Prescott, Mr. Norris, and an influential company of upwards of 200 persons, including many names distinguished in commerce, literature, and art. In a speech of more than usual eloquence and power, Dr. Andrew Clark developed not only the special claims of this hospital, but the relations of the great hospitals of London to the social constitution of our time. He pointed out the peculiar temptations and dangers of special hospitals, and the strength as well as some of the weaknesses of the great metropolitan hospitals; and especially he pleaded against the sophisms which would suggest that too much care is taken in keeping alive the sickly and fragile offspring of parents who bequeath to their children the seeds of weakness and disease. The influence of the chairman was manifest not only in the unusually large company which assembled, but in the importance of the donations. The chairman's list alone amounted to upwards of £1,300, and the total sum subscribed at the dinner exceeded £2,000. Dr. Eustace Smith responded for the medical staff, to whose invaluable service emphatic testimony was gratefully borne. This hospital, which now numbers 90 beds, owes its origin to the well-known devotion of Mr. Heckford, a student of medicine at the London Hospital, and to the unceasing labours and liberality of his wife.

BOYLSTON PRIZE ESSAY.

ONE of the Boylston prizes awarded by the Harvard University has again come to England. Mr. T. M. Dolan, Halifax, Yorkshire, has won the prize of 300 dollars (£61 5s. 11d.) for an essay on Sewer-gas, its Pathological and Physiological Effects on Animals and Plants.

A SANITARY PRIMER.

A SANITARY Primer, prepared for the Government of India, has been extensively circulated, both in English and in the vernaculars, for the use of schools throughout the country, both in Bengal proper, the Punjab, the Central Provinces, the North-West Provinces, and Oudh, Assam, Madras, Malabar, the Hyderabad Assigned Districts, Bombay and British Burma. Altogether over 100,000 copies of the different versions of the Primer have been issued, and it has been translated into fourteen vernacular languages.

DEATH-RATE OF SCARBOROUGH.

THE death-rate of Scarborough for the past year was as low as 16.34 per 1,000 of population, being, with the exception of 1876 when it was a trifle lower, the lowest rate that has been recorded in the borough. From zymotic diseases only 27 deaths were registered, representing the lowest rate ever known from these causes, viz., 0.8 per 1,000. Having regard to the conspicuous position which Scarborough holds as a health resort, these figures appear to have a more than local importance.

CRUELTY IN A WORKHOUSE.

AT a recent meeting of the Shardlow Board of Guardians, a report was presented by the Special Purposes Committee in regard to the cruelties inflicted on the patients in the workhouse by tying them down in their beds. The committee fully recognised the gravity of the charges against the general, which appear to have been conclusively proved, and they recommended that the master and matron at once be required to resign their positions in the workhouse. In this view the guardians concurred, and, in addition, insisted upon the resignation of the porter and his wife.

COUNCIL OF THE COLLEGE OF PHYSICIANS.

THE following are the names of the eligible Fellows who are Candidates for seats in the Council at the ensuing Election on Thursday the 6th of July next, at 2 o'clock p.m.: 1. John Marshall, Savile Row; 2. Alfred Baker, Birmingham; 3. Henry Fowler, Great Cumberland Place, (these three retire from the Council in Rotation); 4. George

Lawson, Harley Street, nominated by T. W. Nunn, Alfred Willett, Henry Smith, George Critchett, W. Bowman, T. Pridgin Teale; 5. John Croft, Brook Street, nominated by F. Le Gros Clark, T. Pridgin Teale, James F. West, W. Morratt Baker, William MacCormac, Arthur E. Durham; 6. Nottidge Charles Macnamara, Grosvenor Street, nominated by W. Bowman, J. Fayer, Thomas Longmore, C. G. Wheelhouse, Alfred Willett, George Cowell.

ROYAL MEDICAL BENEVOLENT COLLEGE.

MR. J. F. France, who last year purchased a perpetual presentation to the Royal Asylum of St. Anne's Society, in favour of the Orphan Daughters of Medical Men who have practised in England or Wales, and vested the nomination in the Members of the Council of the Royal Medical Benevolent College, has now purchased a second perpetual presentation on the same conditions. The council will be ready to receive applications in July, on behalf of eligible candidates.

VACCINATION IN THE METROPOLIS.

DR. SWEETING, the late Superintendent of the Fulham Small-pox Hospital, has prepared a memorandum on vaccination, which has been adopted by the managers of the Metropolitan Asylums District. It contains a number of suggestions for improvement in the present system, the most striking being the substitution of the health-authority for the guardians, as the body responsible for the carrying out of the Vaccination Acts. It also suggests an increase in the staff of vaccination officers in connection with the sanitary authorities, and a more systematic method of house inquiry in non-epidemic as well as in epidemic years. The memorandum also contains a proposal, that the birth of no child should be registered unless a certificate of successful vaccination is produced; and that, for this purpose, the time now allowed for registration should be extended.

THE LATE SIR JOHN ROSE CORMACK.

AT a meeting of friends of the late Sir John Rose Cormack, at the house of Dr. Semple, on Monday last, it was decided to organise a committee in London for the purpose of raising a fund for the benefit of Sir John's family; for, notwithstanding the devotion of a long and laborious life to his profession, he has died without leaving any provision for his widow and children. The committee consists of Sir J. Risdon Bennett, Dr. Quain, Dr. A. P. Stewart, Dr. B. W. Richardson, Mr. W. H. Michael, Q.C., Dr. Thudichum, Dr. McIntyre (Odiham), Dr. Semple, and Dr. A. Henry. Dr. Semple was appointed chairman of the committee, Dr. B. W. Richardson treasurer, and Dr. A. Henry secretary. The following subscriptions, which are exclusive of any sent elsewhere, have been received:—Sir James Paget, Bart., £5 5s.; Sir J. Risdon Bennett, £5 5s.; Dr. Quain, £5 5s.; Dr. B. W. Richardson, £3 3s.; Dr. A. P. Stewart, £3 3s.; Dr. Semple, £3 3s.; Surgeon-General Gordon, £2; Dr. Paul, £1 1s.; Dr. Waller Lewis, £1 1s. Subscriptions will be received by the treasurer, Dr. B. W. Richardson, 25, Manchester Square, W.; by the secretary, Dr. A. Henry, 132, Highbury Hill, N., or by any of the members of the committee.

THE EIRA ARCTIC RELIEF EXPEDITION.

IN the spring of 1880, Mr. Leigh Smith started in the yacht *Eira* for high latitudes; during the summer he reached an extremely northerly point, and returned in the autumn to England without having suffered any accident. In the spring of last year, Mr. Leigh Smith again sailed for the North, intending, if possible, to reach the coast of Franz Joseph Land; the yacht was last seen on July 10th, 1881, by some walrus-hunters, off the coast of Spitzbergen, and considerable anxiety has been felt for her safety. At the instigation of the Royal Geographical Society, the Government advanced £5,000, and the friends of Mr. Leigh Smith, assisted by a further grant of £1,000 from the Society, have organised a search-expedition, which sailed on Thursday last (June 22nd), in the steam-whaler *Hope*, under the command of Sir Allen Young. Mr. Leigh Smith was accompanied on both his Arctic voyages by Dr. William Henry Neale, a former distinguished

student of University College Hospital, and a son of Dr. Richard Neale, the well known author of the *Medical Digest*. The present season has been a very late one as regards the quantity of ice in the North; as recently as last month, fifty vessels were held ice-bound off Cape Breton; and, as the *Eira* was fully provisioned and otherwise prepared to winter in the ice, we trust that the anxiety which has been felt may soon be found to have been groundless.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

MR. FREDERIC S. EVE, the Erasmus Wilson Lecturer, commences his course of lectures on Cystic Tumours of the Jaws, this day, Friday. The following is his syllabus:—1. *Cystic Tumours of the Jaws*.—Multilocular Cystic Tumours:—Anatomy; microscopic anatomy; relations to rudimentary enamel-organ; pathogeny; clinical characters; treatment indicated by pathology; relation to Tumours generally: Mixed Epithelial and Sarcomatous Tumours. Dentigerous Cysts:—Anatomy; minute anatomy; pathogeny. Periosteal Cysts. 2. (Monday, June 26.) *General Characters and Etiology of Tumours*: Definition: relation to hypertrophies and inflammatory new formations; subjection to physiological influences; relation to physiological condition of organ; heredity; local origin; injury and inflammation, etc., as occasional exciting causes; connection between, shown by microscope; effect of predisposition; conclusions. 3. (Wednesday, June 28th.) *Etiology of Tumours* (continued). Bearing of Experiments:—Transplantation of adult and embryonic tissues; transplantation and auto-inoculation of Tumours; Cohnheim's theory of embryonic rudiments; arguments supporting it; criticism; comparison of congenital Tumours and monsters by excess; origin of Tumours in later life; evolution of Tumours.

ALLEGED DEATH FROM VACCINATION.

AN inquest has been held at Wolverhampton touching the death of a child nearly five months old, who, it was certified by the medical man in attendance, Dr. Freeman, had died from the effects of vaccination. Mr. W. H. Hayward, the surgeon who vaccinated the child, maintained that the operation was successfully performed, and that death arose from hereditary disease. In this view he was supported by Mr. C. A. Newnham, an independent witness called in by the coroner. The inquiry was adjourned for the attendance of a Government inspector as an expert. Dr. Ballard, of the Local Government Board, was sworn, and said he had examined the vaccination marks, which showed no signs of disease; they were perfectly healthy vaccine scars. He afterwards examined the body, head, and neck, and the eruptions on them presented appearances of hereditary or congenital disease. There were sufficient ulcerations and other disease to account for death. The symptoms of disease inoculated from vaccination were entirely different from hereditary disease. The illness from which the child died appeared to have commenced about the ordinary time after birth at which the symptoms of hereditary disease would present themselves. The evidence of the mother of the deceased, as to several children being born dead, confirmed Dr. Ballard in his opinion that the child died from hereditary disease, and not from disease inoculated by vaccination. The jury returned a verdict to the effect that the child died from natural causes, and not from the effects of vaccination.

THE SMOKE ABATEMENT EXHIBITION.

THE awards of the jurors of the Smoke Abatement Exhibition are now complete, notices have been forwarded to the exhibitors, and the lists have been issued. The lists are too long for production here, but will, we believe, be published, with the full reports, in a separate publication shortly. Meantime, a descriptive account of those exhibits to which the jurors have awarded the various medals is published in the *Sanitary Record* of the current month, with illustrations. The jurors in the various departments have been men of the highest eminence. In the section of stoves, grates, and kitcheners, the principal jurors were Professor Frankland, F.R.S., Colonel Festing, C.B., and Mr. Cutler, F.R.I., B.A. It may be noted that the chief prizes, both in kitcheners and in grates, have been awarded to Messrs. Brown and Green for their

very simple and very effective kitcheners and grates, in which great economy is effected, and the emission of smoke almost entirely prevented, by the adoption of a simple apparatus for under-feeding, which is effected without any complicated contrivance or unsightly addition to the grate or kitchener. Excellent results have also been obtained in similar directions by other manufacturers of kitcheners and grates, especially by Constantine; the Eagle Range Company; the Radiator Range Company; Brown and Green, etc., in kitcheners; and by Clark, Bunnett, and Co., in the Ingram Kaio Kapnos grate; Shorland, in the Manchester ventilating grate; and in the Feetham, Stanley, and other grates.

THE SANITARY ASPECTS OF THE OVERSIZING OF COTTON YARNS.

AT a deputation lately introduced to the Home Secretary, on the subject of the oversizing of cotton yarns, Mr. Birtwistle, Chairman of the North-East Lancashire Weavers, presented a memorial, which set forth that an addition of about 20 per cent. of size was required for manufacturing purposes; but that, of late years, a practice of adding from 50 to more than 200 per cent. of an admixture of various ingredients, which served no other purpose than to give a fictitious weight and appearance to the cloth, had become very common. They complained that the extraordinary addition to the yarn of this admixture gave off, in the process of weaving, a deleterious effluvium and dust, which was inhaled by the weavers to the injury of their health. Manufacturers of this kind of cloth introduced steam into their weaving sheds, to enable more of this admixture to be woven into the cloth, and to soften the stiff oversized threads, and render them more pliable and less subject to breakages. The clothes of persons, chiefly women and children, who were employed in these sheds, were so damped by the warm moisture given off by the steam, that, when they went out into the open air, coughs, colds, and the whole train of lung-diseases, were contracted; and rheumatism and many other bodily afflictions, which tended to enervate and break up the system at a premature age, followed.

ARTISANS' DWELLINGS.

THE Select Committee on the Artisans' and Labourers' Dwellings Acts have concluded the consideration of their report, which will shortly be published. The Committee lay emphasis on the immense advantages there would be to the working classes if the cheap train system in operation on the Great Eastern Railway could be extended to other railways running out of London. But this would by no means, they considered, meet all the circumstances of the case, as many workmen do not finish their labour until late at night, when such accommodation would not be available, and many persons are bound to live quite near their employment. After thoroughly considering the working of the two systems set on foot by Mr. Torrens's Acts and Sir R. Cross's Act, and the Acts amending them respectively, the Committee came to the conclusion that both were necessary to save the people from overcrowding. They would deal with some of the onerous provisions which hampered the working of Sir R. Cross's Acts; and they think that both these Acts and those of Mr. Torrens should be facilitated and reinforced, and their execution left to the local bodies. The recommendations of the Committee are based on these lines. They recommend that both the legislation introduced by Sir R. Cross, and the Acts known by the name of their author (Mr. Torrens), should be reinforced and worked each on their specific lines; and that, as occasion offers, the system of cheap trains for workmen should be extended to other lines running in and out of London. The Press Association states that the promoters of the Regent's Canal Railway have agreed to run upon their line cheap workmen's trains to the North of London, on terms similar to those already provided by the Great Eastern Railway Company.

THE SOUTHERN DELEGATE.

A CASE is reported in the *South London Observer*, of June 17th, which shows how far some of the lower class of druggists are accustomed to go in defiance of the Apothecaries' Act of 1815, which, while reserving

to them their trade rights in the "buying, preparing, compounding, dispensing, and vending drugs," expressly forbids, under a penalty of £20 for each offence, their acting as apothecaries by presuming to treat diseases. A man (a salesman in one of the markets, but residing at Walworth) came home on the previous Friday week at noon, complaining of pain in his chest, which he attributed to eating a steak for breakfast. Finding that the pain became worse, his wife went to a druggist in the neighbourhood, under the impression that he was a duly qualified medical man, as he had attended her and her children on previous occasions. The druggist wrote a prescription, and his assistant made it up. The next morning, the man was worse than ever; and, shortly after eight o'clock, the druggist visited him, and prescribed a second time; but, after taking two doses of the medicine, he suddenly died; and a coroner's inquest became necessary, at which the above facts were brought out. Mr. Hopkins, surgeon, deposed to making a necropsy, and finding heart-disease to have been the cause of death; and urged that the attention of the public should be drawn to the evils likely to result from practice by unqualified persons like the druggist in this case. It appeared that the relatives of the deceased man had no idea that they had engaged other than a duly qualified medical man. The coroner stated that he had no power to censure the individual referred to; it rested with the medical men themselves, through their Society. This is quite true; and we only regret that the Apothecaries' Society, with whom the duty primarily rests of enforcing their own Act, should not prosecute in such flagrant cases. Under the circumstances, we commend the case to the consideration of the Defence Associations.

PHTHISIS AMONG NEEDLE-MANUFACTURERS.

IN his recent report to the Stratford-on-Avon Combination of Sanitary Authorities, Mr. G. H. Fosbroke again comments upon the not uncommon prevalence of phthisis among needle-manufacturers. During 1880, no fewer than 45 deaths happened from this disease, 24 being registered in Alcester, which had then a population not exceeding 20,000; the remaining 21 deaths occurring in the Evesham and Stratford Districts, which contain together a population of not quite 26,000. Fourteen of the 24 deaths in Alcester took place in two subdistricts, both of which are needle-manufacturing centres. A somewhat similar mortality was registered during 1881, phthisis being held responsible for 24 deaths in the Stratford and Evesham Districts (population 24,507), whereas in Alcester, with a population of 17,387, there were 26 deaths. Mr. Fosbroke regrets that he is unable to give an explanation of this mortality, since the inspection of these needle-manufacturing factories does not come within his province. Whether it is in consequence of such trade employment, or that the workmen so generally keep their work-hops too hot and "close," he is not in a position to say. This appearance of phthisis is, as Mr. Fosbroke observes, well worthy the consideration of factory inspectors: but it is also still more worthy the attention of the Medical Department of the Local Government Board, an inquiry by which, on the present state of the question as to the lung-diseasing conditions of various industries, is much to be desired. Such an inquiry was made on a large scale by the then Medical Department of the Privy Council in 1860-4, and Mr. Simon always recognised the importance of continuing the investigations on the subject. A series of fresh inquiries by various inspectors was indeed begun under his auspices in the year 1873, but the results were never published, and administrative changes put a stop to their further prosecution. The question is, however, one of no little hygienic as well as practical interest, and deserves exact and systematic study by a skilled investigator.

DEATH FROM CHLOROFORM.

WE have received from Mr. Crane, House-Surgeon of the Kent and Canterbury Hospital, the following account of a death from chloroform, that occurred in that hospital on Thursday, the 15th inst. J. S., aged 49, was admitted, under the care of Mr. T. W. Reid, on the 9th inst., for disease of the fifth metatarsal bone of the right foot. The toe had

been removed on the 7th April last, but the flap had not united. The great toe of the left foot had been amputated about five years before. On the 15th, Mr. Reid determined to remove the diseased portion of bone while the patient was under the influence of chloroform. For the first six or seven minutes, the chloroform appeared to have little effect; and, on an incision being made, the patient winced. Further operative proceedings were stayed for a few seconds, and on renewal, a piece of diseased bone was removed. The patient now struggled and sat up in the bed, when the pulse at the wrist suddenly became weak, flickered, and stopped; the face became livid; but the temporal artery could still be felt beating. The pupils were fixed, and not dilated. The breathing became sighing, and then stopped. As soon as the change in the pulse became apparent, the administration of the anæsthetic was discontinued, and the attention of the operator called to the patient's condition, artificial respiration being at once begun. In about a couple of minutes, the phrenic nerve was stimulated by a faradic current. All was of no avail, however, the patient merely giving two or three gasps. The quantity of chloroform used was about two drachms and three-quarters; and the time occupied, from the commencement of its administration until the setting in of the fatal symptoms, was less than ten minutes. The patient looked older than he really was. His pulse was strong and regular, and a little hard. There were no obvious signs of cardiac mischief. The urine was normal. He was accustomed to take large quantities of stimulants. There was unfortunately no necropsy, as the coroner did not deem it necessary, and the friends declined to consent.

THE DEAD IN HOSPITALS.

THE question as to the responsibility of public bodies for the burial of paupers dying in hospitals has for some time been a question of considerable discussion. In January last (see *BRITISH MEDICAL JOURNAL*, February 4th, 1882), the matter was brought before Mr. Bridge, at the Southwark Police Court, by a poor man, who asked for assistance in removing the dead body of his wife from Guy's Hospital, and having it buried by the parish. The applicant was living in the St. George's Union; but the relieving officer contended that, as the hospital was situated in St. Olave's Union, it was the duty of the relieving officer of that parish to go to the expense of removing the body and burying it. Mr. Bridge has since been in communication with the St. Saviour's Union respecting the burial of persons dying in Guy's Hospital who, previously to their admission, were resident in that union, and whose friends were unable to pay the funeral expenses; and Dr. Steele, the Superintendent of Guy's Hospital, has also brought the subject before the Local Government Board, with a view to the satisfactory settlement of this question. The Board have now expressed their opinion that, having regard to the opinion expressed by Lord Denman in the case of *Regina v. Stewart*, 12 A and E 773, in the event of a person dying in a hospital in such a state of indigence as to leave no fund applicable to the payment of the cost of interment, the primary obligation to bury the body devolves upon the hospital authorities, and that the guardians of the union of the parish in which the deceased resided prior to admission into the hospital are not legally bound to bear the expense of such interment. The statute of 7 and 8 Vict., cap. 101, section 31, however, enables the guardians of any parish or union to bury the body of any poor person which may be within such parish or union. As Guy's Hospital is within the St. Olave's Union, it will be for the guardians of that union to determine whether or not in any case they will interfere and exercise the power conferred upon them by that provision, and bury the body of any poor person which may be within the union. Seeing, however, that patients admitted into the hospital came from all parts of the metropolis, and even from the provinces, the guardians of the St. Olave's Union very naturally hesitate to adopt a practice which will render them liable to considerable expenditure. The subject is undoubtedly surrounded by considerable practical difficulty; but, with a view to diminish the hardship on the hospital authorities, of being at the charge of burying the bodies of persons dying in

the hospital, the Board have suggested that the authorities should, when possible, make arrangements with the subscribers or persons sending or bringing patients to the institution, for the removal of such patients when they shall have been discharged from medical treatment, or, in the event of death, for the removal and burial by the Board. An undertaking of this kind is required by the authorities of some of the London hospitals, and its adoption at Guy's might go far to meet the difficulty which is now felt. Of course, no such arrangement would be possible in the case of persons brought to the hospital without an order, in consequence of sudden accident.

EXAMINATION IN ELEMENTARY ANATOMY AND PHYSIOLOGY.

THE following circular has been sent, by order of the Council of the Royal College of Surgeons, to all teachers of anatomy and physiology: "SIR,—I am desired to acquaint you, for the information of the authorities of your Medical School, that the Council of this college have adopted a resolution to the following effect, viz.:—'That it is desirable that an examination in elementary anatomy and physiology should be instituted at the several recognised schools of medicine after the end of the first year of professional study, and that any student commencing his professional education on or after the 1st of October 1882, should not be admitted to the primary examination for the diploma of Member of the College without the production of a certificate from his teachers that he has satisfactorily passed the examination in question at his medical school.'—I am, sir, your obedient servant, EDWARD TRIMMER, secretary. (1) What is your opinion on the propriety of holding the proposed examination in elementary anatomy and physiology after the end of the first year of professional study? (2) If it be determined to hold such an examination, what should be its scope in regard both to the subjects involved and the mode of conducting it? (3) At what period after the end of the first year would you propose that the examination should be held? (4) Would you allow any variation, as regards time, to meet the cases of exceptional students at which such examination should be held, or would you fix a certain date after the completion of the first year at which all candidates should pass it? (5) If you would allow a variation, how long would you delay the right on the part of the candidate to pass the examination before presenting himself for the primary examination for the membership? (6) And, generally, will you kindly favour the committee with any suggestions and observations you may have to make with respect to the examination?"

HUMAN PIGSTIES.

SOME very strong comments on the death of a child aged three weeks, which occurred at St. Mark's Mews, Notting Hill, lately appeared in a daily paper. It was stated that the evidence showed the premises to be in a filthy state, the atmosphere vitiated by an accumulation of stable-manure, and the bad condition of the drains; that there were two families, consisting of fifteen persons, living in six rooms. Dr. Dudfield reported to the Kensington Vestry that the statements were not true, as there were only fourteen persons, seven of whom were young children, occupying the six rooms; that the rooms were structurally like other rooms over stables, but required cleansing; and that there was no communication between the rooms and the drains. The latter were in good order, except that the inlets were trapped with bell-traps, the covers of which were movable; that there was no accumulation of manure, and indeed there could not be, as there is no dung-pit, nor any need of one, as sawdust is used instead of straw. The death was caused by overlying. Dr. Dudfield considered that there was absolutely nothing to justify the newspaper report. It does not appear whether, in addition to cleansing, any action will be taken to remove the bell-traps, and substitute a more efficient trap, which cannot be untrapped by the removal of the cover, or the evaporation of the very small quantity of water in the trap. Bell-traps are admittedly in very many cases no traps at all, even when they retain the covers, as in dry weather the water is absent, and the trap consequently untrapped;

and, in certain states of the atmosphere, sewer-gas will pass through the thin film of water which they ordinarily contain. It is to be hoped that before long all bell-traps in London will be taken away, and yard-gullies or some other similar trap be substituted.

SCOTLAND.

At a meeting of the Royal College of Surgeons of Edinburgh, held on the 21st inst., Dr. Patrick Heron Watson was elected representative of the College in the General Council of Medical Education and Registration of the United Kingdom for the period of three years, in the room of the late Professor Spence.

A HANDSOME TESTIMONIAL.

WHEN it became known in Largs and the neighbourhood that Dr. Kirkwood, on account of the state of his health, had been obliged to give up practice of medicine, a number of his friends agreed to take the opportunity to present him with a testimonial of their grateful and affectionate appreciation of his invaluable professional and public services. The testimonial, consisting of a silver tea and coffee service, and a cheque for £1,435, was last week presented to Dr. Kirkwood.

DUNDEE LUNATIC ASYLUM.

At the annual meeting of the governors of the Royal Lunatic Asylum, Dundee, held on Monday, it was reported that the new asylum buildings at West Green were nearly completed, and that the patients would be transferred from the old buildings to them at an early date. In consequence, however, of want of room in the old house, 39 patients had already been placed in the new asylum buildings, and although there was five miles distance between the old and the new buildings, everything had been managed satisfactorily in conducting the work in direct connection with the old. During the year, 426 patients had been under treatment; this showed an increase of 41 on the previous year. The percentage of recoveries was 27.21, and the percentage of deaths 6.31. The income for the year was £9,109, and the expenditure £8,441.

THE MORISON LECTURES ON INSANITY.

THE course of lectures delivered annually in Edinburgh, in the Royal College of Physicians, and known as the Morison Lectures on Insanity, is this year being delivered by Mr. D. J. Hamilton, Professor-elect of Pathology in the new chair of Pathology in Aberdeen University, and at present Pathologist to the Royal Infirmary, Edinburgh, and Teacher of Practical Pathology. The first lecture was delivered on Friday, June 16th; Dr. Haldane, the President of the Royal College of Physicians, in the chair. The lecturer treated of the nervous system; its evolution; the aid which phylogeny gave in understanding its structure and functions; its history as recorded in development, and as seen in different classes of animals; the relation of the sympathetic to the nervous system of invertebrates; also the development of the sense organs. The second lecture was delivered on Tuesday last, and in it the lecturer considered the development of the vertebrate brain; the comparative anatomy of the convolutions in relation to intelligence; Meynert's "Projection System," and the functions of the cerebral cortex as far as at present known.

REGISTRAR-GENERAL'S RETURN.

FROM the returns of the Registrar-General for the week ending June 10th, it appears that the death-rate in the eight principal towns was 23.2 per 1,000 of estimated population. This rate is 4.5 above that for the corresponding week of last year, and 1.3 above that for the previous week of the present year. The lowest mortality was recorded in Dundee, viz., 18.2 per 1,000; and the highest in Greenock, viz., 29.7 per 1,000. The mortality from the seven most familiar zymotic diseases was at the rate of 4.5 per 1,000, or slightly below the rate for the

previous week. Whooping-cough, diarrhoea, and other bowel-complaints were the most fatal miasmatic diseases in Glasgow. Six deaths from whooping-cough were registered in Edinburgh. Acute diseases of the chest caused 107 deaths, or 18 less than the number registered during the previous week. The mean temperature was 55.3°, being 0.1° below that of the week immediately preceding, but 7.5° above that of the corresponding week of last year.

TYPHOID FEVER IN GLASGOW.

THERE has been a sharp outbreak of this disease in a working-class portion of the western district of Glasgow. In the streets where it prevails the cases have occurred wholly within the area of one milk supply, and, as a consequence, all the farms given as the source from which the milk was derived have been inspected, and inquiries pushed in various directions without discovering the point of infection, so far as actual disease goes. Yet the association of the fever with the milk-distribution is very distinct—as distinct as in any previous experience. In the course of a complete house-to-house visitation in the locality, there has not been found a household infected which was not supplied with this milk. The history of the cases gives the beginning of May as the time when the contamination took place, and there is no evidence of any present or more recent injury. It is to be hoped that some light will yet be thrown on the cause of the outbreak.

THE HEALTH OF GLASGOW.

THE report of the Medical Officer of Health for the fortnight ending June 10th shows that there were 479 deaths registered, giving a death-rate of 24.6 per 1,000 living. In the corresponding fortnight of last year the mean temperature was a degree lower, and the death-rate was also lower. The deaths from pulmonary diseases still continue in excess, being 12 per cent. more this year than last. They amounted to 184, representing a death-rate of 9 per 1,000 living, and constituting 39 per cent. of the total deaths. There were 4 deaths from fever, viz., 3 from enteric and 1 from typhus. The number of deaths from the infectious diseases of children was 33, viz., 21 from whooping-cough, 7 from measles, and 5 from scarlet fever. The cases of fever registered amounted to 73, viz., 67 of enteric fever, 5 typhus, and 1 undefined. There were also 91 cases of measles, 46 of whooping-cough, 46 of scarlet fever, and 9 of diphtheria registered, of which 25 were removed to hospital, and the remainder kept under sanitary supervision at home. On the whole, it may be said that the past fortnight has been one of increased mean temperature, the increase arising chiefly from warmer nights, so that the temperature has been more uniform. Although the number of deaths from pulmonary diseases is less than it has been, it is still higher than usual.

THE CHILDREN'S HOSPITAL IN GLASGOW.

CONSIDERABLE progress has been made with this institution, and it is hoped that it will be shortly open for the reception of patients. The hospital stands on Garnet Hill, which is a central situation, and one of the most airy in the west of Glasgow. The building is externally plain and inexpensive, but internally, as regards drainage, ventilation, heating, the arrangement of the wards and all other details, everything appears to be as perfect as possible. There are three wards, affording accommodation for about sixty patients, but only those suffering from diseases of a non-infectious character will be admitted. About £2,000 is still needed to defray the expenses of the building and its equipment, and a further sum will also be necessary to provide that most necessary adjunct of a children's hospital, a dispensary. Glasgow is to be congratulated on having at last made special provision for the sick children of the city, and no doubt ample funds will be forthcoming for the support of the hospital.

HEALTH OF THE PRINCIPAL TOWNS IN SCOTLAND.

DURING the month of May, there were registered in the eight chief Scotch towns the deaths of 2,440 persons, of whom 1,247 were males and 1,193 females; the number is 220 under the average for the pre-

vious ten years, due allowance having been made for increase of population. The respective death-rates in the various towns were per 1,000 of their population: Leith, 15; Dundee, 19; Edinburgh and Aberdeen, 22; Paisley, 24; Greenock, 25; Perth, 25; and Glasgow, 28. Forty-three per cent. of all the deaths were of children under five years of age, and the percentage of each town was: Perth, 36; Leith, 37; Edinburgh and Dundee, 40; Greenock, 43; Glasgow, 44; Aberdeen, 45; and Paisley, 46 per cent. Fifteen and a-half per cent. of all deaths was due to zymotic diseases; but in Edinburgh, Aberdeen, and Paisley this rate was much exceeded. Whooping-cough, as usual, was most fatal, it having caused 4.9 of the entire mortality; while in several places it was more fatal: thus, in Glasgow 5.7 and in Aberdeen 8.7 per cent. of the deaths were due to it. Of 44 deaths ascribed to fever, 5 were registered as typhus, 37 as enteric, and 2 as simple continued fever. Of the other zymotics, measles was most fatal, having caused 78 deaths, diarrhoea 41, scarlet fever 28, diphtheria 27, croup 17, metria 6. In Edinburgh, 6.6 of the deaths were due to measles; but in that city the epidemic is certainly subsiding rapidly now. As to other diseases, apoplexy caused 63 deaths, paralysis 53, cardiac diseases 149, hydrocephalus 86, and premature birth debility 64 deaths. Phthisis pulmonalis caused 506 deaths, equal to 13.5 per cent. of the entire mortality; while inflammatory affections of the respiratory system, other than those already mentioned, actually contributed 20.6 of the total number of deaths. Of 62 deaths due to violent causes, only 5 were returned as of suicidal origin. Four males and one female died over ninety years of age, of whom the oldest, a labourer, was ninety-eight. During May, there were registered in those eight towns the births of 4,222 children, of whom 2,134 were males and 2,088 females. Meteorologically, the month of May was an ordinary month, its mean temperature being only half a degree above the average of the preceding 26 years. The mean barometric pressure was greater by 0.065 inch, the barometric monthly range greater by 0.279 inch, the mean temperature greater by 0.5°, the mean daily range of temperature greater by 2.6°, the mean humidity (73) was less by 5, the rain depth in inches greater by 0.20 inch, the wind pressure greater by 0.13 lbs. than the average of the same month during the preceding 26 years. The highest mean temperature, 51.4°, was at Paisley; the lowest, 48.8°, was at Aberdeen. The maximum rainfall, 3.79 inches, was at Greenock; and the minimum, 1.58 inch, was at Aberdeen, the place which had also the lowest mean temperature.

IRELAND.

FIVE persons, suffering from small-pox, were last week admitted into Newry Workhouse, from the Camlough division of the union. On examination, four out of the number were destitute of vaccination marks; while in the case of the other patient, who had the disease very mildly, vaccination had been performed.

WOMEN AND CHILDREN'S HOSPITAL, CORK.

THE Board of Management of the County and City of Cork Hospital for Diseases of Women and Children have published a statement in reference to the propriety of amalgamating with the South Infirmary, which was suggested at the late annual meeting of the institution. They state that their hospital having adopted an entirely different system of nursing from that of the South Infirmary, the Board felt that the proposed amalgamation of the two institutions could not be made unless the trustees of the South Infirmary should consent to modify their system of nursing in the department for children. Shortly after this meeting, the intern medical staff of the infirmary issued a communication strongly putting forth the adaptation of the infirmary as much as any other institution for the treatment and nursing of women and children, and appa-

rently pointing out that there was no necessity for a separate institution for these objects. The Board felt that, if such were the case, there was no reason why their institution should exist; and a meeting was arranged between their body and the trustees of the infirmary, when the former offered to use their influence to endeavour to transfer to the latter the funds and subscriptions of the Women and Children's Hospital on the following conditions: 1. That a separate department for children shall be established; 2. That the present medical staff of the Women and Children's Hospital be retained for that department; 3. That the mode of nursing now in operation in the Women and Children's Hospital shall be adopted for this department. Of these three propositions, the first and third were alone insisted on as being absolutely essential. After careful consideration, the trustees of the infirmary declined the proposed amalgamation, their chief objection being that the system of nursing at the Women and Children's Hospital was incompatible with that adopted and strongly approved of by the trustees of the infirmary. The board consider they are justified in still continuing to maintain the hospital as a separate institution, particularly as they have demonstrated by actual experiment the impossibility of amalgamating it with one of the larger institutions, without depriving the hospital of its most important and distinctive characteristic, viz., the system of lady nurses. It is hoped shortly to move the institution into a larger and more commodious building; and although a sum of £700 was obtained last November by means of a bazaar, a further sum of nearly the same amount will be required to enable the board to erect or otherwise provide a building suitable in every respect for a Women and Children's Hospital.

ARMAGH UNION.

THE Hospital Committee appointed by the guardians have recommended that the proposed paying hospital for infectious diseases for Armagh should be erected outside the workhouse walls, and that the cost should not exceed £1,000, which should be borne jointly by the rural and urban sanitary authorities. The matter is still under discussion, but will probably be decided at the next meeting of the board. There were no cases of small-pox admitted to hospital during the week, and the entire number under treatment is five, of whom three are convalescent.

CORK FEVER HOSPITAL.

ON the 15th instant, a meeting of the trustees was held for the purpose of electing an extra physician to the hospital, when Dr. Charles Armstrong Harvey was unanimously elected. Dr. Beamish, who recently resigned, was appointed consulting physician, and it is contemplated to present him with a testimonial of the esteem with which he is regarded by the Committee. It is not intended that this expression of opinion should assume any costly form, and probably an illuminated address will ultimately be decided upon.

LIGATURE OF THE INNOMINATE ARTERY.

WE have received fuller details of Mr. Thomson's case, briefly reported at page 920 of our last number. The patient, forty-five years of age, was suffering from a large aneurysm, involving the second and third parts of the subclavian artery, and three and a half inches in diameter. The operation was performed at the Richmond Surgical Hospital. An ox-aorta ligature, one-sixth of an inch in diameter, was employed, and was passed round the innominate artery by means of the instrument specially devised by Mr. Barwell for the purpose. On the third day, the tumour felt firm, and was already diminished in size; the wound remained aseptic, only a small quantity of serum oozing from the drainage-tube. On the thirteenth day, the pain, from which the patient had suffered much before operation, had completely disappeared; and sensation was returning in the right arm, which had been paralysed for several months. The tumour was steadily contracting, and the wound had entirely healed, except at one point, kept open by a few threads of catgut.

HISTORY OF THE BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.

SUBJOINED are historical notes of the Branches of the British Medical Association, for which we are indebted to the local Secretaries. They will serve to show, at least to some extent, the important part which these societies have taken in promoting the objects for which the Association was founded. The record of the work is chiefly limited to their proceedings in relation to public questions which have been brought under their notice. Of their scientific work, we can only say that hundreds of papers on subjects in the practice of medicine have been read and discussed at the meetings, the mere enumeration of the titles of which would occupy more space than we have at our disposal. It is scarcely possible to overrate the beneficial influence which they have exercised on the progress of medical knowledge and on the general interests of the medical profession.

BATH AND BRISTOL BRANCH.

With one exception (the East Anglian Branch), this Branch—or rather the Bath division of it—is the oldest in the Association. The first steps to inaugurate a district Branch of the Provincial Medical Association in this neighbourhood were taken at Bath, November 18th, 1836, when a few influential members of the profession met and decided upon the formation of the Bath District Branch, of which Mr. W. Tudor, Serjeant-Surgeon to the King, was the first president, and Dr. Barlow secretary. The Bristol Branch was formed in 1839; Dr. J. C. Prichard being the first president, and Mr. Helling secretary. In 1842, a proposal was made to amalgamate the Bath Branch with the Bristol; and in consequence the Bath and Bristol Branch was formed, consisting of 119 members, including many from the country around the two towns.

For some years, the Branch was managed by a council, consisting of eight members from Bath, eight from Bristol, and eight country members; and the president was chosen annually in rotation from each division; but since 1849, there have only been six country members in the chair. Since 1850, the council has consisted of twelve members elected in the Bath district, and twelve in the Bristol district, each including its neighbouring country range.

Each district has its own secretary. In the Bath district, the secretaries have been: Dr. E. Barlow (appointed 1836); Dr. W. I. Morgan (1843); Mr. J. S. Bartrum (1852); and Mr. R. S. Fowler (1859), who holds office at the present time. In the Bristol district, the first secretary was Mr. G. H. Helling (appointed 1839); and his successors have been Mr. J. Colthurst (1847); Mr. Crosby Leonard (1853); Mr. H. Ormerod (1860); Dr. Henry Marshall (1861); Dr. C. Steele (1865); Mr. E. C. Ward (1870); and Dr. E. Markham Skerritt (1880), who is now in office.

The following table shows the presidents of the amalgamated Branches, commencing from 1841. Previously to that time, the presidents were: Bath Branch: 1837, Mr. W. Tudor; 1838, Mr. G. Norman; 1839, Mr. I. S. Soden; 1840, Dr. W. I. Morgan. Bristol Branch: 1839, Dr. J. C. Prichard; 1840, Mr. R. Smith. The annual meetings are held alternately in Bath and Bristol, the president for the year being resident within the district in which the meeting is held. The first meeting on the list, that in 1841, was held in Bristol.

Year.	President.	Year.	President.
1841	W. I. Morgan, M.D.	1851	W. I. Morgan, M.D.
1842	W. I. Morgan, M.D.	1852	W. I. Morgan, M.D.
1843	W. I. Morgan, M.D.	1853	W. I. Morgan, M.D.
1844	W. I. Morgan, M.D.	1854	W. I. Morgan, M.D.
1845	W. I. Morgan, M.D.	1855	W. I. Morgan, M.D.
1846	W. I. Morgan, M.D.	1856	W. I. Morgan, M.D.
1847	W. I. Morgan, M.D.	1857	W. I. Morgan, M.D.
1848	W. I. Morgan, M.D.	1858	W. I. Morgan, M.D.
1849	W. I. Morgan, M.D.	1859	W. I. Morgan, M.D.
1850	W. I. Morgan, M.D.	1860	W. I. Morgan, M.D.
1851	W. I. Morgan, M.D.	1861	W. I. Morgan, M.D.
1852	W. I. Morgan, M.D.	1862	W. I. Morgan, M.D.
1853	W. I. Morgan, M.D.	1863	W. I. Morgan, M.D.
1854	W. I. Morgan, M.D.	1864	W. I. Morgan, M.D.
1855	W. I. Morgan, M.D.	1865	W. I. Morgan, M.D.
1856	W. I. Morgan, M.D.	1866	W. I. Morgan, M.D.
1857	W. I. Morgan, M.D.	1867	W. I. Morgan, M.D.
1858	W. I. Morgan, M.D.	1868	W. I. Morgan, M.D.
1859	W. I. Morgan, M.D.	1869	W. I. Morgan, M.D.
1860	W. I. Morgan, M.D.	1870	W. I. Morgan, M.D.
1861	W. I. Morgan, M.D.	1871	W. I. Morgan, M.D.
1862	W. I. Morgan, M.D.	1872	W. I. Morgan, M.D.
1863	W. I. Morgan, M.D.	1873	W. I. Morgan, M.D.
1864	W. I. Morgan, M.D.	1874	W. I. Morgan, M.D.
1865	W. I. Morgan, M.D.	1875	W. I. Morgan, M.D.
1866	W. I. Morgan, M.D.	1876	W. I. Morgan, M.D.
1867	W. I. Morgan, M.D.	1877	W. I. Morgan, M.D.
1868	W. I. Morgan, M.D.	1878	W. I. Morgan, M.D.
1869	W. I. Morgan, M.D.	1879	W. I. Morgan, M.D.
1870	W. I. Morgan, M.D.	1880	W. I. Morgan, M.D.
1871	W. I. Morgan, M.D.	1881	W. I. Morgan, M.D.
1872	W. I. Morgan, M.D.	1882	W. I. Morgan, M.D.

Dr. J. C. Prichard of Bath is the President-elect.

Six ordinary meetings of the Branch are held yearly during the session between October and May. They take place at Bath and Bristol alternately; and numerous papers bearing on the science and practice of medicine have been read and discussed at them. The Branch has also taken cognisance, from time to time, of medical reform and other matters connected with the interest of the Association and of the profession and public.

The first annual meeting of the Association, after its formation at Worcester in 1832, was held in Bristol in 1833 under the presidency of Dr. Carrick. Since the original formation of the Branch, there have been four meetings in the district: at Bath in 1838 (Dr. Barlow, president), in 1848 (Mr. G. Norman, president), and in 1878 (Dr. R. W. Falconer, president); at Bristol in 1863 (Dr. J. A. Symonds, president).

At the present time, the Branch contains 216 members, all resident in Somerset, Wiltshire, and Gloucestershire.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.

THIS Branch is one of the oldest in the Association, and was projected, in the first instance, in the year 1842, by Mr. Crosse of Norwich, the founder of the "Eastern Medical Association", which had already been incorporated with the Provincial Medical Association established independently by Sir Charles Hastings. In the above year, Mr. Crosse wrote to Mr. G. M. Humphry, just elected surgeon to Addenbrooke's Hospital at Cambridge, asking him to enlist members, and to form a Branch. There were at that time a few members of the Association in Cambridge and its neighbourhood, including Dr. Haviland, Regius Professor of Physic, and Dr. Fisher, Downing Professor of Medicine, who became the first members of the Branch.

The earlier meetings were held at Huntingdon, under the presidency of Dr. Ward; at Ely, under that of Mr. Muriel; at St. Ives, March, Wisbech, and Bishop's Stortford, under the presidency respectively of Mr. Girling, Mr. O'Connor, Dr. Whitted, and Mr. Crosse. The first meeting at Cambridge was held under the presidency of Dr. Paget, four years before the general meeting of the Parent Association at the same place in the year 1864. This meeting was highly successful, and resulted in a large accession to the number of members of the Branch, which has been steadily maintained up to the present time.

The following is a list of Presidents and a table of places of meeting.

Year.	President.	Place of Meeting.
1842	William Ward, M.D.	Huntingdon.
1843	W. Ward, M.D.	Huntingdon.
1844	W. Ward, M.D.	Huntingdon.
1845	W. Ward, M.D.	Huntingdon.
1846	W. Ward, M.D.	Huntingdon.
1847	W. Ward, M.D.	Huntingdon.
1848	W. Ward, M.D.	Huntingdon.
1849	W. Ward, M.D.	Huntingdon.
1850	W. Ward, M.D.	Huntingdon.
1851	W. Ward, M.D.	Huntingdon.
1852	W. Ward, M.D.	Huntingdon.
1853	W. Ward, M.D.	Huntingdon.
1854	W. Ward, M.D.	Huntingdon.
1855	W. Ward, M.D.	Huntingdon.
1856	W. Ward, M.D.	Huntingdon.
1857	W. Ward, M.D.	Huntingdon.
1858	W. Ward, M.D.	Huntingdon.
1859	W. Ward, M.D.	Huntingdon.
1860	W. Ward, M.D.	Huntingdon.
1861	W. Ward, M.D.	Huntingdon.
1862	W. Ward, M.D.	Huntingdon.
1863	W. Ward, M.D.	Huntingdon.
1864	W. Ward, M.D.	Huntingdon.
1865	W. Ward, M.D.	Huntingdon.
1866	W. Ward, M.D.	Huntingdon.
1867	W. Ward, M.D.	Huntingdon.
1868	W. Ward, M.D.	Huntingdon.
1869	W. Ward, M.D.	Huntingdon.
1870	W. Ward, M.D.	Huntingdon.
1871	W. Ward, M.D.	Huntingdon.
1872	W. Ward, M.D.	Huntingdon.
1873	W. Ward, M.D.	Huntingdon.
1874	W. Ward, M.D.	Huntingdon.
1875	W. Ward, M.D.	Huntingdon.
1876	W. Ward, M.D.	Huntingdon.
1877	W. Ward, M.D.	Huntingdon.
1878	W. Ward, M.D.	Huntingdon.
1879	W. Ward, M.D.	Huntingdon.
1880	W. Ward, M.D.	Huntingdon.
1881	W. Ward, M.D.	Huntingdon.
1882	W. Ward, M.D.	Huntingdon.

The work of the Branch has been mainly confined to the reading and discussion of papers in medical science, and has rarely been extended to social or political questions affecting the profession.

POOR-LAW MEDICAL REFORM. At the meeting at Ely, in 1873, a series of resolutions were adopted touching the question of Poor-law medical relief. One of these has a curious significance at the present moment, when it is proposed to increase the tax on carriages. The resolution stated it to be advisable "that every urban medical officer should be entitled to keep one man-servant, one horse, and one two or four-wheeled carriage, free from assessed taxes".

At the meeting at Varmouth in 1868, it was proposed and carried, "That, in the opinion of this meeting, it is expedient to appoint a committee in Section E at the annual meeting at Oxford, to draw up a recommendatory tariff of medical fees and club-remuneration".

PROFESSIONAL SECRETS.—At the meeting at Cambridge in 1869, the question was discussed, "Is it proper that medical men should be compelled to divulge, in courts of justice, facts of a criminal nature which may have become known to them in answer to strictly professional questions?"

HABITUAL DRUNKARDS.—At the third meeting at Cambridge, in 1875, the question of legislation for habitual drunkards was taken up, and petitions to Parliament adopted.

Questions in Medical Ethics are remarkably absent from the records of the Branch, only two such having been discussed since 1850.

Medical Education has not occupied the attention of the Branch, except when, meeting in Cambridge, the advantage likely to accrue if the University could obtain a greater hold of the profession has been informally mentioned in speeches.

With regard to the purely medical work, at the earlier meetings, special questions in medical science were set for discussion, so as to gather up the experiences of a large number of medical observers—a plan foreshadowing the system of collective investigation adopted by the Association. The same plan was again advocated by Mr. Stear at the meeting at Saffron Walden in 1877; but no definite result was arrived at.

Since 1850, regular annual meetings of the Branch have been held at the several towns within its area, or in combination with neighbouring Branches: and, within recent years, additional meetings have been held. The second general meeting of the Parent Association at Cambridge in 1880 is so recent as scarcely to require special notice. It has not been without its effect in furthering the prosperity of the Branch.

The secretaries have been: Mr. Humphry, from the foundation of the Branch to 1864; Dr. Latham (1864); Mr. Helm (1865); Dr. Bradbury (1873); Dr. Anningson (1877 to the present time).

MIDLAND BRANCH.

THIS Branch was formed at a meeting held at the Town Hall, Derby, on November 6th, 1851. Sir Charles Hastings was in the chair; and it was determined to form a Branch including the counties of Derby, Nottingham, Leicester, and Lincoln. Dr. Bent of Derby was appointed the first President, and Mr. Fearn Honorary Secretary; and a Committee of three members from each county was appointed to draw up rules.

The annual meetings are held alternately in the county towns. Quarterly meetings are also held at some place in one of the counties, named by the President. At these meetings, papers on professional subjects and matters of interest to the profession generally are discussed.

The following is a list of the Presidents of the Branch, and places of annual meeting, since its formation.

Date.	Place of Meeting.	President.
1852	Nottingham	J. C. Williams, M.D.
1853	Leicester	Thomas Paget, Esq.
1854	Lincoln	James Snow, Esq.
1855	Derby	James Heygate, M.D.
1856	Nottingham	Booth Eddison, Esq.
1857	Leicester	George Shaw, M.D.
1858	Spalding	Edwin Morris, M.D.
1859	Derby	J. Whitaker Johnson, Esq.
1860	Nottingham	George E. Stanger, Esq.
1861	Leicester	T. Macauley, Esq.
1862	Lincoln	T. Symson, Esq.
1863	Derby	H. Goode, M.B.
1864	Nottingham	W. H. Ransome, M.D.
1865	Leicester	John Barclay, M.D.
1866	Lincoln	Septimus Lowe, Esq.
1867	Derby	John Hitchman, M.D.
1868	Nottingham	Joseph Thompson, Esq.
1869	Leicester	T. W. Benfield, Esq.
1870	Lincoln	G. Mitchinson, Esq.
1871	Derby	Wm. Ogle, M.D.
1872	Nottingham	W. T. Robertson, M.D.
1873	Leicester	H. Lankester, Esq.
1874	Lincoln	T. Symson, Esq.
1875	Derby	A. H. Dolan, Esq.
1876	Nottingham	Joseph White, Esq.
1877	Leicester	C. H. Marriott, M.D.
1878	Lincoln	A. Mercer Adam, M.D.
1879	Derby	J. Wright Baker, Esq.
1880	Nottingham	T. Wright, M.D.
1881	Leicester	W. E. Buck, M.D.

Among the subjects which have been discussed by the Branch are the following.

MEDICAL REFORM.—In 1858, a petition in favour of Mr. Cowper's Bill was ordered to be signed by the President and presented to both Houses of Parliament.

HOMŒOPATHY.—In 1858, the Branch passed a resolution declaring that homœopathy "stamps with degradation the intellect or honesty

of him who possesses it; and that to give encouragement to homœopaths thus becomes impossible with the man of education and high principles; and he who assents to consultation or co-operation with them sinks below the respect of his professional brethren, and the membership of this Branch of the British Medical Association." The meeting also expressed its "high appreciation of the honourable and dignified course taken by Dr. Paley of Peterborough and Mr. Philbrick of Stamford, in refusing to consult or co-operate with a homœopathic practitioner."

POOR-LAW MEDICAL OFFICERS.—In 1858, the Branch passed a resolution, thanking Mr. Richard Griffin of Weymouth "for his able and untiring advocacy of the rights and claims of the Poor-law medical officers, and his noble efforts to obtain an immediate redress of their grievances."

ELECTION OF MEMBERS OF ASSOCIATION.—In 1875, the following motion was carried unanimously: "That it would be conducive to the interests of the British Medical Association if the election of its members rested primarily with the Branch Association in whose district the applicants reside, subject to final approval and confirmation by the General Council of the British Medical Association."

ADVERTISEMENT OF MEDICAL BOOKS.—In 1875, the members at the annual meeting expressed the opinion that the advertising of medical books in the general papers is undesirable.

HABITUAL DRUNKARDS BILL.—In 1876, at the annual meeting, a petition to Parliament in favour of some restrictive measures for habitual drunkards was signed by the President and members.

CRUELTY TO ANIMALS BILL.—At the annual meeting in 1876, Dr. Ransome proposed a series of resolutions on this subject as follows:

"This meeting desires to express its approval of the course of action which has been taken by Mr. Ernest Hart and the Parliamentary Bills Committee towards the amendment of the Bill relating to experiments upon animals. While congratulating the Committee upon the measure of success which has attended their efforts in the interests of scientific truth and of true humanity, this meeting trusts that those efforts will be continued until the Bill is so amended that it will secure for society at large the full benefits which attach to the progress and diffusion of biological science, as well as such securities against possible abuse of the power of man over animals as are consistent with equitable legislation between man and man. This meeting does not consider that legislation equitable which makes penal a given action done for the purpose of acquiring knowledge, while it permits as lawful a similar action done by the same or another person for profit or amusement. It would, however, consider the injustice of the present Bill in this respect removed, were a clause introduced limiting its operation to those animals which either now are, or may hereafter be, included in the operation of Martin's Act. In the opinion of this meeting, the Bill, as it stands, punishes, not the infliction of pain, but the pursuit of knowledge, and, by reason of its unequal treatment of different persons for similar actions, will fail to commend itself to the consciences of those who are affected by it."

MEDICAL EDUCATION.—In 1880, a special meeting was held at Matlock Bath, to discuss and consider the resolutions of the Metropolitan Counties Branch on Medical Education.

Quarterly meetings are held at some place in the county named by the President. At these meetings, papers on professional subjects are read, and matters of interest to the profession generally are discussed.

EAST ANGLIAN BRANCH.

THIS Branch consists of Members of the Association residing in the counties of Norfolk, Suffolk, and North Essex, consolidated from various local societies in connection with the Provincial Medical and Surgical Association, which then existed as the Eastern Branch. No minutes of the transactions of these various district societies are known to exist, and the history of the Branch has therefore to be traced from the record of the names of the gentlemen who have filled the various offices of importance.

Among the most distinguished of the earlier associates, was unquestionably that great provincial surgeon and ardent worker, Dr. John Green Crosse, F.R.S., who it appears (previously to the general meeting of the Association in Norwich in 1846, at which he ably presided), had mainly directed the secretarial work himself. In these important duties he was assisted by various local secretaries, among others by Mr. C. R. Bree of Stowmarket, Mr. G. M. Humphry (Cambridge), Dr. W. England (Wisbeach), Mr. G. Chaters, and Mr. J. B. Pitt (Norwich). About the year 1851 Dr. Kirkman (of the Suffolk County Asylum) became with Mr. J. B. Pitt conjoint secretaries; they worked together until 1857, when Dr. Barrington Chevallier of Ipswich succeeded Dr. Kirkman. After twenty years'

service, Dr. Chevallier resigned in 1877, and was succeeded by Dr. W. A. Elliston of Ipswich. In October 1880, Mr. J. B. Pitt resigned after thirty-four years of office, and was succeeded by Dr. Michael Beverley of Norwich. The two present secretaries are Drs. Elliston and Beverley.

A list of presidents, the names of whom have been carefully recorded by the secretaries, and of the places of annual meeting, is given below. The general meeting of the Association has been twice held at Norwich, viz., in 1846, under the presidency of Dr. Crosse, and again in 1874, under the presidency of Dr. Edward Copeman.

Year.	Place of Meeting.	President.
1843	Stowmarket	C. M. Durrant, M.D.
1844	Bury St. Edmund's	W. H. Ranking, M.D.
1845	Ipswich	G. Buller, Esq.
1846	Norwich	John Green Crosse, M.D., F.R.S.
1847	Ipswich	W. H. Crowfoot, Esq.
1848	Bury St. Edmund's	R. Wake, M.D.
1849	Haverhill	John Green Crosse, Esq.
1850	Wimborne	John D. Kirkman, M.D.
1851	Wimborne	Wm. Jeaffreson, Esq.
1852	Norwich	J. Beddingfield, M.D.
1853	Ipswich	R. Martin, Esq.
1854	Bury St. Edmund's	W. E. Image, Esq.
1855	Cambridge	R. Martin, Esq.
1856	Beeches	W. I. Crosse, Esq.
1857	Norwich	W. H. Ranking, M.D.
1858	Ipswich	C. M. Durrant, M.D.
1859	Lowestoft	J. Kirkman, M.D.
1860	Newmarket	R. Fair, Esq.
1861	Norwich	W. Crosse, Esq.
1862	Stowmarket	S. Freeman, Esq.
1863	Great Yarmouth	E. Copeman, M.D.
1864	Bury St. Edmund's	W. I. Crosse, Esq.
1865	Ipswich	A. H. Burt, M.D.
1866	Norwich	T. W. Crosse, Esq.
1867	King's Lynn	J. V. Hawkins, M.D.
1868	Great Yarmouth	W. Vores, M.D.
1869	Cambridge	W. W. Fisher, M.D.
1870	Ipswich	B. Chevallier, M.D.
1871	Norwich	F. Lister, M.D.
1872	Ipswich	R. Muriel, Esq.
1873	Great Yarmouth	J. C. Smith, Esq.
1874	Norwich	E. Copeman, M.D.
1875	Cambridge	G. M. Humphry, M.D., F.R.S.
1876	Lowestoft	W. E. Crosse, Esq.
1877	Ipswich	T. E. Amy, Esq.
1878	Norwich	T. J. Wain, M.D.
1879	Bury St. Edmund's	J. Kilner, Esq.
1880	Ipswich	F. S. Worthington, Esq.
1881	Great Yarmouth	C. Palmer, Esq.
1882	Ipswich	W. M. Crosse, M.D.

The annual meeting of the Parent Association was held at Norwich in 1846, under the presidency of Mr. Crosse and Dr. Copeman being president.

The East Anglian Branch numbers 170 members. It has a Council, of which all past-presidents are members, in addition to the elected representatives. Two general meetings are held in the year, and the principal business is the reading of short papers, the exhibition of pathological specimens, and the like. A large majority indeed, almost all, the leading men of the district, are, or have been, connected with the Branch, and many valuable contributions have been made through its agency by such men among the dead as William Jeaffreson, of Framlingham, the first performer of the modern operation of ovariectomy in Great Britain; John Green Crosse, Copeman, and Ranking, of Norwich; George Buller, of Ipswich, etc.

The Branch have from time to time expressed their opinion upon various matters of interest to the profession, such as the education of medical students, medical reform, sanitary legislation, the establishment of provident dispensaries, and of county medical clubs, the reform of the administration of medical relief to the poor, especially of the necessity of all drugs and medical appliances being supplied at the expense of the ratepayers in all parts of the kingdom, etc.

The meetings of the Branch are generally well attended, and the annual meeting has more than once been amalgamated with that of the Cambridge and Huntingdon Branch, and also with the South Midland Branch.

SOUTH-WESTERN BRANCH.

This Branch was founded in 1849 by some of the earlier members of the Eastern Medical and Surgical Association. The Association having agreed to hold the annual meeting of 1849 in Exeter, it was suggested that the formation of a Branch for the South-West of England would help to strengthen the Association, and would place the local members in a better position for receiving and entertaining it with honour.

The organisation of the new Branch was entrusted to Dr. T. Shapter, who, by his personal influence, attracted most of the leading medical practitioners of the district to the ranks. Twelve were chosen, and a first list of subscribers. Dr. Blackall was appointed "Father"; Mr.

J. H. James, President; Mr. S. Barnes and Mr. W. Collins, Vice-Presidents; and Dr. T. Shapter, Secretary. The Branch prospered; for, at the third annual meeting, held at the Exeter Hospital in 1843, the number of members on the roll was stated to be 120. All of these members belonged to Devon and Somerset, but, in the following year, the Council had the satisfaction of reporting to the annual meeting "a considerable accession from the neighbouring county of Cornwall". The Branch is now practically confined to Devon and Cornwall, Somersetshire members being served by other Branches. There are now about 180 members on the roll of the South-Western Branch. At the annual meeting of 1844, the rules for the working of the Branch were finally settled. The number of the Council was fixed at fifteen, one-third of the number to retire annually in rotation. The subjoined table gives the places of the annual meetings, and the names of the presidents, in each year since the foundation of the Branch.

Year.	Place of Meeting.	President.
1841	Exeter	J. H. James, Esq.
1842	Exeter	J. H. James, Esq.
1843	Exeter	P. Miller, M.D.
1844	Exeter	J. C. Crosse, Esq., M.D.
1845	Bideford	J. H. James, Esq.
1846	Exeter	S. Barnes, Esq.
1847	Truro	C. Buller, M.D.
1848	Plymouth	J. James, M.D.
1849	Exeter	R. L. Foster, M.D.
1850	Barnmouth	R. L. Foster, Esq.
1851	Devonport	P. W. Swain, Esq.
1852	Exeter	P. W. Swain, Esq.
1853	Exeter	W. I. Crosse, Esq.
1854	Plymouth	T. Shapter, M.D.
1855	Tiverton	G. Paterson, M.D.
1856	Plymouth	J. C. Crosse, Esq., M.D.
1857	Exeter	J. H. James, Esq.
1858	Exeter	C. Buller, Esq., M.D.
1859	Truro	C. Buller, Esq., M.D.
1860	Plymouth	C. Buller, Esq., M.D.
1861	Exeter	S. Barnes, M.D.
1862	Exeter	C. Buller, Esq., M.D.
1863	Exeter	T. Shapter, Esq.
1864	Exeter	P. C. Drake, Esq.
1865	Exeter	T. Shapter, Esq.
1866	Exeter	C. Buller, M.D.
1867	Exeter	W. I. Crosse, Esq.
1868	Exeter	P. C. Drake, Esq.
1869	Exeter	T. Shapter, M.D.
1870	Exeter	J. H. James, Esq.
1871	Exeter	J. H. James, Esq.
1872	Exeter	J. H. James, Esq.
1873	Exeter	J. H. James, Esq.
1874	Exeter	J. H. James, Esq.
1875	Exeter	J. H. James, Esq.
1876	Exeter	J. H. James, Esq.
1877	Exeter	J. H. James, Esq.
1878	Exeter	J. H. James, Esq.
1879	Exeter	J. H. James, Esq.
1880	Exeter	J. H. James, Esq.
1881	Exeter	J. H. James, Esq.
1882	Exeter	J. H. James, Esq.

The treasurership has always been held by the secretary. The first secretary was Dr. T. Shapter of Exeter, to whom belongs the credit of being the founder of the Branch. Dr. Shapter held office till 1847, when he was succeeded by Dr. W. D. Kingston. In 1853, Dr. A. Drake was appointed, on the resignation of Dr. Kingston, and, on Dr. Drake's retirement in 1856, the late Mr. C. H. Raper took office. Mr. Raper resigned in 1859, and was followed by Mr. S. Barnes, who gave up the post to Mr. J. Woodman in 1872. Mr. L. H. Passwell succeeded Mr. Woodman in 1870, but resigned in 1879, when Dr. S. Barnes, the present secretary, was appointed.

The objects for which the Branch was organised were, to promote friendly intercourse, and establish harmony and good feeling between the medical practitioners resident in the west of England.

Meetings have been held annually from the time of the foundation of the Branch, and at these meetings some able addresses have been delivered by the President, and some interesting papers read. The annual meetings have, however, been chiefly valued as a meeting opportunity for the members to discuss the various matters of the day. At the meeting of 1844, it was suggested that the Branch should meet quarterly, "the pathological and other professional interests; and it was agreed to the effect to consider the matter, and, if it found favour, to make the necessary arrangements. Nothing, however, seems to have been done in this way, the Branch contenting itself with annual meetings. General meetings, and annual meetings, were held till 1871, when the Council, to whom the matter had been referred, announced a preliminary meeting held at Plymouth in the early part of the year, and a scheme for providing for three quarterly meetings, in addition to the annual meeting. This scheme was approved by the members, and has since been carried into successful operation. Of these quarterly meetings, one is held at Exeter, one at Plymouth, one at Devonport, one at Bideford, and one at

some town in Cornwall. These meetings are entirely given to work and discussion, there being no public dinner. The annual meeting is held in turn at Exeter, Plymouth (or Devonport or Stonehouse), some town in Cornwall, and some town in Devonshire other than Exeter or Plymouth. In 1877, a Sub-Branch for Cornwall was founded, but, after a short existence, it was dissolved, and the members were, in 1878, received back into the South-Western Branch.

MEDICAL REFORM.—This subject has, from time to time, occupied the attention of the Branch. On March 10th, 1852, a special meeting was held in Exeter, under the presidency of Mr. P. W. Swain of Devonport, for the purpose of discussing the "Draft Bill for Medical Reform". This Bill had been drawn up by Mr. G. W. Hastings, son of Sir Charles Hastings, under the auspices of the Council of the Association. The Bill was by no means satisfactory to the Branch. It was resolved unanimously to recommend that the period of professional study should be five years, instead of four, as proposed in the Bill, and that no student should be permitted to attend the required lectures until a satisfactory preliminary examination had been passed. The clauses referring to registration and penalties met with entire approval. At the annual meeting of the same year, this Bill was discussed carefully by the President in a very able address, and by the members. It was held to be unsatisfactory, even if regarded merely as an instalment of medical reform. It was considered to compare very unfavourably with Sir James Graham's repudiated Bill. The Bill of Sir James Graham undoubtedly contained the elements of practical reform: it annihilated cheap schools and shabby honours. The points in which the Association Bill seemed to the Branch specially defective were, the want of any direct representation of the profession on the proposed Council, and the lack of information as to the disposal of the income derivable from the fees to be paid by medical practitioners. The Branch considered that, in addition to the general registrar, paid sub-registrars should be appointed in various parts of the country, whose duty it should be to inquire into all cases of irregular practice within their respective districts, and to take the necessary steps for their repression. A subcommittee of the Branch was appointed to confer with the promoters of the Bill, and to draw up a report containing the objections of the Branch to many of the provisions of the Bill. On April 26th, 1853, a special meeting was held in Exeter to receive the report of the subcommittee. The chairman expressed the feeling of the meeting when he stigmatised the Bill as "a Bill to authorise certain persons (to be nominated hereafter by some authority as yet undetermined) to levy on medical men certain taxes, and to apply, or otherwise distribute, the proceeds of the said taxes in such manner as to them shall seem best, and for other purposes." A committee was appointed to watch the progress of the Bill. On May 5th, 1854, a special meeting was held in Exeter, and a memorial to Lord Palmerston, opposing the amended Bill of the Association, was approved, and ordered to be forwarded.

On May 14th, 1858, a special meeting was held to consider the propriety of supporting Mr. Cowper's Medical Bill. It was unanimously resolved: "That this meeting cannot concur in any Bill which does not provide for the direct representation of the great body of medical practitioners in the country, or even for their communicating their own views with reference to the important matters entrusted to the Council, either by deputation or petition. They would, therefore, urge that not less than two-thirds of the members of Council to be nominated by the Crown be selected from eminent provincial practitioners, two of them practising in England, one in Ireland, and one in Scotland." A deputation was requested to wait on the members for the county and city, with a request that, in the passage of the proposed Bill through Parliament, they would support the views entertained by this meeting. The Council of the Branch was able to report at the next annual meeting that the Branch had been supported in its opposition to the Medical Bill by the members of Parliament for both city and county. Some of the points insisted on by the Branch were inserted in the Bill, which was duly passed during the session.

In 1859, a special meeting was held, to advocate the formation of a registration society for the district, to watch over the interests of registered medical practitioners.

HOMŒOPATHIC AND IRREGULAR PRACTITIONERS.—On several occasions, this question has been under the discussion of the Branch. At the annual meeting of 1858, the following resolution was unanimously passed: "That the members of this Branch, considering the practice of homœopathy in all instances to be either a delusion or a deception, pledge themselves neither to meet in consultation, nor to attend in conjunction with homœopathic practitioners; and that the members of this Branch will avoid meeting in consultation, or referring their patients to, any member of the profession who knowingly violates the spirit of this resolution."

Again, at a quarterly meeting held at Plymouth, December 31st, 1881, the following resolutions were unanimously passed:

"1. That this meeting desires to express its entire disapproval of the views in relation to consultations with homœopathic practitioners expressed by the readers of addresses in medicine and surgery at the annual meeting of the Association at Ryde in 1881.

"2. That this meeting desires to direct the attention of the Committee of Council of the Association to the resolutions in regard to homœopathic practitioners, passed at the annual meeting of the Association in 1852, and reaffirmed at the annual meetings of 1858 and 1861; and now calls upon the Committee of Council to put in force as speedily as possible By-law 3,* against homœopaths and all members of the profession who assume designations implying the adoption of special modes of treatment."

It having been decided by the Association, at the annual meetings of 1852, 1858, and 1861, that there were "three classes of practitioners who ought not to be members of the Association—viz., 1, real homœopathic practitioners; 2, those who practise homœopathy in combination with other systems of treatment; 3, those who, under various pretences, meet in consultation, or hold professional intercourse with, those who practise homœopathy"—the Branch called upon the Committee of Council to expel a professed homœopathist and medical officer to a homœopathic dispensary in the district served by the South-Western Branch, on the ground that any action against homœopathists would bring them into the notoriety they desire, the Committee of Council declined to act. The Branch, considering that it was the duty of the Committee of Council to carry out the rules of the Association or propose the rescinding of them, was much dissatisfied; and, at a quarterly meeting held in Cornwall on April 17th, 1882, these resolutions were unanimously adopted.

"1. That this meeting heartily approves of the resolutions relative to homœopaths passed at the Plymouth meeting of this Branch; that it regrets that the Committee of Council have not yet seen their way to expel an avowed homœopath when requested to do so by the unanimous vote of one of the oldest Branches of the Association.

"2. That this meeting requests members of the South-Western Branch to help on any movement for obtaining such remodelling of the constitution of the Committee of Council of the Association as shall insure that the Committee of Council will carry out unhesitatingly resolutions that have been adopted by the Association at its annual meetings."

COLLECTIVE INVESTIGATION.—A large subcommittee, embracing the whole of Devon and Cornwall, has been appointed to help in the work of collective investigation.

MEDICAL EDUCATION.—Some important resolutions on the subject of medical education, drawn up by the Metropolitan Counties Branch on December 6th, 1879, were discussed at a Council meeting of the South-Western Branch on May 25th, 1880. The matter was considered so important, that the Council ordered the resolutions to be printed and circulated among the members, with a view to their being discussed at the annual meeting. Each member was invited to express his opinion in writing. The resolutions were further discussed at the annual meeting of 1880, and the opinions of the members collected. The opinion of about 100 members was almost unanimous in favour of the spirit of the resolutions.

GUY'S HOSPITAL.—The matters which led to the resignation by Mr. Cooper Forster and Dr. Habershon of their positions on the staff of Guy's Hospital, were discussed at an extraordinary meeting of the Branch at Plymouth, on January 11th, 1881, when a resolution, expressing sympathy with these gentlemen, and appreciation of their manly conduct, was unanimously passed, and a copy of the resolution ordered to be sent to them.

[The histories of other Branches will be given next week.]

* By-law 3. "Any member may be expelled from the Association by a resolution of the Committee of Council if carried by three-fourths of the members present, subject to confirmation by the next annual meeting, and he shall thereupon cease to be a member, and shall not be eligible for re-election. One month's notice of the intention to propose such resolution shall be given to any member affected thereby."

BEQUESTS AND DONATIONS.—Mr. James Dench has given £300 towards the sea-side branch of the Metropolitan Convalescent Institution.—Mr. and Mrs. Edward Vickers, of Goldicote, have given £150 to the building fund, Children's Hospital, Western Bank, Sheffield.—St. Peter's Hospital for Stone has received £50 from Mr. James Claxwick, and 25 guineas from Mr. F. T. Galsworthy, in aid of the new building.—Mrs. R. Barclay has given £50 to the North-Eastern Hospital for Children.—Sir Charles James Freake, Bart., has given £50 to the National Hospital for Diseases of the Heart and Paralysis.

the transference of the blood from the extremities of the minute arteries into the finest veins is "not effected without some other admirable artifice" (non sine artificio quoque admirabili), *Opera*, p. 616), and that this other admirable artifice is by ducts ("ductus") or very small arteries ("nimirum arteriolæ"), two or three times smaller than the veins which they accompany, and within the tunics of which they are finally lost ("et tandem intra tunicas venarum obliterantur"), and that these vessels (arteries, veins, and very little arteries) at their termination encounter one another (*Works*, pp. 599-602). The words "arteria" and "vena" are always understood to mean "walled vessels". That when Harvey employed the word "porositates" he also meant "walled vessels", is confirmed by his employing synonymously the word "ductus", and the terms "vasa", "artificio admirabili", "nimirum arteriolæ", "et tandem intra tunicas venarum obliterantur".

Many writers have asserted that Harvey knew nothing of the capillaries, without examining or comprehending what he has written on the subject; their assertions can generally be refuted even by his words or the substance of his statements. In an article on Harvey and Cæsalpinus which appeared in the *Edinburgh Review* for January 1878, it is stated: "In fact, until Malpighi discovered the capillaries in 1661, this part of the system remained conjectural, and the flaw made itself felt. Harvey, while he maintained his solid conviction that in some mode the transference was effected, nevertheless remained in doubt (?) as to what that mode was. He hesitated (?) whether to believe that the blood was conveyed by means of direct inoculations between the extremities of the vessels, or that it forced its way through the 'porosities of the parts'. He knew nothing of vascular tissue. Indeed, Cæsalpinus's ideas on the subject seem to have been more advanced, since he insisted, as we have seen, that the blood must everywhere be conveyed in channels continuous with the heart" (p. 42). Setting aside Cæsalpinus's ideas, one may remark that there is nothing in Harvey's writings, especially if the original text be examined as the standard of authority, to substantiate the charge of doubt and hesitation regarding the mode of communication between the last ramifications of the arteries and the radicles of the veins. Respecting the fact of the blood being contained in channels, Harvey has stated: "We find the blood formed in the egg and embryo before any other part; and almost at the same moment appear its receptacles, the veins and the vesicula pulsans"; and, on the same page, he has stated: "For the blood is necessarily inclosed and contained in vessels" ("in vasis", *Opera*, p. 409, *Works*, p. 392). Has Cæsalpinus stated anything of the kind? Surely this remark of Harvey, that at the time of its earliest appearance the blood of the punctum saliens is contained in vessels, goes a long way to prove that he knew that the blood in later life circulated completely through continuous walled channels.

Harvey attributed the pulsation of the arteries to the quantity of blood forcibly expelled by the rhythmic impulse of the left ventricle of the heart, which distends the elastic walls of the arteries in a wave-like manner, but Lawrence and Akenside attributed the pulsation solely to a pulsific power inherent in the coats of the arteries themselves, or to a pulsific power transmitted to them by the heart (*Opera*, p. xiii); as they erred in this and other subjects, so they have failed to comprehend Harvey's description of the exact mode of communication from arteries to veins through the capillaries.

Harvey has referred in many places to the use which he made of his double convex lens. Besides the three places (*Opera*, pp. 249, 255, and 267) noted in the *BRITISH MEDICAL JOURNAL* of July 5th, 1879, he has remarked that, with its aid, he had observed the heart of the slug, the snail, and the shrimp, and had also seen the upper part of the tail of the wasp, the hornet, and the fly pulsating (*Opera*, pp. 31 and 77). He has asserted that, on the sixth day of incubation of the chick, which, though it was then extremely small, yet he had cut off its head, and with the aid of his magnifying glass observed the blood-vessels, as bloody points, ascending to the brain (*Opera*, p. 257). It has also been suggested that, if Harvey had viewed the web of a frog's foot, spread out on a pane of glass against the light, with his magnifying glass, he probably would have seen the transit of the blood in the capillary vessels.

Willis's translation of Harvey's works, and his biographical sketches of Harvey published in 1847 and 1878, sufficiently proclaim Willis to have been a sincere admirer of Harvey; yet in many places Willis's renderings are erroneous or unsatisfactory—the result of his own incorrect preconceived opinions of Harvey's meaning rather than exact interpretations of Harvey's own words. "Ductus" undoubtedly, for instance, means "walled channels", yet Willis has rendered it "pores", which Harvey could not have meant. Again, the term "pori bilarii", etc., literally translated, means "biliary passages", and Willis has rendered it "biliary ducts", instead of "biliary pores", which would agree with his usual mode of translating the word "pori" in other places.

"To err is human"—"Truth wants an advocate"—and the writer of this article, of which we have thus endeavoured to give an abstract, offers these statements, hoping that all impartial thinkers who, like Harvey, "esteem it not discreditable to desert error, though sanctioned by the highest authority", will be led to recognise that Harvey believed in no porous structure, and was the first to discover those vessels now called "capillaries".

PARLIAMENTARY BILLS COMMITTEE.

LORD CARLINGFORD, Lord President, and Mr. Mundella, Vice-President, of the Privy Council, received on Friday, June 16th, a deputation from the Parliamentary Bills Committee of the British Medical Association, on the subject of the examination and registration of widwives. The deputation included Mr. Ernest Hart, Chairman of the Committee, Dr. Quain, F.R.S., Dr. Priestley, Dr. Barnes, Dr. J. H. Aveling, Dr. Farquharson, M.P., Dr. Grigg, and Mr. Nelson Hardy.

The deputation put in the hands of the Lord President a Bill drafted on the lines of the previous resolutions and reports of the Parliamentary Bills Committee, and on the bases of the regulations approved by the Obstetrical Society, and in accord with the spirit of the clauses of the Duke of Richmond's Bill. The Bill has been drafted for the committee by Mr. Vesey Fitzgerald. After the introductory statement of the chairman, Dr. Priestley, Dr. Grigg, Dr. Quain, Mr. Nelson Hardy, and Dr. Aveling addressed the Lord President, explaining the importance of the subject in its various aspects.

The Lord President and Mr. Mundella expressed their warm sympathy with the objects, and approved of the proposals contained in the Bill in the main; and Lord Carlingford said that he would at once submit the Bill to the General Medical Council for their consideration and approval. He could only say that, personally, he thought the object a very useful one, and one which deserved all the support he could give it. The present session was peculiarly unfavourable to legislation; but he should be glad to give such assistance in the matter as the circumstances allowed after receiving the opinion of the General Medical Council on the Bill.

COLLECTIVE INVESTIGATION COMMITTEE.

At a general meeting, held on June 14th, at 4.30 P.M., the Honorary Secretary reported that Committees had already been appointed, and cards had been sent to them for distribution, in the following Branches and Districts.

Bath and Bristol: Honorary Secretary, Dr. Markham Skerrett, Bristol.
East Anglian: Dr. Elliston, Ipswich.
Lancashire and Cheshire: (Not yet completely organised; many subdivisions); Dr. Davidson, Liverpool; Dr. Ransome, Manchester.
North of England: Dr. Drummond, Newcastle.
South Eastern: East Sussex: Dr. Uthoff, Brighton; West Sussex: Mr. G. B. Collett, Worthing; East Kent: Mr. A. Hallows, Maidstone; West Kent: Mr. Whitehead Reid, Canterbury.
South Wales and Monmouthshire: Dr. A. Sheen, Cardiff.
South-Western: Dr. Rees Philipps, Exeter.
Thames Valley: Dr. Atkinson, Kingston-on-Thames.
West Somerset: Dr. Kelly, Taunton.
Yorkshire: Mr. Arthur Jackson, Sheffield.

Many districts have decided to hold special meetings, and appoint local secretaries.

The work of the Committee has also been brought before the following Branches, who have referred the matter to special meetings of the Branch, or of the Branch Council, with a view to the organisation of the Branch for the collective investigation of disease: Staffordshire Branch (Mr. Vincent Jackson); East York and North Lincoln (Mr. E. P. Hardey); South Midland (Mr. Kirby Smith).

The Secretary is in communication with the Secretaries of the following Branches, with a view to the objects of the Committee being brought before their approaching annual meetings: Birmingham and Midland Counties; Border Counties; Cambridge and Huntingdon; Edinburgh; Glasgow and West of Scotland; Midland; Northern Counties of Scotland; Reading; Southern. The few remaining Branches will be communicated with as their meetings approach. No Branch yet appealed to has declined to appoint a committee.

The Secretary especially wished to draw the attention of the Committee to the extent to which it is indebted to the various Honorary Secretaries of the Branches, for the cordial and energetic manner in which they had each taken up the work in their Branches, and had so successfully promoted it.

In two instances, subjects of especial local interest had been proposed

for investigation by Branch Committees; and, no doubt, the example would be followed in other districts. In these cases, a scheme having been drawn up by the Branch Committee, is submitted to the General Committee for criticism and approval. The inquiries are thereby made as authoritative as possible; and the General Committee are enabled to recommend the expenditure on cards, with schedules of questions, etc., necessary for the inquiries. It was stated, as a direction to local Secretaries, that the cards should be returned to them as soon as filled up; and that all the cards should be returned to the General Secretary at the end of the year, for the purpose of tabulation.

An offer to assist the Committee in statistical work, especially with regard to any extracts required from the Registrar-General's returns, was made by Dr. Longstaffe, and accepted. The Secretary was requested to tender the thanks of the Committee to Dr. Longstaffe for his kindness.

A resolution, passed at the East Anglian Branch, and recommending that the effect of syphilis on the civil population should be made the object of a special inquiry, was read.

It was proposed by Dr. PARSONS (Dover), and seconded by Dr. CARPENTER (Croydon): "That syphilis be made a subject of investigation by the Committee; and that a subcommittee be formed for the purpose of considering the line of inquiry, and of preparing a scheme for the investigation, to report to this Committee at its next meeting; the subcommittee to consist of Mr. Palmer (Yarmouth); Mr. Jonathan Hutchinson; Dr. Barlow; Mr. Jackson (Sheffield); Mr. Butlin; Mr. Macnamara; and Dr. S. Mackenzie; with power to add to their numbers: Mr. Henry Lee and Mr. Berkeley Hill to be invited to join the Committee."

It was proposed by Dr. ATKINSON (Kingston), and seconded by Dr. RANSOME (Manchester): "That a scheme for the local investigation of a recent epidemic of diphtheria, presented by Dr. Atkinson on behalf of the Thames Valley Branch, be referred to a subcommittee to report to this Committee at its next meeting; the subcommittee to consist of Dr. Atkinson (Kingston); Dr. Ransome (Manchester); Dr. Carpenter (Croydon); Dr. Barlow; and Dr. Cheadle; with power to add to their numbers: Dr. Thorne Thorne and Dr. Buchanan to be invited to join the Committee."

It was proposed by Dr. SIEVEKING, and seconded by Dr. PARSONS (Dover): "That the suggestion for an investigation concerning the life-history of persons who suffered from typhoid fever, made by Dr. Ransome, be referred to the same Committee for consideration."

It was resolved: "That a meeting of this Committee be held on Tuesday, July 11th, at four o'clock."

MILITIA SURGEONS.

On Thursday 15th instant, the following question was put to Mr. Childers on the compulsory retirement of Militia Surgeons at sixty-five, and depriving them of the pension of six shillings a day to which they were clearly and justly entitled by Acts of Parliament dating from 54 Geo. III. to 31 and 32 Vic. His reply we cannot consider as satisfactory, and we believe it to be not in accordance with the legal aspect of the case.

"Mr. O'SHAUGHNESSY asked the Secretary of State for War whether it was true that on the compulsory retirement, under 68a Circular, 1881, of Militia surgeons holding commissions from lords lieutenant of counties at the age of 65, the pension of 6s. a day, to which, under certain circumstances, such surgeons were entitled, had been refused them; and whether he would explain under what enactment the right to this pension was alleged to have been destroyed."

"Mr. CHILDERS: In reply to my hon. and learned friend, I have to state that until 1820 Militia surgeons were members of the permanent staff, and, like other officers of that staff, entitled to pensions on reduction of the force or on retirement through age or infirmity. But no Militia surgeon retired under 1820, that is to say, during the last 55 years, he has received a retiring allowance. Her Majesty has always had the power to decide at what age Militia officers should cease to serve, and in 1772 the age was fixed at 60, although retirement was not compulsory then. In 1881 it was decided that at 65 all Militia surgeons should retire, this being a boon to them compared with other Militia officers."

I am prepared to state that most of the statements therein made; we regret that, after the reply that appeared in the *Illustrated London News* of 12th April to Mr. Campbell's letter to Mr. Thomas Hart, chairman of the Parliamentary Joint Committee of the British Medical Association, and the communications made by Mr. Childers to the *Standard*, in his answer to Mr. O'Shaughnessy, the Secretary of State for War should have again fallen back upon an Act of Parliament, that has no bearing whatever on the case. We have shown

that the Act of 1829 was not only not repealed at that date, but was in force, and continued by succeeding Acts of 10th Geo. IV and as lately as 31 and 32 Vic.

None of these Acts from 54 Geo. III, up to that latter Act of Victoria, contained a word implying that it was necessary that the Militia surgeon should be on the permanent staff to entitle him to pension. We have pointed this out so repeatedly in the articles alluded to, and in one so lately as May 20th, that it is useless to again refer to them. Suffice it to say that by the 17th section of the 54 Geo. III. the words are, "surgeons were after 30 years' service, or becoming unfit for duty, to be entitled to a retiring pension of 3s. a day—this was when the pay was only 6s. a day—not a word here of its being necessary to be on the permanent staff. So also the 10th Geo. IV, which we must remark was passed subsequently to 1829, the period to which Mr. Childers alludes, contains these words, "all surgeons of Militia who shall have served for 20 years, and who shall be retired from age or infirmities shall be entitled to 6s. a day pension"; not a word here as to being on the permanent staff—as by Mr. Childers own statement in the above reply surgeons of Militia were on the permanent staff only up to 1829. We could still further prove the undeniable claims of the Militia surgeons to this pension by subsequent Acts; and, even as lately as 1854, Lord Panmure, when Secretary of War, issued a circular granting half-pay to Militia surgeons under certain conditions. And surely he would not have issued this if, as Mr. Childers now states, for fifty-three years Militia surgeons were not entitled to pensions.

Mr. Childers, we are persuaded, would be loth to act harshly and in an arbitrary manner, and we trust he will not refuse to at least allow the Militia surgeons a fair and dispassionate hearing. This is all they ask for. If Mr. Childers's contention be correct, and the Militia surgeons be wrong in their representation of the several Acts, surely it is only equitable that their case should be fully inquired into. We have reason to know that they have had the opinion of two eminent Queen's counsel as to their being justly and legally entitled to this pension, and this view has been further confirmed by the legal investigation which we have caused to be made of the case: the result was set forth fully in the *BRITISH MEDICAL JOURNAL* for May 23rd, as well as in a letter on similar lines addressed by Mr. Hart, as chairman of the Parliamentary Bills Committee of the British Medical Association, to Mr. Childers. If a Minister choose to act in an arbitrary manner, he can refuse to grant any relief; but it is manifestly not the spirit of the Constitution (especially as no legal action can be taken against the Government by any private individual) that all modes of grievances should thus be cut off. The Militia surgeons merely ask that they may either have their case referred to a committee, before whom they may be represented by a counsel who has made himself fully acquainted with all the several Acts; and if they fail to establish their position, and if Mr. Childers's interpretation of the Acts be correct, they must then be content; but until they are heard, we contend that it is not in accordance with the equity of the case. They would, as an alternative course, be willing to be allowed to institute an amicable suit in one of the courts of law, and rest satisfied with its decision. We think these requests so reasonable, that we trust Mr. Childers will not refuse to grant them.

As to the "boon" which Mr. Childers stated was conferred on the Militia surgeon, by allowing him to serve until he was sixty-five years of age, against sixty years, it is not easy to see wherein the boon consists. It may be thought a facet of rather grim irony to call that a boon which deprives a man of the whole, or even part, of his income without compensation, and casts him adrift on the world without any means of livelihood, and at a time when he most requires it; and this for no fault of his own, but from the repeated exigencies of the service. Mr. Childers may be right when he says that Her Majesty has the power to decide at what age Militia officers should cease to serve; but the Crown would, we imagine, not so lightly interfere in the household of a peer, or a noble, or a baronet, or a knight, or a gentleman, or a landed servant's lord, or a man of property, or a man of the higher portion of their number. When in 1772, as Mr. Childers states, the age was fixed that Militia officers should cease to serve, it was, as we remarked, applicable to the whole, meaning to include the whole of the colonels and majors. These were officers who in almost every instance were men of position and money, who held these appointments for the rank and standing it gave them in their respective countries, and to whom the loss of twenty or thirty thousand a year was a matter of no consideration. It is a different matter in the case of the Militia surgeons, dependent on the earnings derived from their profession; and, in the case of many of the older Militia surgeons, who survived their private practice by means of their commissions when employed, it is a hard saying, that a man should be cast adrift at sixty-five years of age, and with no provision in their old age.

We are unwilling to believe that any minister, Liberal or Conservative, will refuse to reconsider the case of the Militia surgeons, as we were led to believe Mr. Childers promised to do. We feel assured, moreover, it only wants the public and the House of Commons to be made fully acquainted with the facts as set forth in the petition and other documents submitted to Mr. Childers to at once obtain a recognition of their claims. We trust, however, that Mr. Childers will listen to the requests here shadowed forth, and consent to at least hear what the Militia surgeons have to adduce on their side. A refusal to hear both sides of a question is always a sign of weakness on the part, especially of the stronger, in matters of private life, and how much more so must it be in the case of the Government or its ministers? and we feel assured that it will not be permissible to say that as regards the Militia surgeons' case, might is right.

In conclusion, we would desire to take exception to the statements contained in Mr. Bannerman's recent letter, in which he stated that the 5th Geo. IV, and all other militia Acts, were only in force a year, and expired in 1830. We have already pointed out to Mr. Bannerman that whilst these Acts were annual, they were continued from year to year by the Expiring Acts Continuance Bill. It can, we think, be learned from the statute book that this Act of 5th Geo. IV was not repealed till the close of the session of 1873; and it is a strange coincidence that it should have been so only a few months after a deputation had waited on Mr. Hardy, and was informed by him, no doubt under an erroneous impression, that the Act had been repealed in 1829-30. The other Acts, 10th Geo. IV, Vict. 18 and 19 and 31 and 32, were not repealed until 1876, when the militia were finally transferred under the authority of the Crown, in which year the warrant placing Militia surgeons on the Departmental list was issued, and these gentlemen, in accepting service under that warrant, were distinctly assured that in so doing they did not forfeit any right or claims they previously possessed. Their contention is that these appointments under the jurisdiction of the Lord Lieutenants were retainable for life; and, nothing having been said in that warrant intimating that they were to be forced to retire at a certain age, they feel that they have been unjustly treated, and that the right to pension, so clearly defined by the Acts quoted, was also one of those rights which the War Office assured them they did not forfeit by accepting service in the departmental list.

THE MEDICAL DEFENCE ASSOCIATION.

THE annual general meeting of this association was held on Wednesday, the 21st inst., at the rooms of the Medical Society of London; Dr. B. W. RICHARDSON, F.R.S., presiding.

On the motion of Dr. JOSEPH ROGERS, the president, vice-president, and treasurer of the Association were re-elected.

The CHAIRMAN thanked his associates for having re-elected him and his colleagues, and said that the report would show that the Association had not been inactive since the last general meeting. Considering that the funds of the Association were very limited, it was remarkable that even a part of the work which had been effected had been carried out by the council. At first it was assumed that its objects were to support the professional interests as apart from those interests which were due from the profession to the people at large, and the name of the Association tended to keep up a misunderstanding. The "Medical Defence" was as much a defence of the public as of the faculty, it being understood, of course, that the profession worked for the public good. He lamented that there was less strict etiquette now with regard to consultants than formerly; in fact, he said he found the rules much opposed and much relaxed, though they were altogether necessary in the interests of the sick man, and he did not consider that the practitioner who "sold" his professional brother would be a safe adviser of a patient, for such a trader in the issues of life and death could not fail to trade on the advantage he had achieved. In his experience he had never met with an instance in which a practitioner who ignored medical etiquette was an honest practitioner, such a man as one would endow with any responsibility bearing upon his own interests or those of his intimate friends. Billroth had said he had come to the conclusion that it was the safest and best rule of practice to treat every sick person as if the person treating were the person treated. This rule was not new but it was golden, and it was the principle laboured for in the Association, which was striving to make sure that the sick might be treated in their sickness as medical men would be treated. It was the duty of the skilled in every profession to warn the public against the dangers of employing the unskilled, and it was urgently necessary that those who in times of sickness and anxiety were least of all able to exercise a calm judgment, should have protection against the false promises of the false-hearted and treacherous

who lay in wait for them. The Association had discharged this anxious duty in the public service, and the proof that this was so was to be seen in the fact that the Registrar General and the authorities at Scotland Yard had voluntarily referred to the Association in relation to important irregularities which had come before their departments. The profession and the public had referred to the Association for advice, and the Royal Commission on Medical Legislation had solicited the views of the Association. The Association was much hampered by the lack of resources, for it had had to consider £100 a year a handsome revenue so far, and of necessity it was often obliged to let important cases go by; and it was harassed by the perplexities which impeded it in carrying out the simplest legal procedures against the most flagrant offenders. Little assistance was given by the legally constituted medical authorities—the Apothecaries' Company being slow and hesitating in the exercise of its powers, the College of Surgeons seeming to possess no power, and the Medical Council claiming to have no ready means of enforcing law. He spoke warmly of the services given by Mr. Pridham, as solicitor, and concluded by expressing the hope that the promised legislation would make unnecessary the work of the Association, which might then with honour cease to exist, its part played, and its labours no longer a necessity.

Mr. GEORGE BROWN read the report, which gave in detail the matters upon which the President had spoken in general terms. It dealt with the great amount of work the Association had to cope with upon its foundation—with the unqualified practitioners who had assumed medical titles, the men who were practising under the names of qualified practitioners, the "provident dispensary" practice, this being a system by which one qualified man held three or four places, carried on, miles from his house, by unqualified and often ignorant persons. The report showed the steps which had been taken against some of these people, and spoke cordially of the assistance given by the coroners in exposing the evils to which the public were exposed by the action of these unqualified persons.

Dr. DANFORD THOMAS moved the adoption of the report. While of opinion that "counter-practice" had not increased, he was of opinion that the sale of patent medicines had increased. He had held many inquests on persons who had died from their use.

Dr. STEVENSON seconded the motion, and suggested that the address by Dr. Richardson should, as well as the report, be printed and circulated.

Dr. J. ROGERS remarked that the principle of the people being treated by unqualified practitioners was supported in the Poor Law-service with the perfect cognizance of the Local Government Board. He also strongly commented upon the lack of educated material in the present "qualified" assistants, some of whom, he said, from his experience, were not grounded in the knowledge of medicine.

Dr. GLOVER spoke of the evil wrought by the sham "Dispensaries," and stated that some were administered by men who were paid 25s. a week, these persons seeing the patients and prescribing for them. Sir W. Harcourt had stated in the House of Commons that the General Medical Council had power to deal with these evils in the profession, and he thought the council should be called upon to take action.

Mr. BROWN said the General Medical Council had been applied to take action under the Act of 1858, and the reply was to the effect that the Council had decided that it was not within their province to prosecute; but that it was open to the public to do so.

Mr. PRIDHAM understood the Home Secretary, in the answer referred to, to mean that the General Medical Council could strike the name of any practitioner guilty of any illegal practices off the Register.

SURGEON-GENERAL GORDON expressed his approval of the work undertaken by the Association.

The report was adopted, and the chairman's address was ordered to be printed. The name of Surgeon-General Gordon was added to the Council.

Dr. DANFORD THOMAS moved: "That in the opinion of this Association, in any new legislation, it should be provided that the public prosecutor should be required to undertake prosecutions under the Act."

Mr. HEMMING seconded the motion which was carried.

Thanks were voted to the Secretary, and the Honorary Solicitor, and the proceedings terminated.

THE National Health Society has placed six seats in the churchyard of St. John's, Horsleydown, now converted into an open garden. Seats have also been placed in the new garden in Philpot-street.

PRESENTATION.—Mr. Joshua Edward Adkins, surgeon, of Yeamton, has been presented with a silver ewer and a silver-mounted claret jug, by the subscription of about three hundred of the inhabitants, as a mark of esteem on his leaving the district.

the following: (1) the *in vitro* and *in vivo* effects of the various agents on the growth of the microorganisms; (2) the effect of the agents on the morphology of the microorganisms; (3) the effect of the agents on the metabolic activity of the microorganisms; (4) the effect of the agents on the virulence of the microorganisms; (5) the effect of the agents on the resistance of the microorganisms to other antimicrobial agents; (6) the effect of the agents on the survival of the microorganisms in the environment; (7) the effect of the agents on the transmission of the microorganisms; (8) the effect of the agents on the control of the microorganisms; (9) the effect of the agents on the treatment of the microorganisms; (10) the effect of the agents on the prevention of the microorganisms.

Papers.—The following communications were made :

1. Dr. Humphreys : On the Treatment of the Febrile Condition.
2. Mr. Baber : On Adenoid Vegetations of the Naso-Pharynx. The pathology, etiology, and symptoms were described, and also the treatment illustrated by cases under the author's care.
3. Mr. Maynard read notes of six cases of Rotheln, laying special stress on one case which was attended by serious complications. In this case, on the twenty-first day from the appearance of the rash, the child became feverish; subsequently, she complained of pain in and about the left ear. There was afterwards discharge from this ear, becoming more profuse, and then the right ear became affected. After some days' interval, symptoms arose of affection of the kidneys and heart, there being albumen and blood-casts in the urine, and a basic systolic *bruit* over the semilunar valves. There was never any dropsy; albuminuria lasted fourteen days. The fever, which assumed a hectic type, gradually yielded to remedies (aconite, potash, quinine, iron, etc.), and the hearing, which had been materially impaired, returned. The cases were treated with antiseptic syringing. The basic *bruit* was persistent, but the child's health is improving, and the urine is free from albumen.
4. Mr. Campbell: Two Cases of Hip-Joint Disease.
5. Dr. Trollope exhibited the Cirrhotic Liver of a Child eight years old.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.
The sixth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday, May 24th; DAVID DAVIES, Esq., President, in the chair. There were present fifty-one members and four visitors.

New Members.—The following gentlemen were duly elected: Surgeon-General P. G. Fitzgerald, M.D., of Clevedon; and Messrs. D. A. Fraser, M.R.C.S., of Burnham, and J. R. Woolby, L.R.C.P., M.R.C.S., of Bristol.

Collective Investigation Committee.—Dr. Markham Skeritt read a communication from the honorary secretary of the Central Committee, with reference to the work of the Committee, and cards were distributed among the members present.

Tax on Carriages.—A petition for the exemption of medical men from the proposed increase of the tax on carriages was signed by all the members present.

Business.—The afternoon was devoted to a discussion on Bone-Setting, which was opened by Mr. Richardson Cross. Mr. Howard Marsh, of London, was next invited by the President to speak; and the discussion was continued by the President, and by Dr. Marshall and Messrs. Parette, Greig Smith, Wilcox, Dobson, and Tivy.

CORRESPONDENCE.

SAMARITAN HOSPITAL OVARIOTOMY AND ANTISEPTICS.

SIR,—Your strictures on this matter being admittedly founded on the ovarian practice of Dr. Bantock and Mr. Thornton for one year only, I hope, in justice to all parties concerned, you will accord a small space for a short statement of the remainder of it.

Six years is the extent of their ovarian experience at the hospital, resulting, for Dr. Bantock, in a mortality, including his last run of bad cases, of 15 per cent.; for Mr. Thornton, including his run of forty-one cases (24 deaths), a mortality of 10.17 per cent., a fraction below Mr. Wells's results, concluding his work at the hospital. Thus, as you see, the comparison, fairly denoting the mortality of the two surgeons respectively, is a very different thing from that appearing in your article. Mr. Wells frequently met with these runs, good and bad, during his long ovarian career at the hospital, without much affecting his averages in the long run.

As to the action of the committee, which you thought somewhat questionable, "antiseptic precautions" is a comprehensive term. With all its possible objections against the presence at operations of anyone recently participating in septic matters, such as dissecting-rooms, *post mortem* examinations, infectious diseases, etc., together with the observance of the accepted methods of insuring for the patient wholesome surroundings. The committee merely directed continued attention to these provisos, in which and on all such Lister appears more or less, inasmuch as what has been argued not to generally be the contrary.

Arguing of much longer experience than six years, you appeal impressively to their superior results with it, the spray; hence the impossibility of turning it into the practice of any individual officer. The committee could not have done this, and they did not try.

Mr. Thornton is a believer in the spray, and he insisted, against all

precedent, that his practice should appear in a table by itself; unfortunately, his name was appended in such a way as to lead to what would doubtless in reality be a misunderstanding of his intentions. Hitherto, our reports have not been honoured by the least notice on the part of the journals. Copies of this one were not sent to them from the office, nor were those now circulating—the special page marked, or leaf turned down. This page might as well have recorded that, two years ago, the balance moved in favour of Dr. Bantock. The action of the committee did not appear in the report; both probably came to your notice through the same channel.

The flexibility of statistics is notorious. A contemporary makes ours prove Dr. Bantock's mortality to be five times greater than Mr. Thornton's. During their commencing year, the former lost one case, the latter none; *ergo*, they have been going on from bad to worse ever since—conclusions equally tenable statistically.

As the professed object of your article was to assist in the solution of the antiseptic question, I am surprised Dr. Bantock's superior results in "other operations" were allowed to pass unnoticed.

About oophorectomy, the least said the better, except to denounce it as a detestable mutilation. There are evidences more than enough against the expectation of lasting benefit from that odious operation. It is to be hoped that the few recorded of the many deaths due to it may operate as an enduring sting on the consciences of those who hereafter have recourse to it.

The results hitherto of ovariectomy in London hospitals are not of a character to encourage the hope of reducing their ovarian mortality below 10 or even 15 per cent., antiseptics or no antiseptics. London is not Edinburgh, nor is it Birmingham.—I am, sir, yours obediently,

HENRY SAVAGE, M.D.,

Member of the Committee of Management,
Samaritan Free Hospital.

* * This question is one which interests the profession, and concerns us, solely as one of scientific and practical importance. It is to be regretted that names and individualities have been imported into it, contrary to expectation, and to what we should have wished. Where it has been a question of doing justice to individuals, we could not, however, refuse to publish what was addressed to us on either side. In any other further discussion of this important subject, we must particularly request that all personal questions be set aside, on the principle that methods and results are alone what we desire to see discussed.

SIR,—In reply to the question put by Dr. Savage, I beg to say that my information was got from the article in your JOURNAL of May 20th, in which the writer speaks of the interference in surgical matters by a committee of laymen at the Samaritan Hospital. I have not seen last year's report of the hospital, and the words House Committee were used quite inadvertently. There is thus no mistake on my part. It was the principle of interference by any lay committee that was objected to.

Dr. Savage seems to think that I am blessed with no colleagues. There are at least a dozen. We are a happy family; we have no red tape. "Ephraim does not envy Judah, and Judah does not vex Ephraim."—Yours obediently,

T. KEITH.

2, North Charlotte Street, Edinburgh, June 6th, 1882.

SPECIAL CORRESPONDENCE.

MANCHESTER.

New Pathological Theatre at the Royal Infirmary.—*Antiseptic Demonstration at the Royal Eye Hospital.*

THE arrangements for *post mortem* examinations and pathological teaching at the Royal Infirmary have, owing to the increasing number of students, become entirely inadequate. The governors of the institution having refused to provide the necessary accommodation, on the plea that they do not feel themselves justified in spending the funds of the hospital in extension of the teaching department, from which they derive no revenue, the medical staff have generously come forward and undertaken to make the necessary structural alterations at their own expense. A pathological theatre for the accommodation of students is to be built, and a new room will be provided for the examination of pathological specimens. It is estimated that the new buildings and appliances will cost about £400.

At the Royal Eye Hospital, Dr. Glendon has commenced his summer course of ophthalmoscopic demonstrations, which is remarkably attended by the students of Dr. Lister's class of Systematic

Ophthalmology at Owens College. Each student is individually taught the use of the ophthalmoscope, a large supply of typical cases of intra-ocular disease being drawn from the extensive out-patient department connected with the hospital.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, June 19th.

Fruit-Pickers.—On the motion of Earl STANHOPE, the Public Health (Fruit-Pickers' Lodgings) Bill was read a second time, the noble lord explaining that its object was to authorise local authorities to look after the housing of fruit-pickers, in the same way that they could control the accommodation for hop-pickers.

HOUSE OF COMMONS.—Thursday, June 15th.

Pensions of Militia Surgeons.—Mr. O'SHAUGHNESSY asked the Secretary of State for War whether it was true that on the compulsory retirement, under 68a. Circular, January 1882, of Militia Surgeons holding commissions from lords-lieutenant of counties, at the age of 65, the pension of 6s. a day, to which, under certain circumstances, such surgeons were entitled, had been refused them; and whether he would explain under what enactment the right to this pension was alleged to have been destroyed.—Mr. CHILDERS replied that, until 1829, militia surgeons were members of the permanent staff, and, like other officers of that staff, entitled to pensions on reduction of the force or on retirement through age or infirmity. But no militia surgeon appointed since 1829—that is to say, during the last fifty-three years—has been entitled to a retiring allowance. Her Majesty has always had the power to decide at what age militia officers should cease to serve; and in 1872 this age was fixed at 60, although retirement was not enforced in every case. In 1881, it was decided that at 65 all militia surgeons must retire, this being a boon to them compared with other militia officers.

Monday, June 19th.

Local Improvement Bills.—On the consideration of the Blackburn Improvement Bill as amended, Mr. HOPWOOD moved that it was inexpedient to proceed with the consideration of the Improvement Bills, or any of them, included in the reference to the Committee on Sanitary and Police Clauses of March 13th, 1882, unless such portions thereof as created local sanitary or police law exceptional to the law of the realm be omitted therefrom. The hon. and learned member renewed the protest he had made on a former occasion against the slovenly manner in which Local Improvement Acts were passed, whereby alterations were made in the general criminal law by means of private legislation. The influence of the Local Government Board had been felt by the Committee in a far larger degree than was consistent with the interest of the public. He was, however, glad to see that two sets of clauses in the Bill had been rejected; and he would like to give the House one or two instances of the kind of evidence on which large and special powers were obtained. In one case, a medical man declared that infection might be carried by the distribution of tracts and magazines. He moved the following resolution: "That it is inexpedient to proceed with the consideration of the Blackburn Improvement Bill, or any of the Improvement Bills included in the reference to the Committee on Sanitary and Police Clauses of March 13th, 1882, unless such portions thereof as create local sanitary or police law exceptional to the law of the realm be omitted therefrom."—Mr. SCLATER-BOTH said that these Bills had been submitted to a Select Committee, who had considered them with care, and had greatly improved them by striking out their objectionable parts. If they were to be allowed to pass that House, any amendment that the hon. and learned member might think desirable to have inserted might be inserted during their passage through the House of Lords, where, of course, they would be subject to re-examination.—Mr. PLAYFAIR trusted that, after the great labour which it was well known that Committee had bestowed on those measures, his hon. friend would withdraw his amendment, and that the House would allow their consideration to be proceeded with.—Mr. HOPWOOD withdrew his amendment.

The second reading of the Infectious Diseases Notification (Ireland) Bill is set down for Tuesday, July 11th.

The Public Health (Scotland) Act Amendment Bill has been agreed to in the House of Lords.

The Vivisection Abolition Bill is set down for second reading on Wednesday, June 28th. It is, however, very improbable that any Bills introduced by private members will have a hearing during this session.

A COPY has been presented to the House of Commons of special

pensions or gratuities granted to civilian medical officers and members of the auxiliary forces who were wounded in the South African wars.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

THE DEGREE OF BACHELOR OF SURGERY.—The regulations for the new Degree of Bachelor of Surgery at Cambridge require the candidate to pass all the examinations for the degree of Bachelor of Medicine, and, further, to undergo an examination in surgical operations and the application of surgical apparatus, and in the examination of surgical patients, as well as to have gone through a course of instruction in practical surgery, and attended two years' surgical practice at a hospital, and acted as dresser for six months, in addition to the requirements for M.B. The ordeal, therefore, will be no light one, and the rank of the degree will be proportionately high. With the view of meeting some of the requirements, Professor Humphry announces that he will take classes for instruction in surgery during the vacation, and Mr. Wherry will give a course of instruction in practical surgery.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 15th, 1882.

Kealey, John William Gregory, Gosport.
McDougall, Herbert Alan Hosier, Winchester.
Papillon, James William, Reading.

The following gentlemen also on the same day passed their Primary Professional Examination.

Lane, Frederick Herbert, University College.
Dodd, Henry Work, St. Bartholomew's Hospital.
Mitchell, Walter Frederick, St. Bartholomew's Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, May 8th, 9th, 10th, and 11th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—George Valentine Byrne, Bray, Co. Wicklow; Edward Baldwin Cashel, Dublin; Frederick Hone Moore, Cootehill, Co. Cavan.

For the Licence to practise Medicine only.—Joseph Ignatius Purcell Doyle, Dublin.

For the Licence to practise Midwifery only.—Samuel Macaulay, Belfast.

The following Licentiates in Medicine of the College, having complied with the by-laws relating to Membership, in accordance with the provisions of the Supplemental Charter of December 12th, 1878, have been duly enrolled Members of the College.

Leslie Maturin, 1875, Dublin; Michael Francis Cox, 1877, Dublin; Joseph John Nicholson, 1877, Exeter.

At the usual monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, June 5th, 6th, 7th, and 8th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—Morris Asher, Sydney, New South Wales; Joseph Lieveley Beeston, Newcastle, New South Wales; Joseph Henry Bond, Rathgar, Co. Dublin; Matthew Maria Louis Hutchinson, New Ross, Co. Wexford; Fitz-James Molony, Tulla, Co. Clare; Edmund Rundle, Crediton, Devon; Macnamara Morgan Williamson, Dublin.

For the Licence to practise Midwifery only.—Alan Montgomery Irwin, Donadea.

The following Licentiates in Medicine of the College, having complied with the by-laws relating to Membership, pursuant to the provisions of the Supplemental Charter of 1878, have been duly admitted Members of the College.

Laurence Joseph O'Neill, 1877, St. Douglough's, Co. Dublin; John Freeman Knott, 1877, Dublin; Patrick Matthias Poett, 1878, Rathgar, Co. Dublin.

(The numerals appended to the names indicate the year in which the Licence to practise Medicine was obtained.)

MEDICAL VACANCIES.

The following vacancies are announced:—

BARNET UNION.—Medical Officer and Public Vaccinator for the 3rd District. Salary £60 ros. per annum. Applications by July 4th.

BRADFORD INFIRMARY AND DISPENSARY.—House Surgeon. Salary £150 per annum. Applications by July 3rd.

CITY OF LONDON INFIRMARY, Bow Road, E.—Resident Assistant Medical Officer and Dispenser. Salary £100 per annum. Board, etc. Applications by 25th instant.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Assistant Physician. Applications by the 28th instant.

CUMBERLAND INFIRMARY, Carlisle.—House-Surgeon. Salary, £100 per annum. Applications by June 27th.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..... Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.

TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY... St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.

THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 P.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.

FRIDAY..... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Th., 1.30; Tu. F., 12.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th., S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, W., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopaedic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopaedic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., Tu. F., 2; Eye, Tu. F., 9.15; Ear, M. Th., 2; Skin, Tu. Th., 1.30; Throat, M. Th., 1.45; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. T. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.3.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal College of Surgeons of England, 4 P.M. Mr. Frederic S. Eve: On the Etiology of Tumours.

WEDNESDAY.—Royal College of Surgeons of England, 4 P.M. Mr. Frederic S. Eve: On the Etiology of Tumours.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

PATHOGENIC ORGANISMS.

SIR.—Will you kindly allow me to mention, through your columns, that at the *seance* of the Royal College of Physicians, on the night of the 14th instant, several visitors who took an interest in the pathogenic organisms which I was there showing under the microscope wrote their names and addresses on a sheet of paper, with a view to my sending them reprints of an article describing these organisms in the current number of the *Journal of the Royal Microscopical Society*; but at the conclusion of the meeting, the paper with their addresses was unfortunately lost, and I have consequently no means of fulfilling my promise to them; but if they will be good enough to write to me here, I shall have much pleasure in doing so.—I am, sir, yours faithfully,

G. T. DOWDESWELL.

The Windham Club, St. James's Square, S.W., June 22nd, 1882.

DR. HARRIS.—At the last election into the Council of the College, only ninety-three provincial Fellows attended. There was one provincial candidate, Mr. Reginald Harrison of Liverpool, who polled 87 votes, with 12 plumpers, against Mr. Haynes Walton, 74, with 5 plumpers. Mr. Walton was unseated by Mr. Christopher Heath, who polled 133, with 5 plumpers. Mr. Harrison declines to oppose Mr. Baker of Birmingham, who has been as regular in his attendance as the metropolitan Councilors.

SINGLE QUALIFICATIONS.

SIR.—Can an L.S.A., recently passed, practise with one qualification; can he call himself surgeon; and also, is he allowed to sign death-certificates in surgical cases?—I am, etc.,

W. B.

* According to the thirty-first clause of the Medical Act of 1858, an L.S.A. is legally entitled to practise medicine, and to recover in any court of law, with full costs of suit, reasonable charges for professional aid, advice, and visits, and the cost of any medicines or other medical appliances rendered or supplied by him to his patients. By Clause 40, it is enacted that "Any person who shall wilfully and falsely pretend to be, or take or use the name or title of, Surgeon (etc.), shall, upon a summary conviction for any such offence, pay a sum not exceeding £50." An L.S.A., according to the strict letter of the law, is not entitled to sign death-certificates in surgical cases; but no registrar of deaths would, we apprehend, refuse to accept a certificate so signed by a registered medical practitioner.

T. M. R.—The aniline and other dyes may be obtained from Mr. Martindale, 10, New Cavendish Street, or from Messrs. Hopkins and Williams.

NETHERFIELD INSTITUTION FOR INFECTIOUS DISEASES.

SIR.—The statistics of a single year in any hospital are hardly enough to draw conclusions from, still less so if the hospital be a small one. The following table, showing the number and mortality of the various cases treated in this hospital from its foundation up to June 1st, will compare favourably with those quoted in your article on this institution on May 27th.

Disease.	Total Number of Cases.	Deaths.	Mortality per cent.
Typhus	958	214	22.2
Small-pox (vaccinated and unvaccinated) ..	921	125	13.4
Measles	161	1	0.6
Typhoid	299	53	17.7
Scarlatina	682	48	7.0
Other diseases simulating fever	307	47	15.3

The somewhat higher mortality from small-pox last year, is accounted for by the severity of the type of the disease.—Your obedient servant,

Liverpool, June 20th, 1882.

E. W. HOPE.

A YOUNG MEMBER.—The late Mr. Partridge was very particular about thoroughly clean sponges, and recommended, for the purpose of softening and cleaning them, to put a teaspoonful of the liquor soda chlorinatae in half a tumblerful of water, and wash well, rinsing afterwards in fresh cold water.

THE MEDICAL CONGRESS AT SEVILLE.

SIR.—In your account of the Medical Congress at Seville, you state that a paper was read by Dr. Arthur of Edinburgh on an "Antiseptic Naso-oral Respirator". The paper was one which I communicated to the Congress, concerning certain advantages possessed by Messrs. Mayer and Meltzer's naso-oral respirator (one of which respirators was sent by that firm to the exhibition of the Congress). I can only account for the mistake in name and address by the assumption that my first name has been used in place of my surname, and the address of the Edinburgh College of Physicians as my private address.—Yours, etc.,

ARTHUR ALLBUTT, M.R.C.P.E.

24, Park Square, Leeds, June 17th, 1882.

A LIFE SUBSCRIBER would need to append his name to his letter if he desire publication for it.

A CONVENIENT CARRIAGE FOR MEDICAL MEN.

SIR.—Practising as I have for fifty years in a bleak and hilly country with bad roads, I have long wished for a vehicle of light weight and draught in which I should be protected from the weather. A brougham is out of the question, on account of its weight and expense. For years, I have driven a Victoria phaeton with a head, but I was not protected from a driving storm, besides being very cold and draughty. Seeing the advertisement of Messrs. Harrison and Brass, of Elgin, Scotland, I concluded it was just the conveyance I wished for, and I ordered one. I am happy to say I have not been disappointed, and am highly pleased with it. I consider it a highly finished, convenient, and most comfortable carriage, even without the head on; and, in the back seat, with a small umbrella, I am more sheltered from the rain than in the Victoria with the head up. The Elgin Acme Car, with the hood on behind, is a complete and perfect protection from wind and rain.

I certainly have much pleasure in strongly recommending to the notice of my professional brethren (who are in want of a handsome, well built, and most comfortable conveyance) the Acme Car, built by Messrs. Harrison and Brass, carriage manufacturers, of Elgin, Scotland.—I remain, yours truly,

WILLIAM HEANE, F.R.C.S. Eng.

The Lawn, Cinderford, Gloucester, June 14th, 1882.

SPECIALITY.—See the BRITISH MEDICAL JOURNAL, December 17th, 1864, p. 675. "A man may know how to make a nail, and not know how to make a lock; but would it be possible for a doctor to understand the eyes, and be totally ignorant of the ears? A speciality is good, provided always there is generality also."

R
31
B93
1882
v.1
cop.2

British medical journal
1882, v.1

**Biological
& Medical
Serials**

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY

STORAGE

